WR-37 (REV. 5/01 Date:

October 13, 2008

Operator's

Well No.

911885

API No. 47 - 061 - 0317

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENT-OFFICE OF OIL AND GAS PRE-OPERATION CERTIFICATE FOR LIQUID INJECTION OR WASTE DISPOSAL WELL

WELL OPERA				.L.C.		DESIGNATED	AGENT David	Gum	
Addre		Box 6070				Ac	ldressSame_		
	C	harleston, V	/ V 23302		_				
Virgin re Source o	eservoir pr of informat	essure in ta	TION Hun arget format in reservoir 85 with per	ion pressu	4150 re:	OriskanyDepth Carlos psig Field Estimate 969 Open-hole		8085 feet(botton	m)
MAXIMUM PE Well her Volume p	ad injection		FION OPE 2682 psig	RATIC		ttom hole pressure	: 2980 psig		
	to be inje-		recovery: N		O BE 1	INJECTED			
Additive AcidIronTreatme		mediums,	inhibitors,	solvents	s, oxidi	zers, deoxidizers,	etc.) MC S – 2:	530 Scale Inhib	itor, MC MC 248-5
SPECIFICATIO	ONS FOR	CATHOL	OIC PROTI	ECTIO	N AND	OTHER CORR	OSION CONTE	ROL None	
ADDITIONAL	DRILLIN	G AS PAI	кт ог тні	E CON	VERSI	ON (Complete 1	Form WR-35)		
DETAILS ON NEW CASING AND TUBING PROGRAM AS PART OF THE CONVERSION (To be completed below unless the new casing and tubing program is described on a form WR-35, submitted in connection with the permit to which this form WR-37 relates.)									
CASING OR TUBING TYPE	SIZE	GRADE	WEIGHT PER FT.	NEW	USED	FOOTAGE USED IN DRILLING	FOOTAGE LEFT IN WELL	CEMENT USED	PACKERS (KIND, SIZE, DEPTH SET)
CONDUCTOR	<u>13 3/8</u>					31,22	31,22	<u>50 sks</u>	
FRESH WATER	9 5/8	-			_	1000.56	<u>1000.56</u>	300 sks	
COAL									
INTERMEDIATE									
PRODUCTION	41/4					8185	<u>8185</u>	250 sks	
TUBING A4 Lockset Retreivs	2 3/8 Seal able packer	Tight		X _		<u>7791</u>	7791		7797 Baker 2 3/8 43
LINERS							·		

MECHANICAL INTEGRITY TEST

Test Method <u>Backside loaded</u>, <u>pressure up on backside</u>. Pumped to 2010 psi on casing and shut pumps down, Pressure immediately fell to 1875 after 45 sec. Pressure stayed at 1850 for 30 minutes. Casing tested good with no action on tubing. Bleed pressure off to truck and SI with 100 psi to and install casing guage to monitor backside pressure during step rate test.

The undersigned certifies that the test was performed on December 4, 2006 and demonstrated mechanical integrity of the well. The test was witnessed by Dave Gum representing the Office of Oil and Gas.

Chesapeake Appalachia, L.L.C. Well Operator 12/04/2006 -- Date

THIS WELL IS AUTHORIZED FOR INJECTION.

Signed INC PROGRAM DIRECTOR

Date /0//3/

[NOTE: That the mechanical integrity of this well must be demonstrated again within ninety (90) days of five years from this date in order for injection to continue. Please notify the state inspector 24 hours in advance of the test].

Chesapeake Appalachia, L.L.C.

Well Operator

Its Operations Supervisor



BJ Services JobMaster Program Version 3.20 Job Number: 225047259 Customer: CHEASAPEAKE Well Name: 911885 911885

