

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

Lease G18675 **Area/Block** WR 278 **Well Name** 001 **ST** 00 **BP** 00 **Well** Exploration
Application Status Approved **Operato** 02421 **Devon Energy Production Company, L.P.**

General Well Information

API Number 608124002500	Approval Date 06/18/2007	Approved By Ben Coco
Date of Request 05/29/2007	Req Spud 06/25/2007	Kickoff Point N/A
Water Depth (ft.) 6475	Drive Size (in) 36	Mineral Code Hydrocarbon
RKB Elevation 86	Drive Depth 6816	Subsea BOP Yes
Verbal Approval		Verbal Approval By

Proposed Well Location

SURFACE LOCATION

LEASE (OCS) G18675	Area/Block WR 278	Authority Federal Lease
Entered NAD 27	Calculated NAD 27 Departures	Calculated NAD 27 X-Y
Lat: 26.660985	S 10.0	X 2216909.988164
Lon: -91.23441028	E 690.0	Y 9678250.006377
Surface Plan	Plan Lease (OCS) G18675	Area/Block WR 278

BOTTOM LOCATION

LEASE (OCS) G18675	Area/Block WR278
Entered NAD 27	Calculated NAD 27 Departures
Lat: 26.67727444	S 5856.0
Lon: -91.25097944	E 6182.0
Bottom Plan	Plan Lease (OCS) G18675

Approval Comments

The APD is approved with the following conditions:

Maintain kill weight mud in the pits.

Maintain good drilling mud properties to drill out of drive pipe and weight increased as required to TD of well.

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

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

Follow the conditions of your approved Plan N-8938.

You are required to enter the as built casing on the WAR for every wellbore including each sidetrack and or bypass.

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.

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RKB Elevation	86	Drive Depth	6816	Subsea BOP	Yes
Verbal Approval			Verbal Approval By		

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

Call if any questions or concerns, Ben Coco at 985-853-5903.

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Geologic Information

H2S Designation	Absent	H2S TVD
Anticipated Geologic Markers		
Name	Top MD	
Top of Salt	6868	
Base of Salt	25619	
Oligocene (MOL)	29005	
Wilcox (EOC3)	32483	

Rig Information

RIG SPECIFICATIONS		ANCHORS		Yes
Rig Name	DIAMOND OCEAN ENDEAVOR			
Type	SEMISUBMERSIBLE	ID Number	28531	
Function	DRILLING	Constructed	1975	
Shipyard	AUSTRALIA	Refurbished		
RATED DEPTHS				
Water Depth	10000	Drill Depth	38000	
CERTIFICATES				
ABS/DNV	03/30/2012	Coast Guard	06/12/2009	
SAFE WELDING AREA				
Approval Date	12/27/2000	District	5.0	
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?	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 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	GMG290091
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	Proposed Wellbore Schematic	Attached
pdf	Pore pressure (PP), Mud Weight (MW), and Fracture Gradient (FG) Plot	Attached
pdf	Engineering Calculation	Attached
pdf	BOP & Diverter Schematics with Operating Procedures	Attached

Optional/Supplemental Attachments

pdf	Deepwater Cement Practices	Attached
pdf	Rig Water Depth Capability	Attached
pdf	Ship Radio Station License	Attached
pdf	18in Pipe Collapse Report	Attached
pdf	Vessel Certificate of Financial Responsibility	Attached
pdf	Shallow Gas and Shallow Water Flow Contingency	Attached
pdf	Mooring Analysis and Risk Assessment	Attached
pdf	Floater Evacuation Plan	Attached
pdf	Safe Welding Area Drawing	Attached
pdf	U.S. Coast Guard Certificate	Attached
pdf	Rig Picture and Drawing	Attached
pdf	Departure List	Attached
pdf	ABS/DNV Certificate	Attached

Contacts Information

Name	Patricia Bruce
Company	02410 Devon Energy Corporation
Phone Number	713--286-5861
E-mail Address	Patricia.Bruce@dvn.com
Contact	Senior Regulatory Specialist

