

From: Vidrine, Don J  
Sent: Fri Apr 16 11:23:02 2010  
To: Kaluza, Robert  
Subject: FW: Modification of Permit to Bypass at Location Surface Lease: G32306 Surface Area: MC Surface Block: 252 Bottom Lease: G32306 Bottom Area: MC Bottom Block: 252 Well Name: 001 Assigned API Number: 608174116901 has been approved.  
Importance: Normal  
Attachments: Macondo\_RBP\_7addition.pdf

-----Original Message-----

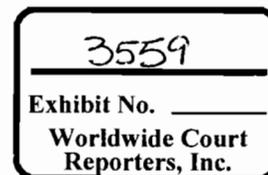
From: Morel, Brian P  
Sent: Thursday, April 15, 2010 9:43 PM  
To: Vidrine, Don J; Sepulvado, Ronald W  
Subject: FW: Modification of Permit to Bypass at Location Surface Lease: G32306 Surface Area: MC Surface Block: 252 Bottom Lease: G32306 Bottom Area: MC Bottom Block: 252 Well Name: 001 Assigned API Number: 608174116901 has been approved.  
FYI - Approved permit for casing. Still working on getting permission to set deeper surface plug.

----- Original Message -----

From: Powell, Heather (JC Connor Consulting)  
To: Hafle, Mark E  
Sent: Thu Apr 15 15:11:56 2010  
Subject: FW: Modification of Permit to Bypass at Location Surface Lease: G32306 Surface Area: MC Surface Block: 252 Bottom Lease: G32306 Bottom Area: MC Bottom Block: 252 Well Name: 001 Assigned API Number: 608174116901 has been approved.  
Please tell me 3rd time's the charm! :)  
Thanks!  
Heather

-----Original Message-----

From: frank.patton@nms.gov [mailto:frank.patton@nms.gov]  
Sent: Thursday, April 15, 2010 2:40 PM  
To: Powell, Heather (JC Connor Consulting)  
Subject: Modification of Permit to Bypass at Location Surface Lease: G32306 Surface Area: MC Surface Block: 252 Bottom Lease: G32306 Bottom Area: MC Bottom Block: 252 Well Name: 001 Assigned API Number: 608174116901 has been approved.  
Modification of Permit to Bypass at Location Surface Lease: G32306 Surface Area: MC Surface Block: 252 Bottom Lease: G32306 Bottom Area: MC Bottom Block: 252 Well Name: 001 Assigned API Number: 608174116901 has been approved. as of 2010-04-15 14:39:39.0



**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.

**Pay.gov**  
**Amount:**

**Agency**  
**Tracking ID:**

**Pay.gov**  
**Tracking ID:**

04/15/10 - Inadvertently removed the 9-7/8" liner from the well design information. Have reincorporated it.

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 updated 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.

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**

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

**Proposed Well Location**

**Surface Location**

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

**Bottom Location**

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

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**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.

**Approval Comments**

**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.

**Geologic Information**

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

**Rig Information**

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

**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.

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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**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.

**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**

<b>Name</b>	Heather Powell
<b>Company</b>	02481                      BP Exploration & Production Inc.
<b>Phone Number</b>	281-504-0984
<b>E-mail Address</b>	heather.powell@bp.com
<b>Contact Description</b>	Regulatory

**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.

**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							

**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.

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 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 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 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									

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease H43417 Area/Block ND363 Well Name !!112 ST 11 BP 12 Well Type Fyqrp!bujpo  
 Application Status Bqqspv e Operator 13592 CQ!Fyqrp!bujpo! !Qspevdjpo!bd/

Interval Number 7			Type Mof s	Name .btf sn f ejbtf				
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD TVD		Pore Pressure (ppg)
2	!!!!22/986	!!!!82/9	R.236	21831	6741	26224	26213	!!!!24/2
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) !!!!!25/611			Type Cmpx pvu			Annular Test (psi) 4611		
Mud Weight (ppg) !!!!!24/4			Size (in) 29/86			BOP/Diverter Test (psi) 7611		
Mud Type Code Tzou f jcd!Cbt f			Wellhead Rating (psi) 26111			Test Fluid Weight (ppg) !!!!!24/4		
Fracture Gradient (ppg) !!!!!25/7			Annular Rating (psi) 21111			Casing/Liner Test (psi) 2911		
Liner Top Depth (ft) !23911/1			BOP/Diverter Rating (psi) 26111			Formation Test (ppg) !!!!!25/7		
Cement Volume (cu ft) 451								

