

**Form MMS 123A/123S - Electronic Version**  
**Application for Revised Bypass**

Lease G32306 Area/Block MC 252 Well Name 001 ST 00 BP 01 Well Type Exploration  
Application Status Approved Operator 02481 BP Exploration & Production Inc.

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Agency  
Tracking ID:

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04/15/10 - Correct casing program. the 9-7/8" & 7" are actually a tapered casing. Please see corrected well design information.

04/14/10 - Revise casing program to include running a 7" production casing.

Revised data includes:  
- wellbore schematic

03/26/10 - Revise casing program to include running a 9.875" liner.

Revised data includes:  
- directional  
- wellbore schematic  
- pore pressure chart  
- procedure

01-25-10 -

1) Revise Annular Pressure test from 5000 psi to 3500 psi.

2) Request departure to stump test the 6-5/8" and 5-1/2" drill pipe but only the 6-5/8" drillpipe subsea. The only time the 5-1/2" will be run below the stack is as an inner string during the 16" casing job. Once the 16" string is landed out and cemented, the seal assemble will be set, and the inner string pulled out of the wellbore. During this time the 5-1/2" will be below the stack inside the casing

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01-12-10 - Revision to use the Deepwater Horizon to finish drilling operations (Marianas sent to shipyard for repairs, no longer under BP contract).

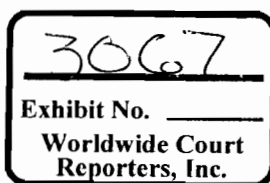
Revised attachments include:  
1) Horizon BOP schematic  
2) Wellbore schematic with revised RKB  
3) Revised Departure List (removed departure for 250.449 (f)  
4) Revised Pore Pressure Plot with Horizon RKB

The casing information has been upated to reflect actual setting depths, mudweights, etc.

Attachments referring to the Marianas BOPs and mooring have been removed.

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10-29-09 - Revised to show shallow setting depth and revised cement volume for the 18" casing.



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Revision I: 10-15-09

This RPD is to request approval to replace the upper annular element from the originally approved standard element rated to 10k on 5-1/2" pipe to a 6-5/8" element which is rated to 7.5k on 5-1/2" and 10k on 6-5/8".

Please see the attached chart which shows the rating of each element. Our max annular tests per the approved APD will be 5k both on the stump test and down hole.

**General Well Information**

API Number 608174116901	Approval Date 04/15/2010	Approved By Frank Patton
Date of Request 04/15/2010	Req Spud Date 03/16/2010	Kickoff Point
Water Depth (ft.) 4992	Drive Size (in) 36	Mineral Code Hydrocarbon
RKB Elevation 75	Drive Depth (ft.) 5361	Subsea BOP Yes
Verbal Approval Date	Verbal Approval By	

**Proposed Well Location**

**Surface Location**

LEASE (OCS) G32306	Area/Block MC 252	Authority Federal Lease
Entered NAD 27 Data	Calculated NAD 27 Departures	Calculated NAD 27 X-Y Coordinates
Lat: 28.73836889	N 6857	X 1202802.892336
Lon: -88.36593389	E 1037	Y 10431702.916855
Surface Plan	Plan Lease (OCS)	Area/Block

**Bottom Location**

LEASE (OCS) G32306	Area/Block MC 252	
Entered NAD 27 Data	Calculated NAD 27 Departures	Calculated NAD 27 X-Y Coordinates
Lat: 28.73836889	N 6857	X 1202802.892336
Lon: -88.36593389	E 1037	Y 10431702.916855
Bottom Plan	Plan Lease (OCS)	Area/Block

Approval Comments Production string must be tested to 5141 psi prior to perforating.

