# 4952



## Kristle L. McBride

Field Production Engineer
Permian Asset
North America Ga**203** PGPR 23 RM 11 43

#### **BP America Production Company**

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Direct: 432-688-5237 Fax: 432-688-5310 mcbrkl@bp.com

April 16, 2007

United States Department of the Interior Bureau of Land Management 2909 W. 2<sup>nd</sup> Street Roswell, New Mexico 88201

Attn: Alexis Swoboda, P.E.

State of New Mexico Commissioner of Public Lands P.O Box 1148 Santa Fe, New Mexico 87501

Attn: Pete Martinez

State of New Mexico
Department of Energy and Minerals
1220 S. St. Francis Dr.
Santa Fe, New MExio 87505

Attn: Mark E. Fesmire, P.E.

2007 EAU Plan of Operation – Section 11 of EAU Agreement,

Contract No. 14-08-0001-13801

Kristle L. Mc Bride Lehe-

#### Ladies and Gentlemen:

In compliance with Section 11 of the Unit Agreement, Empire Abo Unit, Eddy County, New Mexico, BP America Production Company, as Unit Operator, on behalf of itself and other participating working interest owners, hereby submits the 2007 Empire Abo Unit Plan of Operation for your approval to cover the period beginning March 1, 2007, and extending through February 28, 2008.

Sincerely,

Re:

Kristle L. McBride, Field Production Engineer

Enclosed: Exhibit A – EAU P&A Well Status, Exhibit B – EAU 2002-2006 Production History Summary Cc: Preston Abbott, Scott Wilkins, Leah Brumlow, David Newell, Marvin Whitmire, Kristle McBride

# EMPIRE ABO UNIT 2007 Plan of Operation

## Summary of the Plan of Operation for 2007

BP America Production Company has been committed to assessing and executing Empire Abo Unit workover projects that have been identified by the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management (BLM) as either being out of compliance or approaching compliance deadlines. An intensive regulatory workover program has been implemented to either return shut-in or temporarily abandoned EAU wells to production or plug and abandon EAU wells that are uneconomic. BP America Production Company will continue to be proactive in our efforts to evaluate and return EAU regulatory wells to production, maximize EAU field production, and most importantly, comply with NMOCD and BLM rules and regulations.

#### **Project Area- Description and History**

The Empire Abo Unit is located in portions of Sections 34, 35, 36, Township 17 South, Range 27 East; Sections 1, 2, 3, 4, 8, 9, 10, 11, 12, 15, 16, 17, Township 18 South, Range 27 East; Sections 25, 26, 27, 28, 31, 32, 33, 34, 35, 36, Township 17 South, Range 28 East; Sections 4, 5, 6, Township 18 South, Range 28 East; Sections 29, 30, Township 17 South, Range 29 East, Eddy County, New Mexico.

The effective date of the Unit was October 1, 1973. Tracts 2, 6, 41, 42, 46, 79, and 84 of the Unit Area did not qualify for participation on October 1, 1973. The Riverwolf Unit, comprised of Tracts 2, 6, 42, and 46, received NMOCD participation approval in June 1974, and Tracts 41, 79, and 84, included in the Empire Abo Unit, received NMOCD participation approval in September 1975. The acreage breakdown of the Unit Area is as follows:

<u>Area</u>	<u>Acres</u>
Empire Abo Unit:	10, 814.44
Riverwolf Unit:	241.05
Total Area	11, 055.49

#### **Current Performance**

In March 2007, the Empire Abo Unit averaged 1972 BOEPD. Cumulative monthly oil production from the Empire Abo Unit from January 2002 through November 2006 was 1.81 MMBO. Cumulative monthly gas production from January 2002 through November 2006 was 17.3 BCF. To date, the Empire Abo Unit has a total of 210 active wells.

