

Form MMS 123A/123S - Electronic Version
Application for Permit to Drill a New Well

Lease G20259 **Area/Block** WR 8 **Well Name** 001 **ST** 00 **BP** 00 **Well** Exploration
Application Status Approved **Operato** 00148 Anadarko E&P Company LP

General Well Information

API Number 608124003400	Approval Date 05/14/2008	Approved By Ben Coco
Date of Request 05/01/2008	Req Spud 05/12/2008	Kickoff Point N/A
Water Depth (ft.) 5815	Drive Size (in) 36	Mineral Code Hydrocarbon
RKB Elevation 82	Drive Depth 6222	Subsea BOP Yes
Verbal Approval		Verbal Approval By

Proposed Well Location

SURFACE LOCATION

LEASE (OCS) G25232	Area/Block WR 52	Authority Federal Lease
Entered NAD 27	Calculated NAD 27 Departures	Calculated NAD 27 X-Y
Lat: 26.92019389	N 2177.0	X 2108186.005869
Lon: -91.56408639	W 1466.0	Y 9771102.975301
Surface Plan	Plan Lease (OCS) G25232	Area/Block WR 52

BOTTOM LOCATION

LEASE (OCS) G20259	Area/Block WR 8	
Entered NAD 27	Calculated NAD 27 Departures	Calculated NAD 27 X-Y
Lat: 26.92727056	S 394.0	X 2108085.685641
Lon: -91.56430472	W 1366.0	Y 9773674.052314
Bottom Plan	Plan Lease (OCS) G20259	Area/Block WR 8

Approval Comments

The APD is approved with the following conditions:

Drill with caution due to possible shallow gas at 430 ft BML as listed on the MMS Geological Review.

Maintain KWM in the pits while drilling potential shallow gas and until behind casing. Maintain good mud properties to drill out of DP and adjusted as required to TD of well.

Hold a prespud meeting with the crew to discuss the drilling plan for the well and above shallow hazard. Hold pit drills and abandon ship drill prior to spudding.

Cement slurry must contain gas migration additives, quick transition time additives, and high compressive strength additives to prevent gas flow after cementing across any gas sands or any referenced shallow hazards. Casing must be centralized in the hole across any gas sands to ensure uniform cement sheath across the sands or any referenced shallow hazards.

The well design is approved as submitted, but during the course of drilling operations the well must be continuously evaluated to ensure that all annuli meet the requirements of 30 CFR 250.420 and 421 and 428 for casing and cementing design. You are required to adhere to the cementing requirements as set forth by 30 CFR 250.422 for the resumption of drilling after cementing. Casing shall be tested to the requirements set forth by 30 CFR 250.423 thru 427.

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All test pressures for the operation should be rounded off to the nearest tens.

The 14-day BOP test interval begins at completion of the Stump Test, not the Wellhead Connection Test. All hydraulically operated BOP components must be functioned during the Connection Test. All required pressure tests are to also be conducted once the BOP stack is latched.

If BOP Test RAMs are used, the initial BOP test must be conducted using a test tool and the Wellhead/BOP stack connection must be tested to the maximum proposed RAM test.

The use of a drill string hang off tool for rig evacuation or to repair major drilling or well control equipment is allowed only until such time as hydrocarbons are present in the open hole. If hydrocarbons are exposed, a downhole safety device such as a cement plug, bridge plug, or packer must be used if time allows.

If a storm packer is used to secure the well in the event of a storm evacuation, the packer must be set at a minimum of 100 feet BML.

Follow any conditions stipulated in your approved Plan N-9174.

You are required to submit the WAR s per 30 CFR 250.468(b) and the time requirements outlined in NTL No. 2004-G04, as well as enter the as-built casing in the WAR for every wellbore, including each ST and/or BP. The EOR is required to be submitted by the time requirements stated in 30 CFR 250.465(b)(3).

All requested departures cited from 30 CFR 250 are acceptable unless stated otherwise. All comments stated apply unless a waiver is approved and documented. Any verbal approval given should be documented in the IADC report on the rig and the submitted WAR.

An APM is needed with a Final Surveyed Surface Location Plat certified by a professional surveyor as required by 30 CFR 250.465(a)(2) with NAD 83 coordinates, KB, and WD as soon as they are determined.