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Geologic Information

H2S Designation Absent	H2S TVD
Anticipated Geologic Markers	
Name	Top MD
Catinaster coalitus	13145
Discoaster kugleri	14153
Cyclicargolithus floridanus	17481
Globorotalia peripheroronda	18400
Sphenolithus heteromorphus	19120
Discoaster petaliformis	19594

Rig Information

RIG SPECIFICATIONS		ANCHORS	No
Rig Name	T.O. DEEPWATER HORIZON	ID Number	46428
Type	SEMISUBMERSIBLE	Constucted Year	2001
Function	DRILLING	Refurbished Year	
Shipyard	HYUNDAI		
RATED DEPTHS		Drill Depth	35000
Water Depth	10000		
CERTIFICATES		Coast Guard	07/27/2011
ABS/DNV	02/28/2011		
SAFE WELDING AREA		District	1
Approval Date	09/26/2001		
Remarks			

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**Application Status** Approved    **Operator** 02481    BP Exploration & Production Inc.

Number	Question	Response	Response Text
1	Will you maintain quantities of mud and mud material (including weight materials and additives) sufficient to raise the entire system mud weight 1/2	YES	
2	If hydrocarbon-based drilling fluids were used, is the drilling rig outfitted for zero discharge, and will zero discharge procedures be followed?	N/A	
3	If drilling the shallow casings strings riserless, will you maintain kill weight mud on the rig and monitor the wellbore with an ROV to ensure that it i	N/A	
4	If requesting a waiver of the conductor casing, have you submitted a log to MMS G&G that is with in 500 feet of the proposed bottom hole location for th	N/A	
5	Will the proposed operation be covered by an EPA Discharge Permit? (please provide permit number in comments for this question)	YES	Number not yet assigned
6	Will all wells in the well bay and related production equipment be shut-in when moving on to or off of an offshore platform, or from well to well on the plat	N/A	

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Permit Attachments

File Type	File Description	Status
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Required Attachments

pdf	Drilling prognosis and summary of drilling, cementing, and mud processes	Attached
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Optional/Supplemental Attachments

pdf	Wellbore Schematic	Attached
PDF	Application for Permit to Drill	Attached

Contacts Information

Name	Scherie Douglas	
Company	02481	BP Exploration & Production Inc.
Phone Number	281-366-6843	
E-mail Address	scherie.douglas@bp.com	
Contact Description	Regulatory	
Name	Heather Powell	
Company	02481	BP Exploration & Production Inc.
Phone Number	281-504-0984	
E-mail Address	heather.powell@bp.com	
Contact Description	Regulatory	

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**Well Design Information**

Interval Number 1		Type	Casing	Name		Conductor		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD	Depth (ft) TVD	Pore Pressure (ppg)
1	28.000	218.0	X-52	2437	952	6217	6217	8.6
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) 32.500			Type No Preventers			Annular Test (psi) 0		
Mud Weight (ppg) 8.6			Size (in) N/A			BOP/Diverter Test (psi) 0		
Mud Type Code Gelled Sea Water			Wellhead Rating (psi) 0			Test Fluid Weight (ppg) 0.0		
Fracture Gradient (ppg) 9.8			Annular Rating (psi) 0			Casing/Liner Test (psi) 0		
Liner Top Depth (ft)			BOP/Diverter Rating (psi) 0			Formation Test (ppg) 0.0		
Cement Volume (cu ft) 4636								

Interval Number 2		Type	Casing	Name		Surface		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD	Depth (ft) TVD	Pore Pressure (ppg)
1	22.000	277.0	X-80	7955	6670	5227	5227	8.6
2	22.000	224.0	X-80	6363	3876	7937	7937	9.3
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) 26.000			Type Blowout			Annular Test (psi) 5000		
Mud Weight (ppg) 9.5			Size (in) 18.75			BOP/Diverter Test (psi) 6500		
Mud Type Code Water Base			Wellhead Rating (psi) 15000			Test Fluid Weight (ppg) 8.6		
Fracture Gradient (ppg) 10.5			Annular Rating (psi) 10000			Casing/Liner Test (psi) 3400		
Liner Top Depth (ft)			BOP/Diverter Rating (psi) 15000			Formation Test (ppg) 10.5		
Cement Volume (cu ft) 6301								