#### Discussion of Past, Current, and Future Operations

- a) Empire Abo 2002-2006 Summary of Operations
  Enclosed is the EAU 2002 2006 Production History Summary (Exhibit B) and the EAU Field Production Curve covering January 2002 to November 2006.
- b) Empire Abo Plug and Abandonment and Drilling Operations
  Enclosed is the EAU P&A Well Status document (Exhibit A), which identifies
  EAU wells that have been plugged and abandoned to date and future plug and
  abandonment well operations. No drilling operations have been performed within
  the years of 2002 to 2006.
- c) Workovers

An intensive workover program has been implemented to identify uphole potential in the shallow part of the Abo reef, optimize EAU field production utilizing artificial lift techniques, and analyze inactive wells to ensure compliance with NMOCD and BLM regulations.

d) Continuing Field Optimization

In an effort to maximize future reserves, BP America Production Company will continue to monitor field performance. Furthermore, BP America Production Company will continue to evaluate options to improve performance such as the use of compression to lower wellhead pressures.

### **Modifications to Plan**

It is understood that to meet changing conditions, this plan of operation may be modified from time to time, with the approval of the Supervisor of the U.S.G.S., the Commissioner of Public Land of the State of New Mexico, and the Department of Energy and Minerals, Oil Conservation, State of New Mexico.

BP America Production Company, as Unit Operator, will act prudently to preserve the rights of mineral owners, and to effectively and efficiently recover the Unit Area Reserves. BP America Production Company will meet all economical offset obligations, act to prevent waste, conserve natural resources, and protect correlative rights.

### Effective Date and Duration of the Plan

The 2007 EAU Plan of Operation shall be effective March 1, 2007 and extended through February 28, 2008 unless otherwise amended.

## **Empire ABO Unit 2007 Plan of Operation**

If the proposed Plan of Operation meets BLM Approval, please sign below and return one copy for BP America Production Company's files.

Regards, BP America Production Company Operator

Kristle J. Mc Bride Jere

Kristle L. McBride
Production Engineer
Permian Asset

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Office: 432-688-5237 Mobile: 432-238-1910

APPROVED BY:		_DATE:
	District Manager	
	United States Department of the Interior	
	Bureau of Land Management - Roswell	
APPROVED BY:		_DATE:
	Commissioner of Public Lands	
	State of New Mexico	
	Sod Martino	
APPROVED BY:	for Mark Fernice	DATE: 4-23-07
•	Division Director	
	Department of Energy and Minerals	
	Oil Conservation Division	

