

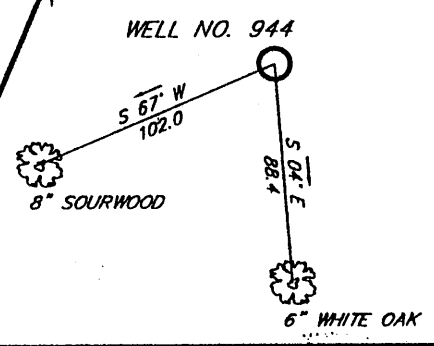
1500' W
 LATITUDE 39° 07' 30"
 LONGITUDE 81° 42' 30"

NORTH
 HOOD COUNTY
 JACKSON COUNTY

5 12.150'

2.30
 85

REFERENCES



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

FILE NO. 01099
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 : 2500
 PROVEN SOURCE OF ELEVATION GPS OBSERVATION

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. _____ L.L.S. 1956

PLACE SEAL HERE

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



DATE SEPTEMBER 14, 20 01
 OPERATOR'S WELL NO. NCEE 944
 API WELL NO. 47 107 01639
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 626.4 WATERSHED POND CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE POND CREEK 7.5'
 SURFACE OWNER CHARLES WRIGHT ACREAGE 80
 OIL & GAS ROYALTY OWNER CHARLES WRIGHT LEASE ACREAGE 120
 LEASE NO. _____

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

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION SILURIAN LOCKPORT ESTIMATED DEPTH 5500 FT.
 WELL OPERATOR NORTH COAST ENERGY EASTERN INC. DESIGNATED AGENT TOM LIBERATORE
 ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164 ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164

COUNTY NAME WOOD
 PERMIT 1639

DEEP WELL 3-6 111

NOV 02 2001

DEEP

STATE OF WEST VIRGINIA
Division of Environmental Protection
Office of Oil and Gas

Reviewed RTB

WELL OPERATOR'S REPORT of WELL WORK

Farm Name: Wright, Charles Operator Well No.: NCEE-944

Location: Elevation: 626.4 7.5' Quad.: POND CREEK

District: HARRIS County: WOOD
Latitude: 12150 Feet South of 39 Deg. 07 Min. 30 Sec.
Longitude: 4500 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: NORTH COAST ENERGY EASTERN, INC.
P.O. BOX 8
RAVENSWOOD, WV 26164

Agent: David L. Cox

Inspector: LARRY PARRISH

Permit Issued: 10/30/01

Well Work Commenced (spud): 11/24/01

Well Work Completed (T.D.): 12/04/01

Verbal Plugging

Permission Granted on:

Rotary X Cable Rig

Total Depth (feet): 5329

Fresh Water Depths (feet):

100 FT.?

Salt Water Depths (feet):

1290 FT. ?

Is coal being mined in area? No

Coal Depths (ft): None present

Casing & Tubing (Size-O.D.)	Used in Drilling (feet)	Left in Well (feet)	Cement Type (sacks)
11 3/4"	253	253	160 SX Class A Cement
8 5/8"	1739	1739	430 SX Class A Cement
4 1/2"		5214	185 SX 65/35 POZ Cement

RECEIVED
Office of Oil & Gas
Permitting
MAY 10 2002
WV Department of Environmental Protection

OPEN FLOW DATA

Producing formation BROWN SHALE Pay zone depth (ft) 3322-3575

Gas: Initial open flow * MCF/D Final open flow 0 BBL/D
 Final open flow 250 MCF/D Final open flow 0 BBL/D
 Time of open flow between initial and final tests NA Hours

Static rock pressure EST. 400 psig (surface pressure) after 24 HOURS

*NOTE: stimulation of Silurian Lockport resulted in Salt Water.

2nd producing form. 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 Days

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 GEOLOGIC RECORD OF ALL FORMATIONS, INCLUDING COAL, ENCOUNTERED BY THE WELLBORE.

For: David L. Cox
By: David L. Cox, Manager of Geology
Date: 9-May-02

Wood 1639
MAY 17 2002

WR-35
(Reverse)

API / Permit #: 47-107-01639
North Coast Well #: NCEE-944
Elevation: 626 GL 636 KB

DETAILS OF PERFORATING, FRACTURING, OR PHYSICAL CHANGE, ETC.

PERFORATED THE LOCKPORT DOLOMITE FROM 5080 TO 5090 USING 40 HOLES.
FRAC'D THE LOCKPORT WITH 800GAL ACID & 63 BBL KCI WATER
ATP = 2600 # BDP = 3168#

TREATMENT RESULTED IN SALT WATER. PLUG-BACK TO BROWN SHALE

PERFORATED THE BROWN SHALE FROM 3322 TO 3575 USING 40 HOLES.
FRAC'D THE SHALE USING 52,000# SAND, 332,000 SCF OF NITROGEN,
130 BBL WATER. ATP=1700# ISIP=1270#

WELL LOG

ROCK TYPE OR FORMATION NAME	TOP	BOTTOM	REMARKS
<small>(all measurements taken from KB)</small>			
SHALE	0	80	
SAND	80	132	
SHALE	132	349	
SAND	349	380	
SHALE W/ SAND STRINGERS	380	998	
SAND W/ SHALE	998	1405	
SHALE	1405	1921	
SALT SANDS	ABSENT		
BIG LIME (GREENBRIER)	ABSENT		
BIG INJUN SAND?	ABSENT		
COFFEE SHALE (SUNBURY)	1921	1941	
BEREA SAND	1941	1943	
SHALE	1943	3027	
BROWN SHALE (LOWER HURON)	3027	3578	s/gas @ 3400'
SHALE (JAVA)	3578	3812	
RHINESTREET SHALE	3812	4126	
ONONDAGA LIMESTONE (Big Lime of OH)	4126	4220	
ORISKANY SANDSTONE	4220	4234	s/gas & water
HELDERBERG LIMESTONE	4234	4424	
"SALINA" DOLOMITE	4424	4936	
NEWBURG SAND	4936	4942	tight & dry
DOLOMITE & SHALE	4942	5040	
LOCKPORT DOLOMITE	5040	5252	s/gas & water
BIG SIX SAND (KEEFER)	5252	5276	
ROSE HILL SHALE	5276	5329	
LOGGERS' TD	5329		
DRILLERS' TD	5381		

