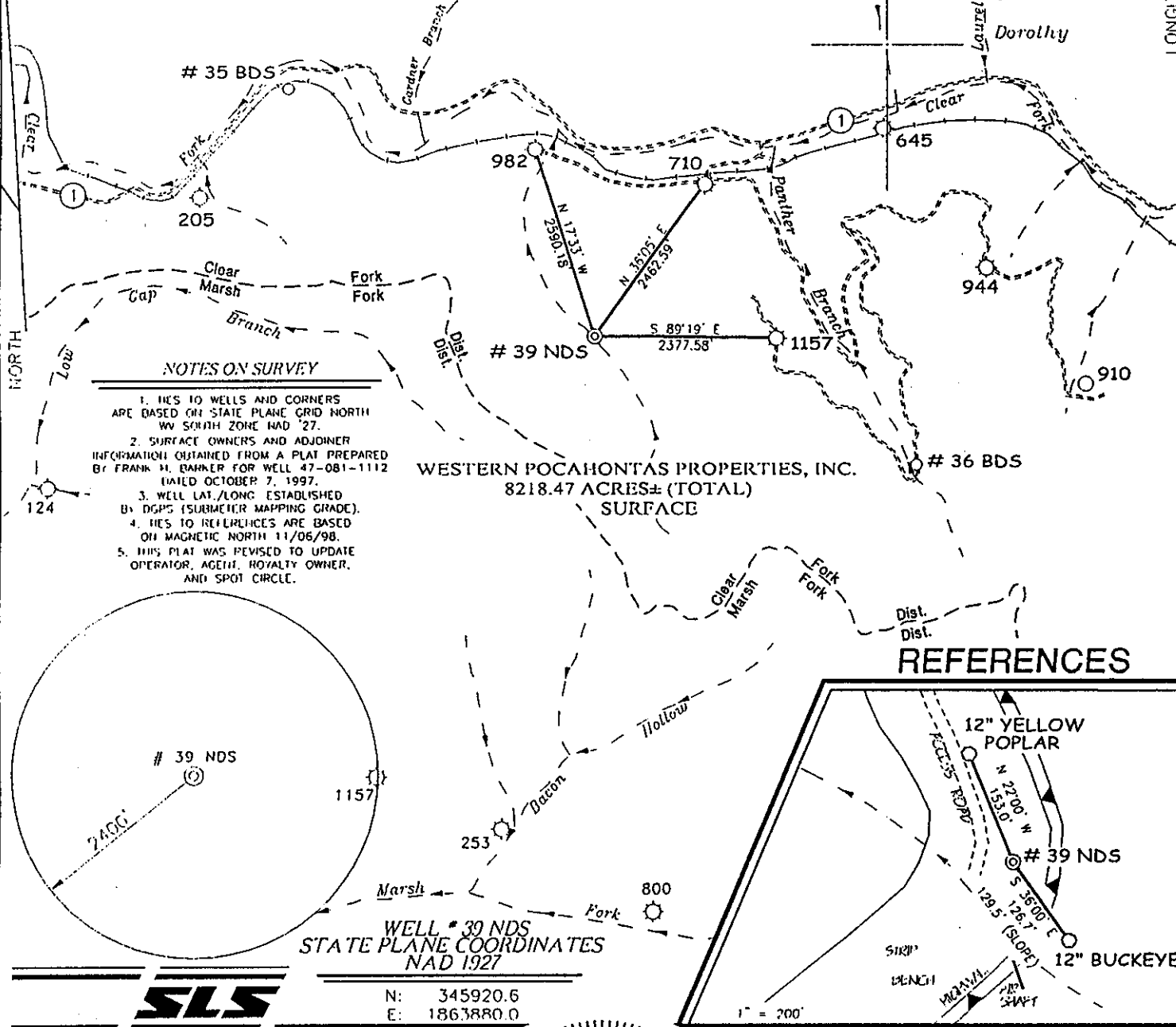


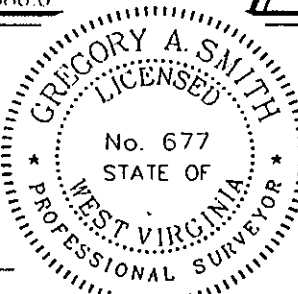
# WESTERN POCAHONTAS PROPERTIES DOROTHY LEASE 8218.47 ACRES ± TOTAL WELL # 39 NDS

LONGITUDE 81°27'30"  
5.390'  
LAT. 37°56'56.6"



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 677 Gregory A. Smith



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

DATE NOVEMBER 9, 19 98  
REVISED MARCH 3, 20 03  
OPERATORS WELL NO. # 39 NDS  
API WELL NO. 47-081-01314  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 4058P39R (73-2)  
PROVEN SOURCE OF ELEVATION EXISTING WELL # 30 BDS ELEVATION 1009' SCALE 1" = 2000'

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

WELL TYPE : OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION :  
ELEVATION 1516' WATERSHED TRIBUTARY OF CLEAR FORK  
DISTRICT CLEAR FORK COUNTY RALEIGH QUADRANGLE DOROTHY 7.5'

SURFACE OWNER WESTERN POCAHONTAS PROPERTIES ACREAGE 8218.47  
ROYALTY OWNER ENERGEN RESOURCES MAO, ET AL LEASE ACREAGE 8218.47

PROPOSED WORK : LEASE NO. \_\_\_\_\_  
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER \_\_\_\_\_  
PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION GORDON / DEVONIAN SHALE  
ESTIMATED DEPTH 5200 FT.