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Interval Number 3		Type	Liner	Name		Intermediate		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD	Depth (ft) TVD	Pore Pressure (ppg)
1	18.000	117.0	P-110	6680	2110	8969	8969	10.1
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) 22.000			Type Blowout			Annular Test (psi) 3500		
Mud Weight (ppg) 10.2			Size (in) 18.75			BOP/Diverter Test (psi) 6500		
Mud Type Code Synthetic Base			Wellhead Rating (psi) 15000			Test Fluid Weight (ppg) 10.2		
Fracture Gradient (ppg) 11.8			Annular Rating (psi) 10000			Casing/Liner Test (psi) 3000		
Liner Top Depth (ft) 7489.0			BOP/Diverter Rating (psi) 15000			Formation Test (ppg) 11.8		
Cement Volume (cu ft) 993								

Interval Number 4		Type	Casing	Name		Intermediate		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD	Depth (ft) TVD	Pore Pressure (ppg)
1	16.000	97.0	P-110	6920	2340	11585	11585	11.0
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) 20.000			Type Blowout			Annular Test (psi) 3500		
Mud Weight (ppg) 11.2			Size (in) 18.75			BOP/Diverter Test (psi) 6500		
Mud Type Code Synthetic Base			Wellhead Rating (psi) 15000			Test Fluid Weight (ppg) 11.2		
Fracture Gradient (ppg) 13.0			Annular Rating (psi) 10000			Casing/Liner Test (psi) 3600		
Liner Top Depth (ft)			BOP/Diverter Rating (psi) 15000			Formation Test (ppg) 13.0		
Cement Volume (cu ft) 1120								

Interval Number 5		Type	Liner	Name		Intermediate		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD	Depth (ft) TVD	Pore Pressure (ppg)
1	13.625	88.2	Q-125	10030	4800	13145	13145	11.7
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) 16.000			Type Blowout			Annular Test (psi) 3500		
Mud Weight (ppg) 12.3			Size (in) 18.75			BOP/Diverter Test (psi) 6500		
Mud Type Code Synthetic Base			Wellhead Rating (psi) 15000			Test Fluid Weight (ppg) 12.1		
Fracture Gradient (ppg) 14.7			Annular Rating (psi) 10000			Casing/Liner Test (psi) 2500		
Liner Top Depth (ft) 11153.0			BOP/Diverter Rating (psi) 15000			Formation Test (ppg) 14.7		
Cement Volume (cu ft) 410								

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Interval Number 6		Type	Liner	Name		Intermediate		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD      TVD		Pore Pressure (ppg)
1	11.875	71.8	Q-125	10720	5630	15113	15102	13.1
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)		14.500	Type		Blowout	Annular Test (psi)		3500
Mud Weight (ppg)		13.3	Size (in)		18.75	BOP/Diverter Test (psi)		6500
Mud Type Code		Synthetic Base	Wellhead Rating (psi)		15000	Test Fluid Weight (ppg)		13.3
Fracture Gradient (ppg)		14.6	Annular Rating (psi)		10000	Casing/Liner Test (psi)		1800
Liner Top Depth (ft)		12800.0	BOP/Diverter Rating (psi)		15000	Formation Test (ppg)		14.6
Cement Volume (cu ft)		340						

Interval Number 7		Type	Casing	Name		Production		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD TVD		Pore Pressure (ppg)
1	9.875	62.8	Q-125	13840	11140	12300	12289	13.9
2	7.000	32.0	Q-125	14160	11710	18360	18349	13.9
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)		9.875	Type		Blowout	Annular Test (psi)		3500
Mud Weight (ppg)		14.0	Size (in)		18.75	BOP/Diverter Test (psi)		6500
Mud Type Code		Synthetic Base	Wellhead Rating (psi)		15000	Test Fluid Weight (ppg)		14.0
Fracture Gradient (ppg)		16.0	Annular Rating (psi)		10000	Casing/Liner Test (psi)		2500
Liner Top Depth (ft)		0.0	BOP/Diverter Rating (psi)		15000	Formation Test (ppg)		15.2
Cement Volume (cu ft)		150						

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