Interval Number 8			Type Mof s	Name .btf sn f ejbtf				
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD TVD		Pore Pressure (ppg)
2	!!!!: /986	!!!!73/9	R.236	24951	22251	28622	28611	!!!!24/8
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) !!!!!23/361			Type Cmpx pvu			Annular Test (psi) 4611		
Mud Weight (ppg) !!!!!24/:			Size (in) 29/86			BOP/Diverter Test (psi) 7611		
Mud Type Code Tzou f jcd!Cbt f			Wellhead Rating (psi) 26111			Test Fluid Weight (ppg) !!!!!24/:		
Fracture Gradient (ppg) !!!!!26/1			Annular Rating (psi) 21111			Casing/Liner Test (psi) 2111		
Liner Top Depth (ft) !25: 11/1			BOP/Diverter Rating (psi) 26111			Formation Test (ppg) !!!!!26/1		
Cement Volume (cu ft) 271								

Interval Number 9			Type Dbt joh	Name Qspevdjpo				
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD TVD		Pore Pressure (ppg)
2	!!!!: /986	!!!!73/9	R.236	24951	22251	23411	2339:	!!!!24/:
3	!!!!8/111	!!!!43/1	R.236	25271	22821	29471	2945:	!!!!24/:
<b>GENERAL INFORMATION</b>			<b>PREVENTER INFORMATION</b>			<b>TEST INFORMATION</b>		
Hole Size (in) !!!!!: /986			Type Cmpx pvu			Annular Test (psi) 4611		
Mud Weight (ppg) !!!!!25/1			Size (in) 29/86			BOP/Diverter Test (psi) 7611		
Mud Type Code Tzou f jcd!Cbt f			Wellhead Rating (psi) 26111			Test Fluid Weight (ppg) !!!!!25/1		
Fracture Gradient (ppg) !!!!!27/1			Annular Rating (psi) 21111			Casing/Liner Test (psi) 3611		
Liner Top Depth (ft) !!!!!1/1			BOP/Diverter Rating (psi) 26111			Formation Test (ppg) !!!!!26/3		

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

Lease H43417 Area/Block ND 363 Well Name !!112 ST 11 BP 12 Well Type Fyqps!ujpo  
Application Status Bqqspw e Operator 13592 CQ!Fyqps!ujpo! !Qspvdujpo!bd/

Cement Volume (cu ft) 261		
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QBQFSX PSL!SFEVDUPO!BDU!PG2: : 6!)QSB\*!TUBUFNF!OU!U f !QSB!)55!V/T/D/!4612!f ut f r !/Sf r vjst !vt !up!jogsn !zpv!  
u! bux f !dprndu!u! jt !jogsn bujpo!up!pcubjo! opx r!ehf !pgf r vjqn f ouboe!qspdf evsf t !up!cf !vt f e!jo!esj!oh!pqf sbujpot !/!NNT!vt ft !  
u! f !jogsn bujpo!up!f v!mbuf !boe!bqqspw !ps!ejt bqqspw !u! f !bef r vbdz!pg u! f !f r vjqn f ouboe!qspdf evsf t !up!t bg!az!qf s!psn !u! f !  
qspqpt f e!esj!oh!pqf sbujpo!Sft qpot f t !bsf !n boebupsz!)54!V/T/D/!2445\*/!Qspqsf absz!ebub!bsf !dpw!sf elvoef s!41!DGS!361/2: 7/  
Bo! bhf odz! n bz! opu dpoevdu!ps!t qpot ps! boe! b! qf st po!jt ! opu sf r vjst e! up! sf t qpoel up-! b! dprndu!jpo! pg jogsn bujpo! vorft t ! ju  
ejt q!bz t ! b! dvss! ouz! v!rje! PNC!Dpoupr!Ovn of s! Qvc!r!d!sf qps!joh! cvsef o! g!s!u! jt ! g!sn !jt ! f t yn buf e! up! bw! sbhf !38! i pvst ! qf st  
sf t qpot f -!jodme!joh!u! f !yn f !g!s!f vj!f x!joh!jot usvdujpot -!hbu f s!joh!boe!n b!joh!joh!ebub-!boe!dpn q!r!ujoh!boe!sf vj!f x!joh!u! f !g!sn /  
Ejsf d!d!pn n f ou !sf hbse!joh!u! f !cvsef olf t yn buf !ps!boz!pu! f s!bt qf d!up!gu! jt ! g!sn !g!s!u! f !.g!sn bujpo!Dprndu!jpo!Dr!f!sbodf !P!g!df s  
Nbjr!T!upq!5341-!Njof sbrn!Nbobhf n f ouTf s!df -!295: