

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

FILE NO. CNR24054(TAN2)DGN
 DRAWING NO. CNR 824054 REV.
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION USGS BM (1047)
4,350' ± 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 ENVIRONMENTAL PROTECTION.
 (SIGNED) *R. P. E. Miller*
 R.P.E. _____ L.L.S. _____ 647

4,375
 4,450
 y+mc 409169.4
 from 4217626.5
 PLACE SEAL HERE

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

DATE MARCH 20, 2008
 OPERATOR'S WELL NO. 824054 REV.
 API WELL NO. _____

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

LOCATION: ELEVATION 1269' WATER SHED DIVIDING RDG. BETWEEN BIG CREEK & BOBBY CREEK
 DISTRICT JEFFERSON COUNTY LINCOLN
 QUADRANGLE BIG CREEK, WY 7.5' Midway EC

SURFACE OWNER CAROLYN BREWSTER, ET. AL. ACREAGE 67
 OIL & GAS ROYALTY OWNER COLUMBIA NATURAL RESOURCES, INC. LEASE ACREAGE _____
 LEASE NO. FEE LANDS

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) _____

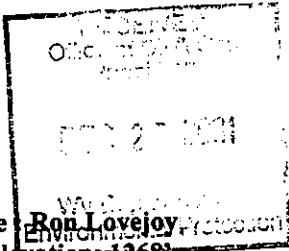
PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION TRENTON, BLACK RIVER, BEEKMANTOWN ESTIMATED DEPTH 10139'
 WELL OPERATOR COLUMBIA NATURAL RESOURCES, INC. DESIGNATED AGENT W.A. WATSON, JR.
 ADDRESS P.O. BOX 6070, CHARLESTON, WY 25362 ADDRESS SAME

DEEP WELL 1-1 0 MAY 22 2008

DEEP

DATE: November 2, 2001

API: 47-043-03097



State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

My

Farm name: **Ron Lovejoy**
Location Elevation: **1268'**
District: **Jefferson**

Operator Well No: **824054**
Quadrangle: **Big Creek**
County: **Lincoln**

COLUMBIA NATURAL RESOURCES	Casing & Tubing	Used in drilling	Left in Well	Cement fill up Cu.Ft.
Address: P.O. Box 6070	26"	12'	12'	9 yds.
Charleston, WV 25362	20"	325'	325'	354 cu. ft.
Agent: Thomas H. Blake	13 3/8"	2032'	2032'	2085 cu. ft.
Inspector: Dave Belcher	9 5/8 "	4682'	4682'	354 cu. ft.
Date Permit Issued: 05/05/2000	7 "	6903'	6903'	375 cu. ft.
Date Well work commenced: 05/18/2000	4 1/2"		9814'	418 cu. ft.
Date Well Work completed: 09/27/2001	2 3/8"		9533'	
Verbal Plugging:				
Date Permission granted on:				
Rotary x Cable Rig				
Total Depth (feet): 10,070				
Fresh Water Depth (ft): None Reported				
Salt Water Depth (ft.): 1282				
Is coal being mined in area: No				
Coal Depths (ft): NA				

OPEN FLOW DATA

Producing formation: Trenton/ Black River: Pay zone depth (ft) from **7420'** to **9715'**

Gas: Initial open flow: MCF/d Oil: Initial open flow : Bbl/d
Final open flow : **1500** Mcf/d Oil: Final open flow : Bbl/d
Time of open flow between initial and final tests **24** Hours
Static rock Pressure : **1835** psig (surface pressure) after **168** Hours

2nd producing formation:

Pay zone depth (ft) from to
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 pressure) after Hours

3rd producing formation

Pay zone depth (ft) from to
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 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.

WELL OPERATOR: COLUMBIA NATURAL RESOURCES, INC.

By: *[Signature]* Date: 12/12/01

FEB 01 2002

FEB 01 2002

LIN 3097

STIMULATIONS & PERFORATIONS

Perforated interval: 9708' – 9715' (6 holes)

Acidized with 3000 gals. 28% intensified HCl . B.D. press. – 7630 psi , Ave. rate – 2.2 bpm , Ave. T.P. – 6838 psi
Total H2O – 187 bbls. , ISIP – 6164 psi , 5 min. – 5630 psi , 15 min. – 5370 psi

Perforated interval: 9314' – 9324' (20 holes) , 9522' – 9532' (20 holes) , 9558' – 9564' (12 holes) , 9571' – 9581'
(20 holes) , 9680' – 9690' (20 holes)

Acidized with 6000 gals. 28% intensified HCl , Ave. rate – 3.9 bpm , Ave. T.P. – 7035 psi , Total H2O – 160 bbls. ,
ISIP – 5723 psi , 5 min. – 5311 psi , 15 min. – 4950 psi

Perforated interval: 8245' – 8253' (33 holes)

Acidized with 2000 gals. 15% HCl , Ave. rate – 1.5 bpm , Ave. T.P. – 4950 psi , Total H2O – 33 bbls.

Perforated interval: 7420' – 7432' (37 holes)

Acidized with 2000 gals. 15% HCl , Ave. rate – 3 bpm , Ave. T.P. – 3500 psi , Total H2O – 5 bbls. , ISIP – 3574 psi ,
15 min. – 2930 psi

Acid frac'd same interval with 1000 gals. 15% HCl , 14,000 gals. 28% HCl & 7,000 gals of gelled H2O w/ 4,900 lbs.
Of 80/100 mesh sand as a diverter. Ave. rate – 7.4 bpm , Ave. T.P. – 3500 psi , ISIP – 3560 psi , 15 min. – 3355 psi

CIBPs were set at 9665' and 9700' to seal off the perforated intervals below them because those perforations did not
Make enough volume to gauge. This plugs were not drilled out.

Columbia Natural Resources, Inc.
FEE LAND #24054

47-043-03097

Jefferson District, Lincoln County, WV

All depths are measured

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Shale & siltstone	0	1120
Salt Sand	1120	1800
Shale	1800	1894
Little Lime	1894	1950
Big Lime	1950	2122
Injun	2122	2156
Pocono Shale	2156	2598
Sunbury Shale	2598	2619
Berea	2619	2636
U. Devonian Shale	2636	3658
Lower Huron	3658	3954
L. Devonian Shale	3954	4260
Rhinestreet	4260	4468
Marcellus	4468	4495
Onondaga	4495	4638
Oriskany	4638	4688
Helderberg	4688	4638
Salina	4638	5300
Keefer	5300	5326
Rose Hill	5326	5603
Tuscarora	5603	5668
Juniata/Martinsbg	5668	7088
Trenton	7088	9551
Black River	9591	TD

FEB 01 2002

LIN 3097