If it appears that the time of operation is to extend beyond that listed in your submitted Mooring Analysis you are required to contact the MMS Houma District immediately with an updated operations plan. Anadarko may be required to submit an RPD with a revised Mooring Analysis to amend the time of operation if requested by the Regional Office.

All operations must be conducted in accordance with the OCS Lands Act (OCSLA), the lease terms and stipulations, the regulations of 30 CFR Part 250, Notices to Lessees and Operators (NTL s), the approved Application for Permit to Drill (APD), and any written instructions or orders of the District Manager.

Notify the MMS Houma District office 24 hours prior to moving onto or off of the location.

Ben Coco
Drilling Engineer
MMS Houma District

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RKB Elevation	82	Drive Depth	6222	Subsea BOP	Yes
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985-853-5903

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Geologic Information

H2S Designation Absent	H2S TVD
Anticipated Geologic Markers	
Name	Top MD
Wilcox	28347

Rig Information

RIG SPECIFICATIONS		ANCHORS Yes	
Rig Name	NOBLE PAUL ROMANO		
Type	SEMISUBMERSIBLE	ID Number	92126
Function	DRILLING	Constructed	1981
Shipyard	INGALLS MS	Refurbished	1997
RATED DEPTHS			
Water Depth	6000	Drill Depth	32500
CERTIFICATES			
ABS/DNV	05/31/2009	Coast Guard	05/07/2009
SAFE WELDING AREA			
Approval Date	02/19/1999	District	1.0
Remarks			

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Question Information

Number	Question	Respons	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 ppg or more?	NO	
2	If hydrocarbon-based drilling fluids were used, is the drilling rig outfitted for zero discharge and will zero discharge procedures be followed?	NO	Synthetic is used
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 is not flowing?	YES	
4	If requesting a waiver of the conductor casing, have you submitted a log to MMS G&G that is within 500 feet of the proposed bottom hole location for the proposed surface casing point?	N/A	
5	Will the proposed operation be covered by an EPA Discharge Permit? (please provide permit number in comments for this question)	YES	GMG290033 - EPA coverage has been applied for 4-30-2008 for WR 8 and WR 52. Includes SBM
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 platform? If not, please explain.	N/A	

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Permit Attachments

File Type	File Description	Status
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Required Attachments

pdf	Proposed Well Location Plat	Attached
pdf	Drilling prognosis and summary of drilling, cementing, and mud processes	Attached
pdf	Directional Program	Attached
pdf	Pore pressure (PP), Mud Weight (MW), and Fracture Gradient (FG) Plot	Attached
pdf	BOP & Diverter Schematics with Operating Procedures	Attached
pdf	Proposed Wellbore Schematic	Attached
pdf	Engineering Calculation	Attached

Optional/Supplemental Attachments

pdf	Departure List	Attached
pdf	AQWA Summaries Minimum Category 1 - Appendix B	Attached
pdf	Shallow Gas Statement	Attached
pdf	Appendix C - AQWA Summaries Limit Sate	Attached
pdf	Appendix A - AQWA Survival Draft RAOs &	Attached
pdf	Mooring Pattern - 9 anchor	Attached
pdf	Constat Report	Attached
pdf	MOTION MOORING Analysis	Attached
pdf	Check list	Attached
pdf	Revised procedure	Attached
pdf	2008-05-13 Regional approval and comments - Mooring analysis	Attached

Contacts Information

Name	Gaylene Reier
Company	00148 Anadarko E&P Company LP
Phone Number	832.636.3096
E-mail Address	gaylene.reier@anadarko.com
Contact	

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Contacts Information

Name	Sharon Jensen
Company	00148 Anadarko E&P Company LP
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E-mail Address	sharon.jensen@anadarko.com
Contact	

Name	Judy Davidson
Company	00148 Anadarko E&P Company LP
Phone Number	832.636.8766
E-mail Address	judy.davidson@anadarko.com
Contact	

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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 TVD	Pore Pressure (ppg)
1	22.0	224.0	X-80	6363.0	3876.0	8250. 8250.	8.8
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)	26.0		Type	Blowout		Annular Test (psi)	3500.0
Mud Weight (ppg)	9.0		Size (in)	18.75		BOP/Diverter Test	5000.0
Mud Type Code	Water Base		Wellhead Rating	15000		Test Fluid Weight	0.0
Fracture Gradient	12.8		Annular Rating (psi)	10000		Casing/Liner Test	4500.0
Liner Top Depth (ft)	0.0		BOP/Diverter Rating	15000		Formation Test (ppg)	12.7
Cement Volume (cu	3310.0						

