



06-Feb-01 API# 47-107-01631

Ast

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

### WELL OPERATOR'S REPORT of WELL WORK

Farm Name: SMITH, TIMOTHY, J.					PKN-887			
Location:	ation: Elevation: 701			7.5' Quad.: POND CRI			<u>EEK</u>	
		HARRIS			County:	WOOD	20.0	
	Latitude: Longitude:	1760 2710	Feet Feet	South of West of	39 Deg. 81 Deg.	07 Min. 40 Min.	30 Sec. 00 Sec.	
Company: N	ORTH COAST ENER		Used in	Left in	Cement			
	P.O. BOX 8 RAVENSWOOD, V	VV 26164		Tubing (Size-O.D.)	Drilling (feet)	Well (feet)	Type (sacks)	
Agent:	THOMAS S. L		RE	11 5/8"	260'	260'	167 SX Class A	
Inspector:	LARRY PARF ed: 02/06/01	RISH					Cement	
Well Work Co	ommenced (spud): ompleted (T.D.):	03/29/01		8 5/8"	1695'	1695'	410 SX Class A Cement	
Permission G Rotary >> Total Depth Fresh Wate 105 FT.	Granted on:  ( Cable (feet): r Depths (feet):	Rig 5626		4 1/2"		5586'	185 SX 65/35 POZ Cement	
1500 FT.?	Depths (feet):		··-				And the state of t	
	g mined in area ? (ft): None present	No						
OPEN FLO	W DATA							
	Producing formation	LOCKPO	RT DO	LOMITE	Pay zone de	pth (ft)	5304-5308	
(	Gas: Initial open flow	EST. 6.0	MMCF	7D Fina	al open flow	0	_BBL/D	
	Final open flow	*	MCF/E	) Final	open flow	0	_BBL/D	
	Time of open	flow between	en initial	and final test	s	NA	_Hours	
5	Static rock pressure	1600	_ psig	(surface pre	ssure) after	17	_HOURS	
	*NOTE: Pay a	zone resulf	ted in S	alt Water, w			hale	
	2nd producing form.				_Pay zone d	lepth (ft)	551.75	
(	Gas: Initial open flow			Oil: Initial			_BBL/D	
	Final open flow		_MCF/E		open flow		_BBL/D	
	Time of open	flow betwee	en initial	and final test	S cours) offer		_ Hours	
	Static rock pressure		psig	(surrace pre	ssure) anter		_ Days	
	Static rock pressure CK OF THIS FORM PU					NTERVALS, FR	-	

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:

North Coast Energy Eastern, Inc.

By: David L. Cox, Petro. Geologist

Date: 17-Oct-01

Reep well

WR-35 (Reverse) API / Permit #: Peake Well #: Elevation: 47-107-01631 PKN-887 701GL 711KB

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

PERFORATED THE LOCKPORT DOLOMITE FROM 5305 TO 5308 USING 12 HOLES. FRAC'D THE LOCKPORT WITH 19 BBL ACID & 37 BBL KCI WATER ATP = 2490 # BDP = 3219# ISIP = 2500#

TREATMENT RESULTED IN GAS & SALT WATER. PLANS ARE TO PLUG-BACK TO DEVONIAN BROWN SHALE INTERVAL

#### WELL LOG

ROCK TYPE OR FORMATION NAME	ТОР	воттом	REMARKS
(all measurements taken from KB)			
SHALE	0	80	
SAND	80	110	
SHALE	110	540	
PITTSBURGH (?) SAND	540	600	
SHALE W/ SAND STRINGERS	600	1010	
SAND W/ SHALE	1010	1370	
SHALE W/ SAND STRINGERS	1370	1452	
SALT SANDS	1452	1521	
BIG LIME (GREENBRIER)	ABSENT		
BIG INJUN SAND?	1584	1612	
SHALE	1612	2025	
COFFEE SHALE (SUNBURY)	2025	2050	
BEREA SAND	2050	2053	
SHALE	2053	3196	
BROWN SHALE (LOWER HURON)	3196	3729	s/gas @ 3464'
SHALE (JAVA)	3729	4114	
RHINESTREET SHALE	4114	4303	
ONONDAGA LIMESTONE (Big Lime of OH)	4303	4400	
ORISKANY SANDSTONE	4400	4432	s/gas & water
HELDERBERG LIMESTONE	4432	4630	
"SALINA" DOLOMITE	4630	5146	
NEWBURG SAND	5146	5154	tight & dry
DOLOMITE & SHALE	5154	5256	
LOCKPORT DOLOMITE	5256	5472	gas @ 5306'
BIG SIX SAND (KEEFER)	5472		
ROSE HILL SHALE	5505	5626	
LOGGERS' TD	5626		
DRILLERS' TD	5639		

Environmental Protection

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

### WELL OPERATOR'S REPORT of WELL WORK

	***	LL OPERA	NIUR S	REPURI OF W	ELL WORK					
Farm Name:	SMITH, TIM	OTHY J.			_Operator W	ell No.:	PKN 8871	F		
Location:	Elevation:	701		_	7.5' Quad.:	POND CR	EEK	-		
	District: Latitude: Longitude:	HARRIS 1760 2710	Feet Feet	South of West of	County: 39 Deg. 81 Deg.	WOOD 07 Min 40 Min.	30 Sec. 00 Sec.	<b></b>		
	rth Coast Ener D. Box 8 Jenswood, Wes			Casing & Tubing (Size-O.D.)	Used in Drilling (feet)	Left in Well (feet)	Cement Type (sacks)			
Agent:	David L. Cox			11 5/8						
Inspector: Permit Issued:	LÁRRY PARI 12/04/01	RISH		113/6						
Well Work Comp Well Work Comp Verbal Plugging	oleted (T.D.):	12/07/01 02/22/02	-	8 5/8						
Permission Gran Rotary X Total Depth (fee Fresh Water De See Original W Salt Water Dep	_ Cable et): epths (feet): R-35	Rig	-	4 1/2						
See Original W Is coal being mi	R-35		-							
Coal Depths (ft):		No VR-35				- 1 - 1				
	ATA ucing formation Initial open flow Final open flow Time of open f	* 350	MCF/D MCF/D	Oil: Initial open f	_		3251-3696 BBL/D BBL/D	SEP	17	2004
Statio	rock pressure			nd final tests surface pressure	e) after		Hours Hours			
Gas:	roducing form. Initial open flow Final open flow Time of open flock pressure *OPEN-FLOWS	* low between *	psig (s	Oil: Initial open f	low ) after	*	BBL/D BBL/D Hours Days			ξ
NOTE: ON BACK STIMULATING, PH	OF THIS FORM PU	T THE FOLLO	WING: 1)	DETAILS OF PERF	OBATED INTER	VALS, FRACTI	JRING, OR			0000
	OF ALL FORMAT	TONS, INCLUD	DING COAL	LENCOUNTERES	BY THE WELLB	ORE.	Cilice of C	e Ges Hid .	TO THE PERSON OF	e _
	i		3y: <u>D</u> :	COAST ENER avid L. Cox, Ma	GY Eastern, anager of Geo	Inc.	AUG B 4	2004		£ /
		L	Date:	3-Aug-2004			WW Depart	Well of		7

WR-35 (Reverse)

API / Permit #:
North Coast Well #:

Elevation:

47-107-01631F PKN 887F 701GL 711KB

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

SET SOLID MECHANICAL BRIDGE PLUG AT 3866.

PERFORATED THE BROWN SHALE FROM 3251 TO 3696 USING 40 HOLES.

FRAC'D THE BROWN SHALE WITH 61,500# SAND, 507,000SCF OF NITROGEN, 147 BBL GELLED FLUID, AND 500 GAL 15% HCL.

### **WELL LOG**

	ROCK TYPE OR FORMATION NAME	ТОР	воттом	REMARKS	
	SHALE	0			
	SAND	80	80		
	SHALE		110		
	PITTSBURGH (?) SAND	110	540	1	
	SHALE W/ SAND STRINGERS	540	600		
	SAND W/SHALE	600	1010	P .	
	SHALE W/ SAND STRINGERS	1010	1370		
	SALT SANDS	1370	1452		
	BIG LIME (GREENBRIER)	1452 ABSENT	1521		
	BIG INJUN SAND	1584	1612		
	SHALE	1612	2025		
	COFFEE SHALE (SUNBURY)	2025	2050		
	BEREA SAND	2050	2053		
	SHALE	2053	3196		
	BROWN SHALE (LOWER HURON)	3196	•	0/200 @ 0404	
	SHALE (JAVA)	3729	4114	s/gas @ 3464	
	RHINESTREET SHALE	4114	4303		
	ONONDAGA LIMESTONE (Big Lime of OH)	4303	4400		
	ORISKANY SANDSTONE	4400	1	n/m== 0 .	
Auto Pr	HELDERBERG LIMESTONE SALINA" DOLOMITE	4432	4630	s/gas & water	
	SALINA" DOLOMITE	4630	5146		
	NEWBURG SAND	5146		ight & dry	
	DOLOMITE & SHALE	5154	5256	igni & ary	P 1 2004
	LOCKPORT DOLOMITE	5256		TO B TOOK SE	P 1 9 2007
	BIG SIX SAND (KEEFER)	5472	5505	gas @ 5306 🔝 🕏 🕏	• •
	ROSE HILL SHALE	5505			
	TOTAL DEPTH (LOGGERS')	5626	5626		
	TOTAL DEPTH (DRILLERS')	5639	l		
	,	3039			
•					
			İ		
	en e				
*					
		İ			
		1			**
		į	1		•
			ĺ		