the information is true, accurate, and complet

State of West Virginia

DATE: NOV 0 6 2012

API No: 47-001-03248H

Department of Environmental Protection

Lease No: 70640; 70642; 070943; 070943

County: Deg		00 Sec. 00 Sec.	
Deg. 15	5 Min.		
Deg. 15	5 Min.		
Deg. 00			
	Min	Sec.	
Casing and	Used in	Left in well	Cement fill
_	drilling		up Cu. Ft.
rubing	di ming		Lp Cu. x u
			ļ
		ļ	
20"	40'	40'	Grouted In
12.2/01	6111	6111	400 sks
13 3/8"	011	011	400 SKS
9.5/8"	2023'	2023'	650 sks
7 5/0			
5 1/2"	15235'	15235'	3191 sks
	<u> </u>		<u> </u>
		<u> </u>	ļ
CF/d CF/d	Oil: Initia	al open flow	7756'-15235' * Bbl/d * Bbl/d 8 Hour
neio	r (surface pr	essure) after	
bare	s (surace pro)3341C) 414C1_	
	CF/d sts	20" 40' 13 3/8" 611' 9 5/8" 2023' 5 1/2" 15235' Pay zon F/d Oil: Initial Final	20" 40' 40' 13 3/8" 611' 611' 9 5/8" 2023' 2023' 5 1/2" 15235' 15235' Pay zone depth (ft) 7 Final open flow Final open flow

10-31-12 Date

WR.	-35	5	
Rev	(5	-01)
Doo	. 1	۰£	1

WELL: PHL4BHS (406155)

1	_											
Were core	samples taken	?	Yes No	<u>X</u>	Wei	re cuttings	caught duri	ng dri	illing?	Yes <u>X</u> N	√o	
Were	_ Electrical _		_Mechanical	, <u> </u>	r Geoj	physical lo	gs recorded	on thi	s well?			
NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.												
PERFOR	ATED INTER	7 A 1	I.S. FRACTUI	RING. OI	R STIN	ATTLATTN	G:					
7/13/2012	FRACED STAGE							346,10	90#, AVG P	SI 8311, AV	3 RATE 62.4.	
7/13/2012	FRACED STAGE	2/24	. PERFED MAR	CELLUS @	14804'-	15046' W/ 40	SHOTS. SAND	288,84	10#, AVG P	SI 8588, AV	G RATE 73.1.	
7/13/2012	FRACED STAGE	3/24	. PERFED MAR	CELLUS @	14504'-	14746' W/ 40	SHOTS. SAND	350,72	20#, AVG P	SI 8645, AV	G RATE 72.0.	
7/14/2012	FRACED STAGE											
7/14/2012	FRACED STAGE	5/24	4. PERFED MAR	CELLUS @	13904'-	14146' W/ 40	SHOTS. SAND	350,40	00#, AVG P	SI 8688, AV	3 RATE 69.5.	
7/15/2012	FRACED STAGE	6/24	4. PERFED MAR	CELLUS @	13604'-	13846' W/ 40	SHOTS. SAND	351,90	00#, AVG P	SI 8585, AV	G RATE 71.4.	
7/15/2012	FRACED STAGE											
7/15/2012	FRACED STAGE	8/24	4. PERFED MAR	CELLUS @	13064'-	13246' W/ 40	SHOTS. SAND	346,74	10#, AVG P	SI 8497, AV	G RATE 67.1.	
7/16/2012	FRACED STAGE	9/24	4. PERFED MAR	CELLUS @	12704'-	12946' W/ 40	SHOTS. SAND	274,4	40#, AVG P	SI 8624, AV	G RATE 76.3.	
7/17/2012	FRACED STAGE	10/2	24. PERFED MAI	CELLUS @	12404	'-12646' W/ 4	0 SHOTS. SAN	ID 330,	260#, AVG	PSI 8565, AV	/G RATE 77.	€.
7/18/2012	FRACED STAGE	11/2	24. PERFED MAI	CELLUS (@ 12104	'-12346' W/ 4	0 SHOTS. SAN	ID 344,0	040#, AVG	PSI 8542, AV	/G RATE 84.	€.
7/19/2012	FRACED STAGE	12/	24. PERFED MAI	CELLUS (@ 11722	'-12037' W/ 4	0 SHOTS. SAN	TD 413,	220#, AVG	PSI 8434, AV	/G RATE 82.:	3.
7/20/2012												
7/23/2012	FRACED STAGE	14/	24. PERFED MAI	CELLUS (10920	'-11171' W/ 4	0 SHOTS. SAN	TD 350,	140#, AVG	PSI 8585, AV	VG RATE 93.	3.
7/23/2012	FRACED STAGE	15/	24. PERFED MAI	CELLUS (@ 10619	'-10870' W/ 4	0 SHOTS. SAN	TD 350,	890#, AVG	PSI 8446, AV	VG RATE 91.	0.
7/23/2012	FRACED STAGE	16/	24. PERFED MAI	CELLUS (@ 10319	'-10570' W/ 4	0 SHOTS. SAN	TD 353,	160#, AVG	PSI 8620, A	VG RATE 96.	3.
7/23/2012	FRACED STAGE	15/	24. PERFED MAI	CELLUS (@ 10019	'-10270' W/ 4	0 SHOTS. SAN	TD 346,	200#, AVG	PSI 8284, AV	VG RATE 99.	B .
7/24/2012	FRACED STAGE	16/	24. PERFED MAI	CELLUS (@ 9719'-	9970' W/ 40 S	SHOTS. SAND	343,50	0#, AVG PS	I 8417, AVG	RATE 100.2	
7/25/2012	THE PARTY OF THE P											
7/24/2012	FRACED STAGE	18/	24. PERFED MAI	CELLUS (@ 9120'-	9372' W/ 40 S	SHOTS. SAND	350,88	0#, AVG PS	SI 8495, AVG	RATE 88.0.	
7/24/2012	FRACED STAGE	19/	24. PERFED MAI	CELLUS (@ 8820'-	9071' W/ 40 S	SHOTS. SAND	315,94	0#, AVG PS	SI 8751, AVG	RATE 95.8.	
7/24/2012	FRACED STAGE	20/	24. PERFED MAI	RCELLUS (@ 8520'-	8770' W/ 40 S	SHOTS. SAND	363,78	0#, AVG PS	SI 8362, AVG	RATE 99.3.	
7/25/2012	FRACED STAGE	23/	24. PERFED MAI	RCELLUS (@ 8315'-	8477' W/ 40 S	SHOTS. SAND	363,80	0#, AVG PS	SI 8429, AVG	RATE 85.0.	
7/25/2012	FRACED STAGE	24/	24. PERFED MAI	RCELLUS (@ 8117'-	8277' W/ 40 S	SHOTS. SAND	363,04	0#, AVG PS	SI 8683, AVC	RATE 85.5.	
FORMATIONS ENCOUNTERED:												
Fill		0	Surface Rock	40	120	Sand&Shale	120	385	Sand	385	525	
Sand&Shale	525 5	65	Shale	565	1905	RedRock Sand	1 1905	1965	RedRock	1965	5 2065	
Shale	2065 2	090	Sand&Shale	2090	2100	Shale Sand	2100	2120	Sandy Shale	2120	2180	
RedRock	2180 2	230	Sandy Shale	2230	2265	Shale	2265	2300	Sandy Shale	2300	2700	
Shale	2700 4	300	Sandy Shale	4300	5550	Shale	5550	7756				
					GAMMA							
	RAY/											
<u>FORMATION</u>												
#PHL4BHS (406155) <u>TOPS</u> 47-001-03248H												
					TOP	BASE				-		
	FORMATION TVD AT SURFACE LOCATION					7395			-	-		
	BURKETT				7362 7395					-		
	MARCELLUS				7756					コ		
	LTD									_		
		ED U	INTIL KICKOFF POINT									
	HAMILTON				7468	7756						