WELL OPERATOR NORTH COAST ENERGY EASTERN, INC. DESIGNATED AGENT DAVID L. COX  
ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164 ADDRESS P.O. BOX 8 RAVENSWOOD, WV 26164

11 262 Burnwell

COUNTY NAME  
PERMIT  
1314

*Mr 17*

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

WELL OPERATOR'S REPORT of WELL WORK

Farm Name: WESTERN POCAHONTAS PROP. Operator Well No.: DOROTHY 39NDS

Location: Elevation: 1516 7.5' Quad.: DOROTHY

District: CLEAR FORK County: RALEIGH  
Latitude: 3,390 Feet South of 37 Deg. 57 Min. 30 Sec.  
Longitude: 3,930 Feet West of 81 Deg. 27 Min. 30 Sec.

Company: **North Coast Energy Eastern, Inc.**  
P. O. BOX 8  
RAVENSWOOD, WV 26164

Agent: David L. Cox

Inspector: Richard Campbell

Permit Issued: 05/16/03

Well Work Commenced (spud): 07/27/03

Well Work Completed (T.D.): 08/08/03

Verbal Plugging

Permission Granted on:

Rotary  Cable  Rig

Total Depth (feet): 5202

Fresh Water Depths (feet):  
245'

Salt Water Depths (feet):  
1260', 1320'

Is coal being mined in area? yes

Coal Depths (ft): None recorded

Casing & Tubing (Size-O.D.)	Used in Drilling (feet)	Left in Well (feet)	Cement Type (sacks)
13 3/8"	30	30	NONE
9 5/8"	318	318	135 SX CLASS A CEMENT
7"	1739	1739	350 SX CLASS A CEMENT
4 1/2"	5143	5143	130 SX GSB CEMENT

OPEN FLOW DATA

Producing formation GORDON SAND Pay zone depth (ft) 3434-3444

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

2nd producing form. BROWN SHALE Pay zone depth (ft) 4583-5068

Gas: Initial open flow - MCF/D Oil: Initial open flow -- BBL/D

Final open flow 1.1M MCF/D Final open flow -- BBL/D

Time of open flow between initial and final tests 28 Hours

Static rock pressure 820 psig (surface pressure) after 16 Hours

*\*Note: Open-flows & Rock Pressure are combined*

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*  
**NORTH COAST ENERGY Eastern, Inc.**  
By: David L. Cox, Manager of Geology  
Date: 31-Dec-03

RALEIGH 1314  
RECEIVED  
Office of Oil & Gas  
Office of Chief  
JAN 06 2004  
WV Department of  
Environmental Protection  
JAN 5 2004

WR-35  
(Reverse)

API / Permit #: 47-081-01314  
North Coast Well #: DOROTHY 39NDS  
Elevation: 1516 GL 1526 KB

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

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PERFORATED THE GORDON SAND FROM 3434 TO 3444 USING 32 HOLES.  
FRAC'D THE GORDON SAND WITH 45,680# 20/40 SAND, 305,000SCF OF NITROGEN, 500 GAL HCL  
AND 161 BBL OF GELLED WATER.

PERFORATED THE BROWN SHALE FROM 4583 TO 5068 USING 40 HOLES.  
FRAC'D THE BROWN SHALE WITH 1,200,000 SCF OF N2

**WELL LOG**

ROCK TYPE OR FORMATION NAME	TOP	BOTTOM	REMARKS
SAND	0	60	
SHALE	60	150	
SAND	150	260	
SAND & SHALE	260	708	
SAND	708	921	
SHALE	921	1032	
SALT SANDS	1032	1465	
SHALE & SAND	1465	1784	
AVIS LIME	1784	1817	
SHALE	1817	2334	
LITTLE LIME	2334	2388	
SHALE	2388	2426	
BIG LIME	2426	2740	S/GAS
SHALE	2740	3211	
COFFEE SHALE (SUNBURY)	3211	3230	
BEREA SAND	3230	3232	
SHALE	3232	3438	
GORDON	3438	3454	S/GAS
SHALE	3454	4326	
BROWN SHALE (LOWER HURON)	4326	5069	S/GAS
SHALE (JAVA)	5069	5221	
DEPTH DRILLER		5221	
DEPTH LOGGER		5202	