Interval Number 2			Type Liner		Name Surface		
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD TVD	Pore Pressure (ppg)
1	17.875	93.5	P-110	5380.0	1270.0	12600 12600	10.7
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)	21.0		Type	Blowout		Annular Test (psi)	3500.0
Mud Weight (ppg)	12.2		Size (in)	18.75		BOP/Diverter Test	5000.0
Mud Type Code	Synthetic		Wellhead Rating	15000		Test Fluid Weight	12.2
Fracture Gradient	14.6		Annular Rating (psi)	10000		Casing/Liner Test	1600.0
Liner Top Depth (ft)	7750.0		BOP/Diverter Rating	15000		Formation Test (ppg)	14.4
Cement Volume (cu	1500.0						

Interval Number 3			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	13.625	88.2	HCQ-	10610.0	5930.0	19500 19500	12.0
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)	16.5		Type	Blowout		Annular Test (psi)	3500.0
Mud Weight (ppg)	13.8		Size (in)	18.75		BOP/Diverter Test	9000.0
Mud Type Code	Synthetic		Wellhead Rating	15000		Test Fluid Weight	13.8
Fracture Gradient	15.8		Annular Rating (psi)	10000		Casing/Liner Test	2600.0
Liner Top Depth (ft)	0.0		BOP/Diverter Rating	15000		Formation Test (ppg)	15.6
Cement Volume (cu	1700.0						

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Well Design Information

Interval Number 4		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	HCQ125	10720.0	7190.0	26141 26022	12.9
GENERAL INFORMATION			PREVENTER INFORMATION		TEST INFORMATION		
Hole Size (in) 14.0			Type Blowout		Annular Test (psi) 3500.0		
Mud Weight (ppg) 14.2			Size (in) 18.75		BOP/Diverter Test 9000.0		
Mud Type Code Synthetic			Wellhead Rating 15000		Test Fluid Weight 14.2		
Fracture Gradient 14.7			Annular Rating (psi) 10000		Casing/Liner Test 2100.0		
Liner Top Depth (ft) 19200.0			BOP/Diverter Rating 15000		Formation Test (ppg) 14.7		
Cement Volume (cu 900.0							

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	9.375	39.0	HCQ-125	9330.0	4850.0	27857 27600	14.0
GENERAL INFORMATION			PREVENTER INFORMATION		TEST INFORMATION		
Hole Size (in) 10.625			Type Blowout		Annular Test (psi) 3500.0		
Mud Weight (ppg) 14.2			Size (in) 18.75		BOP/Diverter Test 9000.0		
Mud Type Code Synthetic			Wellhead Rating 15000		Test Fluid Weight 14.2		
Fracture Gradient 15.0			Annular Rating (psi) 10000		Casing/Liner Test 1100.0		
Liner Top Depth (ft) 25841.0			BOP/Diverter Rating 15000		Formation Test (ppg) 15.0		
Cement Volume (cu 100.0							

Interval Number 6		Type Open Hole		Name Open Hole			
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft) MD TVD	Pore Pressure (ppg)
1						31011 30500	14.2
GENERAL INFORMATION			PREVENTER INFORMATION		TEST INFORMATION		
Hole Size (in) 8.5			Type Blowout		Annular Test (psi) 3500.0		
Mud Weight (ppg) 14.5			Size (in) 18.75		BOP/Diverter Test 9000.0		
Mud Type Code Synthetic			Wellhead Rating 15000		Test Fluid Weight 0.0		
Fracture Gradient 15.5			Annular Rating (psi) 10000		Casing/Liner Test		
Liner Top Depth (ft)			BOP/Diverter Rating 15000		Formation Test (ppg)		
Cement Volume (cu							

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PAPERWORK REDUCTION ACT OF 1995 (PRA) STATEMENT: The PRA (44 U.S.C. 3501 et seq. Requires us to inform you that we collect this information to obtain knowledge of equipment and procedures to be used in drilling operations. MMS uses the information to evaluate and approve or disapprove the adequacy of the equipment and/or procedures to safely perform the proposed drilling operation. Responses are mandatory (43 U.S.C. 1334). Proprietary data are covered under 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number. Public reporting burden for this form is estimated to average 2? hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the