

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-----

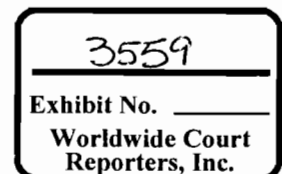
From: Morel, Brian P  
Sent: Thursday, April 15, 2010 9:43 PM  
To: Vidrine, Don J; Sepulvado, Ronald W  
Subject: FW: Modification of Permit to Bypass at Location Surface Lease: G32306 Surface Area: MC Surface  
Block: 252 Bottom Lease: G32306 Bottom Area: MC Bottom Block: 252 Well Name: 001 Assigned 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 assembly 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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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.

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

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

**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.

**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

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			
Water Depth	10000	Drill Depth	35000
CERTIFICATES			
ABS/DNV	02/28/2011	Coast Guard	07/27/2011
SAFE WELDING AREA			
Approval Date	09/26/2001	District	1
Remarks			

**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      TVD		Pore Pressure (ppg)	
1	28.000	218.0	X-52	2437	952	6217	6217	8.6	
GENERAL INFORMATION				PREVENTER INFORMATION			TEST INFORMATION		
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)		Pore Pressure (ppg)	
						MD	TVD		
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	
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION			
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	
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION			
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		
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION				
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
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
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 ND 363 Well Name !!112 ST 11 BP 12 Well Type Fyqpsbupo  
Application Status Bqqspw e Operator 13592 CQ!Fyqpsbupo! !Qspevdjpo!bd/

Interval Number 7		Type	Mof s	Name .baf sn f ejbaf				
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 jdl!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 .baf sn f ejbaf				
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 jdl!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 jdl!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!bypo

Application Status Bqqspw e    Operator 13592    CQ!Fyqps!bypo! !Qspvdujo!bd/

Cement Volume (cu ft)    261		
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QBQFSX PSL!SFEVDUPO!BDU!PG2: : 6!)QSB\*!TUBUFNFOU!U f!QSB!)55!V/T/D/!4612!f ut f r /!Sf r vjsf t !vt !up!jogsn !zpv!  
u bulx f !dpmndu!u jt !jogsn b!ypo!up!pcubjo!! opx r!hehf !pgf r vjqn f ou!boe!qspdf evsf t !up!cf !vt f e!jo!esj!h!pqf sb!jpot /!!NNT!vt f t !  
u f !jogsn b!ypo!up!f v!mbuf !boe!bqqspw !ps!ejt bqqspw !u f !bef r vbdz!pg u f !f r vjqn f ou!boe!qspdf evsf t !up!t b!q!qf s!psn !u f !  
qspqpt f e!esj!h!pqf sb!jpo!/Sf t qpot f t !bsf !n boeb!psz!)54!V/T/D/!2445\*/!Qspqsf ubz!ebub!bsf !dpw!sf el voef 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 vjsf e!up!sf t qpoel up-!b!dpmndu!po!pg jogsn b!ypo!vor!f t t !ju  
ejt q!bz t !b!dvssf ouz!v!rje!PNC!Dpousr!Ovn cf s!Qvc!r!sf qps!joh!cvsef o!gs!u jt !gsn !jt !f t yn buf e!up!bw!sbhf !38!i pvst !qf st  
sf t qpot f -!jodme!joh!u f !yn f !gs!sf v!r x!joh!jot usvdu!jpot -!hbu f s!joh!boe!n b!joub!joh!ebub-!boe!dpn q!r!joh!boe!sf v!r x!joh!u f !gsn /  
Ejsf d!dpn n f ou !sf hbse!joh!u f !cvsef olf t yn buf !ps!boz!pu f s!bt qf du!pgu jt !gsn !gs!u f !b!gsn b!ypo!Dpmndu!po!Dr!f!sbodf !Pg!jdf s-  
Nbjr!T!pq!5341-!Njof sbrn!N bobhf n f ouTf s!jdf -!295: