

FILE NO. CNR23954REV.DGN
 DRAWING NO. CNR 823954
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION OPERATOR'S WELL NO. 22753 PERMIT 4217 ELEV.1072'

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 ENVIROMENTAL PROTECTION
 OIL AND GAS DIVISION

DATE OCTOBER 25, 2001
 OPERATOR'S WELL NO. 823954 REV.
 API WELL NO. _____

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

LOCATION: ELEVATION 1136' WATER SHED SHAWER FORK OF LEFT HAND RUN
 DISTRICT GEARY COUNTY ROANE
 QUADRANGLE LOONEYVILLE, WV 75'

SURFACE OWNER P.W. VINEYARD EST. ACREAGE 35.25
 OIL & GAS ROYALTY OWNER GROVES ET AL LEASE ACREAGE 61.80
 LEASE NO. 2239

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

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____

TARGET FORMATION BLACK RIVER ESTIMATED DEPTH 10765' MAR 15 2002

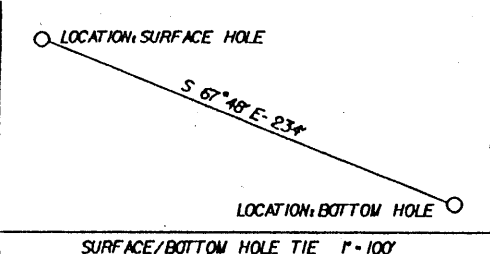
WELL OPERATOR COLUMBIA NATURAL RESOURCES, INC. DESIGNATED AGENT THOMAS H. BLAKE
 ADDRESS PO BOX 6070, CHARLESTON, WV 25362 ADDRESS SAME

COUNTY NAME ROA
 PERMIT 4256 P

DEEP WELL

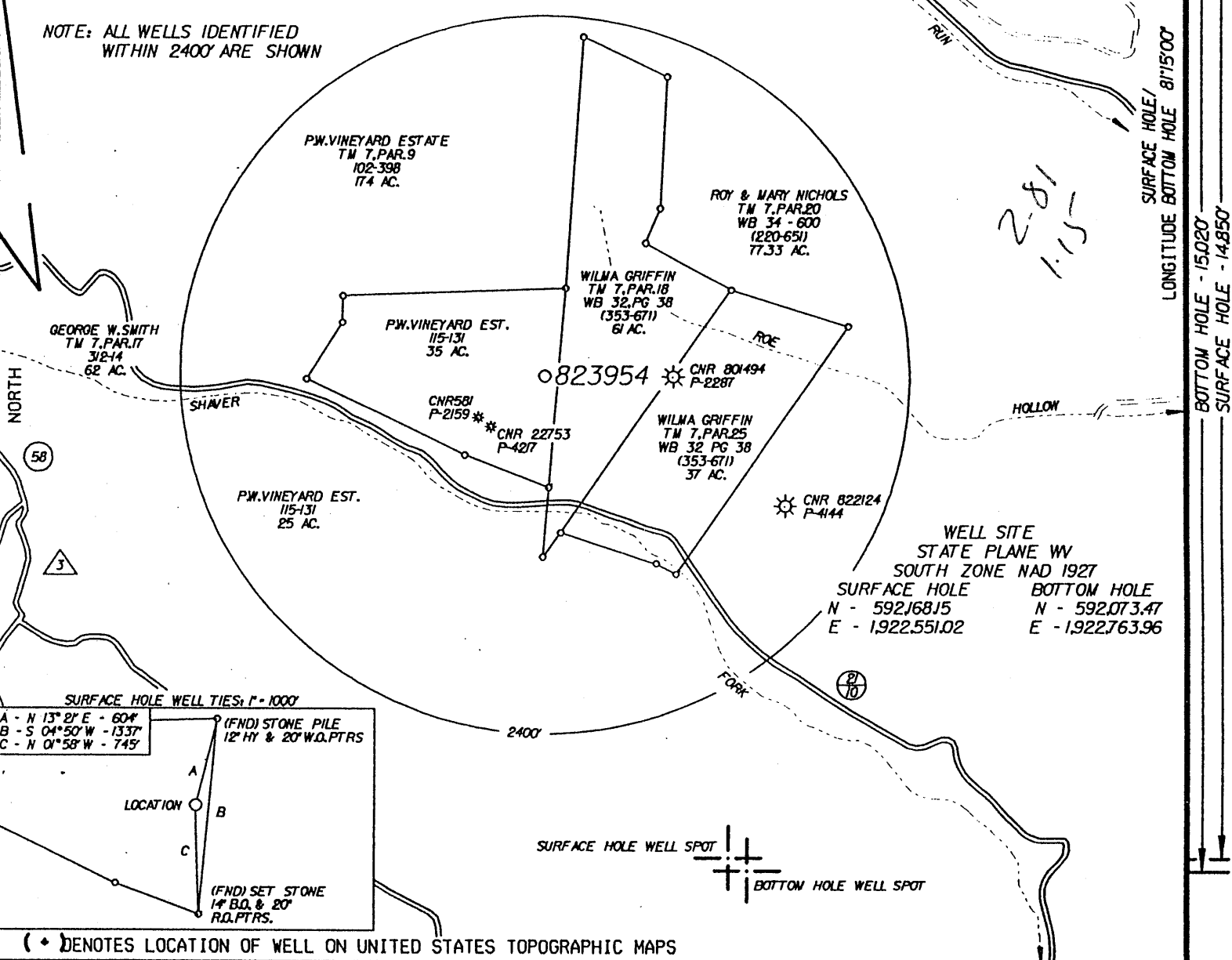
SURFACE HOLE - 6030
 BOTTOM HOLE - 5780

LATITUDE SURFACE HOLE / 38° 40' 00"
 BOTTOM HOLE

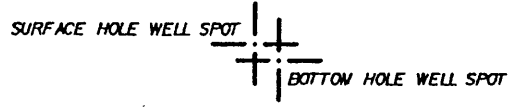
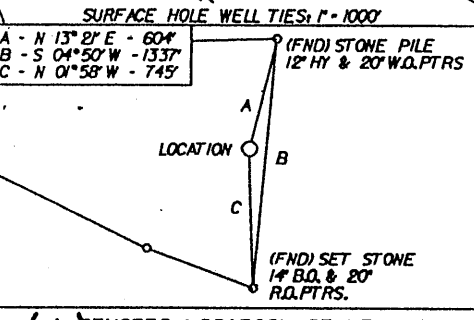


LEASE 1002239

NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN



WELL SITE
 STATE PLANE WV
 SOUTH ZONE NAD 1927
 SURFACE HOLE BOTTOM HOLE
 N - 59216815 N - 59207347
 E - 192255102 E - 192276396



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

FILE NO. CNR23954REV.DGN
 DRAWING NO. CNR 823954
 SCALE 1\"/>

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 ENVIROMENTAL PROTECTION
 OIL AND GAS DIVISION

DATE OCTOBER 25, 2001
 OPERATOR'S WELL NO. 823954 REV.
 API WELL NO. _____

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

LOCATION: ELEVATION 1136' WATER SHED SHAWER FORK OF LEFT HAND RUN
 DISTRICT GEARY COUNTY ROANE
 QUADRANGLE LOONEYVILLE, WV 7.5'

SURFACE OWNER P.W. VINEYARD EST. ACREAGE 35.25
 OIL & GAS ROYALTY OWNER GROVES ET AL LEASE ACREAGE 61.80
 LEASE NO. 2239

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

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION BLACK RIVER ESTIMATED DEPTH 10765'
 WELL OPERATOR COLUMBIA NATURAL RESOURCES, INC. DESIGNATED AGENT THOMAS H. BLAKE
 ADDRESS PO BOX 6070, CHARLESTON, WV 25362 ADDRESS SAME

COUNTY NAME ROA
 PERMIT 4256 H

DEEP WELL

JAN 11 2002

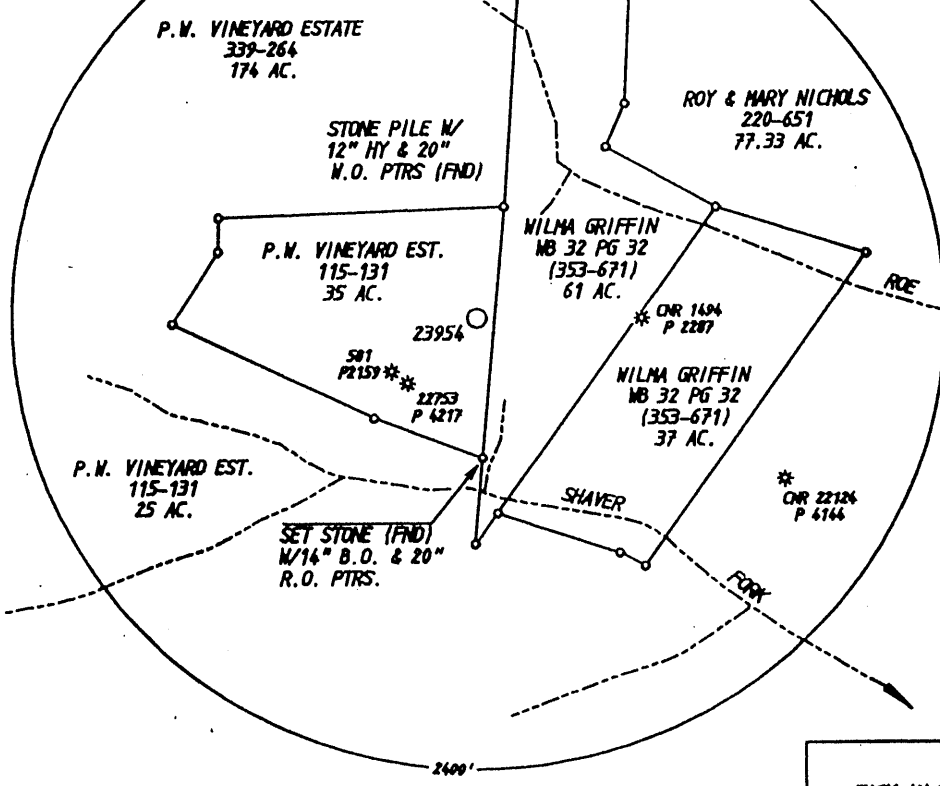
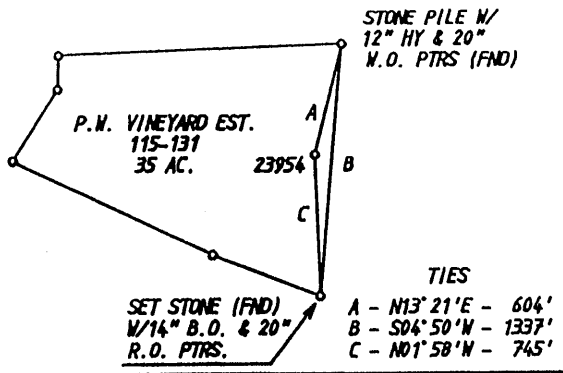
6,000

LATITUDE 38° 40' 00"

LEASE 1002239

LONGITUDE 81° 15' 00"

14,847'

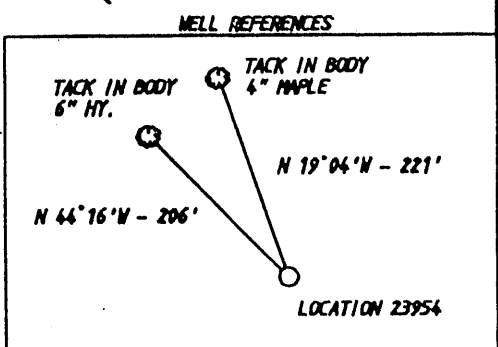


GEORGE W. SMITH 312-14

WELL SITE

STATE PLANE WV SOUTH ZONE NAD 1927

NORTH - 592,168.15
EAST - 1,922,551.02



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

FILE NO. CNR23954.DGN
 DRAWING NO. CNR 23954
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:2500
 PROVEN SOURCE OF ELEVATION OPERATOR'S WELL NO. 22753 PERMIT 4217 ELEV. 1072'

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) Paul A. Miller
 R.P.E. _____ L.L.S. 647

PLACE SEAL HERE

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



DATE JULY 7, 19 99
 OPERATOR'S WELL NO. 23954
 API WELL NO. 47 087 04256
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1136' WATER SHED SHAVER FORK
 DISTRICT GEARY COUNTY ROANE
 QUADRANGLE LOONEYVILLE, WV 7.5'

SURFACE OWNER P.N. VINEYARD EST. ACREAGE 35 & 25
 OIL & GAS ROYALTY OWNER GROVES ET AL LEASE ACREAGE 61.80
 LEASE NO. 2239

PROPOSED WORK: DRILL 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 BLACK RIVER ESTIMATED DEPTH 10,765'
 WELL OPERATOR COLUMBIA NATURAL RESOURCES, INC. DESIGNATED AGENT W.A. WATSON, JR.
 ADDRESS PO BOX 6070, CHARLESTON, WV 25362 ADDRESS SAME