State of New Mexico

## Exhibit A: EAU P&A Well Status

EAU P&A WELL STATUS					
updated as of 03/07	CONDITION				
WELL NAME	CODE	CONDITION _	DATE		
EMPIRE ABO UNIT PH-2 B40	93	Abandoned-nonproductive	08/02		
EMPIRE ABO UNIT PH-2 B42	93	Abandoned-nonproductive	01/03		
EMPIRE ABO UNIT PH-2 C45	93	Abandoned-nonproductive	01/03		
EMPIRE ABO UNIT PH-2 D42	93	Abandoned-nonproductive	10/03		
EMPIRE ABO UNIT PH-2 E27	93	Abandoned-nonproductive	03/03		
EMPIRE ABO UNIT PH-2 E28	93	Abandoned-nonproductive	03/03		
EMPIRE ABO UNIT PH-2 E31	93	Abandoned-nonproductive	09/02		
EMPIRE ABO UNIT PH-2 E374	93	Abandoned-nonproductive	11/03		
EMPIRE ABO UNIT PH-2 E41	93	Abandoned-nonproductive	10/02		
EMPIRE ABO UNIT PH-2 F32	93	Abandoned-nonproductive	09/03		
EMPIRE ABO UNIT PH-2 F333	93	Abandoned-nonproductive	11/03		
EMPIRE ABO UNIT PH-2 F334	93	Abandoned-nonproductive	09/03		
EMPIRE ABO UNIT PH-2 F336	93	Abandoned-nonproductive	09/03		
EMPIRE ABO UNIT PH-2 F363	93	Abandoned-nonproductive	09/03		
EMPIRE ABO UNIT PH-2 F37	93	Abandoned-nonproductive	04/91		
EMPIRE ABO UNIT PH-2 F374	93	Abandoned-nonproductive	10/03		
EMPIRE ABO UNIT PH-2 F39	93	Abandoned-nonproductive	10/03		
EMPIRE ABO UNIT PH-2 F40	93	Abandoned-nonproductive	12/02		
EMPIRE ABO UNIT PH-2 G21	93	Abandoned-nonproductive	09/02		
EMPIRE ABO UNIT PH-2 G23	93	Abandoned-nonproductive	08/03		
EMPIRE ABO UNIT PH-2 G30	93	Abandoned-nonproductive	06/99		
EMPIRE ABO UNIT PH-2 G301	93	Abandoned-nonproductive	12/03		
EMPIRE ABO UNIT PH-2 G31	93	Abandoned-nonproductive	12/03		
EMPIRE ABO UNIT PH-2 G311	93	Abandoned-nonproductive	05/03		
EMPIRE ABO UNIT PH-2 G313	93	Abandoned-nonproductive	05/03		
EMPIRE ABO UNIT PH-2 G32	93	Abandoned-nonproductive	05/99		
EMPIRE ABO UNIT PH-2 G321	93	Abandoned-nonproductive	01/03		
EMPIRE ABO UNIT PH-2 G332	93	Abandoned-nonproductive	03/03		
EMPIRE ABO UNIT PH-2 G343	93	Abandoned-nonproductive	05/03		
EMPIRE ABO UNIT PH-2 G37	93	Abandoned-nonproductive	09/02		
EMPIRE ABO UNIT PH-2 H21	93	Abandoned-nonproductive	07/05		
EMPIRE ABO UNIT PH-2 H302	93	Abandoned-nonproductive	05/03		
EMPIRE ABO UNIT PH-2 H33	93	Abandoned-nonproductive	12/03		
EMPIRE ABO UNIT PH-2 H34	93	Abandoned-nonproductive	10/03		
EMPIRE ABO UNIT PH-2 H341	93	Abandoned-nonproductive	12/03		
EMPIRE ABO UNIT PH-2 I29	93	Abandoned-nonproductive	12/03		
EMPIRE ABO UNIT PH-2 J-8	93	Abandoned-nonproductive	02/07		
EMPIRE ABO UNIT PH-2 J27	93	Abandoned-nonproductive	12/03		
EMPIRE ABO UNIT PH-2 K11	93	Abandoned-nonproductive	08/04		
EMPIRE ABO UNIT PH-2 K181	93	Abandoned-nonproductive	05/03		
EMPIRE ABO UNIT PH-2 K20	93	Abandoned-nonproductive	01/03		
EMPIRE ABO UNIT PH-2 K24	93	Abandoned-nonproductive	07/88		

# **Exhibit A continued: EAU P&A Well Status**

EAU P&A WELL STATUS					
EMPIRE ABO UNIT PH-2 L131	93	Abandoned-nonproductive	07/04		
EMPIRE ABO UNIT PH-2 L17	93	Abandoned-nonproductive	07/04		
EMPIRE ABO UNIT PH-2 L18	93	Abandoned-nonproductive	10/03		
EMPIRE ABO UNIT PH-2 L7	93	Abandoned-nonproductive	07/04		
EMPIRE ABO UNIT PH-2 M10	93	Abandoned-nonproductive	03/03		
EMPIRE ABO UNIT PH-2 M11	93	Abandoned-nonproductive	03/03		
EMPIRE ABO UNIT PH-2 M15	93	Abandoned-nonproductive	07/04		
EMPIRE ABO UNIT PH-2 M16	93	Abandoned-nonproductive	01/07		
EMPIRE ABO UNIT PH-2 M151	93	Abandoned-nonproductive	08/06		
EMPIRE ABO UNIT PH-2 N4	93	Abandoned-nonproductive	08/04		
EMPIRE ABO UNIT PH-2 N10	93	Abandoned-nonproductive	07/04		
EMPIRE ABO UNIT PH-2 N13	93	Abandoned-nonproductive	01/07		
EMPIRE ABO UNIT PH-2 N701	93	Abandoned-nonproductive	02/05		
EMPIRE ABO UNIT PH-2 N9	93	Abandoned-nonproductive	08/04		
EMPIRE ABO UNIT PH-2 O9	93	Abandoned-nonproductive	03/04		
EMPIRE ABO UNIT PH-2 S7	93	Abandoned-nonproductive	11/03		
EMPIRE ABO UNIT PH-2 S8	93	Abandoned-nonproductive	09/02		
EMPIRE ABO UNIT PH-2 T6	93	Abandoned-nonproductive	11/87		
EAU FUTU	JRE	<b>P&amp;A WELLS</b>			
WELL NAME		Proposed P&A Date			
EMPIRE ABO UNIT F-38		Jul-07			
EMPIRE ABO UNIT H-32		Jul-07			
EMPIRE ABO UNIT 1-30		Jul-07			
EMPIRE ABO UNIT N-901		Jul-07			
EMPIRE ABO UNIT Q-7		Jul-07			