COUNTY NAME

PERMIT

ROA

4256

DEEP 1071

Cottonwood Acid

5-5-0

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

Reviewed AL

Farm name:
Location Elevation: 1,136'
District: Geary

Operator Well No: 823954
Quadrangle: Looneyville
County: Roane

COLUMBIA NATURAL RESOURCES	Casing & Tubing	Used in drilling	Left in Well	Cement fill up Cu.Ft.
Address: P. O. Box 6070 Charleston, WV 25362-0070	26"	20	20	216
Agent: W. A. Watson, Jr.				
Inspector: Homer Dougherty	20"	350	350	400
Date Permit Issued: 09/20/99				
Date Well work commenced: 10/07/99	13 3/8"	2,122	2,122	1,880
Date Well Work completed: 01/17/01				
Verbal Plugging:	9 5/8"	6,120	6,120	354
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>	7"	9,243	9,243	780
Total Depth (feet): 11,198'				
Fresh Water Depth (ft):				
Salt Water Depth (ft.): 1,580', 1,750'				
Is coal being mined in area (N <input checked="" type="checkbox"/> Y <input type="checkbox"/>)				
Coal Depths (ft): N/A				

REC'D
FEB 22 2001
W. Va. Division of Environmental Protection

OPEN FLOW DATA

Producing formation: Trenton/Black River O.H. Pay zone depth(ft) from 9,800' to 11,198' ; from to

Gas: Initial open flow 231MCF/d Oil: Initial open flow -0-Bbl/d
Final open flow 84 MCF/d Final open flow -0- Bbl/d
Time of open flow between initial and final tests 100 Hours
Static rock Pressure 2,945 psig (surface pressure) after Hours

2nd producing formation: Pay zone depth (ft) from to ; from to

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

3rd producing formation: Pay zone depth (ft) from to ; from to

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.

Signed: R.E. Schindler
COLUMBIA NATURAL RESOURCES, INC.

By: R.E. Schindler (Tech. Adm.)
Date: 2-20-01

orig: State
Copies: Geology
m. Nays
Area -
Region
MAR 02 2001

ROA 4256

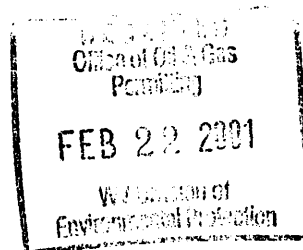
Columbia Natural Resources, Inc.
GROVES 23954
Straight hole

47-087-24256

Geary District, Roane County, WV

All depths are measured

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Shale & siltstone	0	1568
Salt Sand	1568	1804
Shale	1804	1886
Little Lime	1886	1925
Big Lime	1925	2117
Injun	2117	2150
Pocono Shale	2150	2446
Sunbury Shale	2446	2466
Berea	2466	2472
Upper Devonian Sh	2472	2767
Gordon Siltstone	2767	2781
Devonian Shale	2781	3612
Lower Huron	3612	4770
Devonian Shale	4770	4897
Lower Alexander	4897	4974
Devonian Shale	4974	5110
Rhinestreet	5110	5467
Devonian Shale	5467	5734
Marcellus	5734	5776
Onondaga	5776	5940
Oriskany	5940	6000
Helderberg	6000	6273
Salina	6273	6913
Newburg	6913	6932
McKenzie	6932	7276
Rose Hill	7276	7762
Tuscarora	7762	7832
Juniata (red)	7832	8500
Martinsburg (gray)	8500	9803
Trenton	9803	9950
Black River	9950	TD



(10,849')

WELL # 823954

PERFORATIONS:

Stage I, Open Hole from 9,800' to 11,198'

PLUG BACK OF PRIMARY HOLE & FIRST KICK HOLE :

Primary hole was plugged as follows:

1: 10,832' – 9,832' w/182 sks of 50/50 Class H- Poz w/2% gel, .25% dispersant, .05% defoamer & .1% retarder;

9,832' – 8,832' w/213 sks of 50/50 Class H – Poz w/2% retarder, .25% dispersant, & .05% defoamer.

This cement was then drilled out to a kick off point of 9,200'.

THE FIRST KICK HOLE WAS PLUGGED AS FOLLOWS:

2a: 11,026' – 10,900' – w/gel.

10,900' – 9,900' – w/182 sks (same as above)

9,900' – 8,900' – w/213 sks (same as above)

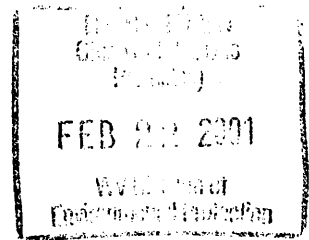
This cement was then drilled out to 9,564' and was not hard enough to kick off and was reset w/

2b: 9,539' – 8,900' w/145 sks Class H w/.2% Retarder, .75% dispersant and .45% D-46,

This cement was drilled out to 9,543' and was also not hard enough to start kick, and was reset w/

2c: 9,532' – 8,754' w/175 sks Class H w/.75% dispersant, .05% defoamer.

This cement was then drilled out to a kick off point of 9,300'.



MAR 02 2001

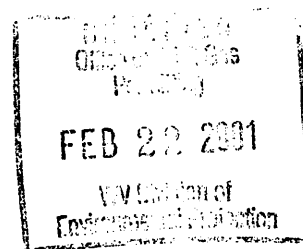
KOH
4150

Columbia Natural Resources, Inc.
GROVES 23954-A
First kick hole

47-087-24256
Geary District, Roane County, WV

All depths are measured

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Kick off point	9200	
Martinsburg (gray)	9200	9852
Trenton	9852	10016
Black River	10016	TD (11,026')

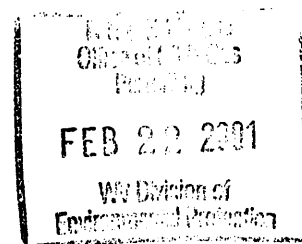


Columbia Natural Resources, Inc.
GROVES 23954-B
Second kick hole

47-087-24256
Geary District, Roane County, WV

All depths are measured

<u>Formation</u>	<u>Top</u>	<u>Bottom</u>
Kick off point	9300	
Martinsburg (gray)	9300	9800
Trenton	9800	9968
Black River	9968	TD (11,198')



MAR 02 2001

ROA 4250

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

SEE ATTACHED SHEETS (A)
Coal Operator or Owner

Address

NOT OPERATED
Coal Operator or Owner

Address

SEE ATTACHED SHEET (B)
Lease or Property Owner

Address

COLUMBIA NATURAL RESOURCES
Name of Well Operator

P.O. Box 6070 CHARLESTON, WV 25362
Complete Address

823954 19 2002

WELL AND LOCATION

GEARY District

ROANE County

WELL NO. 823954

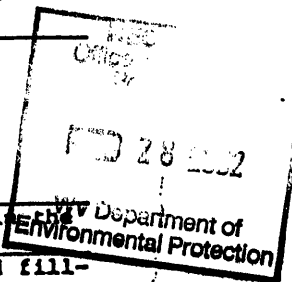
GRIFFIN, VINEYARD, MIRQUET Farm

STATE INSPECTOR SUPERVISING PLUGGING HOWER DOUGHERTY

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of ROANE ss:

CHUCK FARRAR (UDI) and JASON BACA (CNR)
being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by CNR, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 19 day of FEBRUARY, 2002, and that the well was plugged and filled in the following manner:

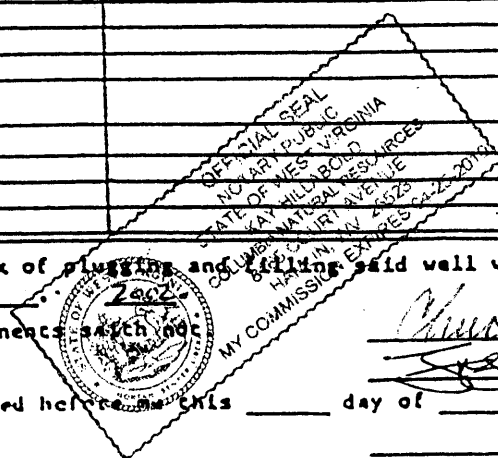


Sand or Zone Record Formation	Filling Material	Plugs Used Size & Kind	Casing	
			CSG PULLEN	CSG LEFT IN
<u>SEE ATTACHED SHEETS</u>				
Coal Seams (Name)	Description of Monument			
(Name)				
(Name)				
(Name)				
(Name)				

and that the work of plugging and filling said well was completed on the 24 day of FEBRUARY

And further deponents swear

Sworn to and subscribed before me this day of , 19



Chuck Farrar UDI

Jason Baca CNR

Ray Hill
Notary Public

My commission expires:
April 25, 2010

Permit No. 47-087-04256

James H. Dougherty

ROA 04256

MAR 15 2002