Exhibit B: Empire Abo Unit 2002 through 2006 Production History

EMPIRE ABO UNIT						
	2002 PRODUCTION HISTORY					
Month	ВО	BW	MCF	Injected MCF		
January	35,285	193,701	413,373	0		
February	30,342	170,446	367,963	0		
March	35,213	193,638	414,263	0		
April	31,695	175,282	403,278	0		
May	30,441	149,106	469,303	0		
June	30,057	170,958	437,501	0		
July	28,949	178,098	424,661	0		
August	27,907	164,455	500,082	0		
September	28,934	162,367	458,678	0		
October	32,162	186,560	448,434	0		
November	30,246	185,652	416,432	0		
December	32,539	195,873	445,952	0		
Total	373,770	2,126,136	5,199,920	0		

EMPIRE AROUNT					
	EMPIRE ABO UNIT				
	2003 P	RODUCTIO	N HISTORY		
Month	ВО	BW	MCF	Injected MCF	
January	37,700	176,827	409,811	0	
February	36,413	205,476	344,414	0	
March	37,765	239,689	405,215	0	
April	36,959	222,074	378,261	0	
May	32,830	223,892	377,639	0	
June	28,827	215,657	353,819	0	
July	28,459	196,755	357,234	0	
August	31,153	202,438	331,327	0	
September	28,734	180,736	330,877	0	
October	31,350	162,599	280,938	0	
November	28,125	188,262	227,050	0	
December	35,525	223,309	283,595	0	
Total	393,840	2,437,714	4,080,180	0	

# Exhibit B continued: Empire Abo Unit 2002 through 2006 Production History

EMPIRE ABO UNIT						
	2004 PRODUCTION HISTORY					
Month	ВО	BW	MCF	Injected MCF		
January	34,957	229,605	337,701	0		
February	33,050	194,132	312,948	0		
March	32,997	215,943	317,530	0		
April	25,210	185,889	285,534	0		
May	27,324	167,842	295,189	0		
June	26,008	164,340	273,354	0		
July	27,740	171,709	285,308	0		
August	31,609	185,033	287,387	0		
September	34,115	176,601	272,289	0		
October	33,406	192,122	284,880	0		
November	33,334	161,838	256,063	0		
December	33,629	161,647	248,428	0		
Total	373,379	2,206,701	3,456,611	0		

EMPIRE ABO UNIT						
	2005 PRODUCTION HISTORY					
Month	ВО	BW	MCF	Injected MCF		
January	31,345	182,669	242,737	0		
February	27,579	168,425	205,742	0		
March	31,007	159,187	243,766	0		
April	31,042	181,218	191,459	0		
May	32,963	202,406	194,428	0		
June	30,415	145,020	198,599	0		
July	31,174	155,725	215,431	0		
August	28,295	183,721	210,691	0		
September	26,208	184,043	195,803	0		
October	28,966	199,685	216,573	0		
November	28,398	190,985	202,854	0		
December	28,923	219,487	205,802	0		
Total	356,315	2,172,571	2,523,885	0		

# Exhibit B continued: Empire Abo Unit 2002 through 2006 Production History

EMPIRE ABO UNIT						
	2006 PRODUCTION HISTORY					
Month						
Month	ВО		MCF	Injected MCF		
January	25,204	207,493	194,381	0		
February	25,235	188,391	166,570	0		
March	28,876	205,587	198,880	0		
April	29,083	200,890	183,235	0		
May	23,204	160,117	176,497	0		
June	29,278	194,583	180,155	0		
July	30,891	194,264	176,271	0		
August	32,865	200,868	188,015	0		
September	29,315	182,231	178,251	0		
October	31,808	199,782	176,476	0		
November	31,167	204,607	172,442	0		
December						
Total	316,926	2,138,813	1,991,173	0		