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Contacts Information

Name	George Mullen
Company	02421 Devon Energy Production Company, L.P.
Phone Number	713-286-5836
E-mail Address	george.mullen@dvn.com
Contact	Senior Regulatory Specialist

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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	224.3	X-80	6360.0	3870.0	8100. 8100.	8.6
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)		26.0	Type		No Preventers	Annular Test (psi) 0.0	
Mud Weight (ppg)		9.6	Size (in)		N/A	BOP/Diverter Test 0.0	
Mud Type Code		Gelled Sea	Wellhead Rating		N/A	Test Fluid Weight 8.6	
Fracture Gradient		10.6	Annular Rating (psi)		N/A	Casing/Liner Test 2700.0	
Liner Top Depth (ft)			BOP/Diverter Rating		N/A	Formation Test (ppg) 10.5	
Cement Volume (cu		3750.0					

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	18.0	94.0	X-80	3880.0	1060.0	10700 10700	9.8
2	17.875	93.5	HCN-80	3916.0	1290.0	12500 12500	9.8
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)		21.0	Type Blowout		Annular Test (psi)		5400.0
Mud Weight (ppg)		10.0	Size (in) 18.75		BOP/Diverter Test		5400.0
Mud Type Code		Synthetic	Wellhead Rating 15000		Test Fluid Weight		10.0
Fracture Gradient		13.3	Annular Rating (psi) 10000		Casing/Liner Test		2100.0
Liner Top Depth (ft)		7500.0	BOP/Diverter Rating 15000		Formation Test (ppg)		13.2
Cement Volume (cu		2391.0					

Interval Number 3		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	16.0	96.0	HCP-110	6918.0	2345.0	17000 17000	11.4

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GENERAL INFORMATION		PREVENTER INFORMATION		TEST INFORMATION	
Hole Size (in)	20.0	Type	Blowout	Annular Test (psi)	5400.0
Mud Weight (ppg)	12.1	Size (in)	18.75	BOP/Diverter Test	5400.0
Mud Type Code	Synthetic	Wellhead Rating	15000	Test Fluid Weight	12.1
Fracture Gradient	14.7	Annular Rating (psi)	10000	Casing/Liner Test	2000.0
Liner Top Depth (ft)	7400.0	BOP/Diverter Rating	15000	Formation Test (ppg)	14.3
Cement Volume (cu	2035.0				

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	14.0	113.0	HCQ-125	12500.0	10540.0	6581. 6581.	12.3
2	13.625	88.2	HCQ-125	10030.0	5930.0	21902 21725	12.3

GENERAL INFORMATION		PREVENTER INFORMATION		TEST INFORMATION	
Hole Size (in)	16.5	Type	Blowout	Annular Test (psi)	5500.0
Mud Weight (ppg)	13.1	Size (in)	18.75	BOP/Diverter Test	8000.0
Mud Type Code	Synthetic	Wellhead Rating	15000	Test Fluid Weight	13.1
Fracture Gradient	15.7	Annular Rating (psi)	10000	Casing/Liner Test	5200.0
Liner Top Depth (ft)		BOP/Diverter Rating	15000	Formation Test (ppg)	15.0
Cement Volume (cu	2476.0				

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	11.875	71.8	HCQ125	10720.0	7190.0	27034	26585	14.0

GENERAL INFORMATION		PREVENTER INFORMATION		TEST INFORMATION	
Hole Size (in)	14.5	Type	Blowout	Annular Test (psi)	5100.0
Mud Weight (ppg)	14.3	Size (in)	18.75	BOP/Diverter Test	9100.0
Mud Type Code	Synthetic	Wellhead Rating	15000	Test Fluid Weight	14.3
Fracture Gradient	15.3	Annular Rating (psi)	10000	Casing/Liner Test	2000.0
Liner Top Depth (ft)	21500.0	BOP/Diverter Rating	15000	Formation Test (ppg)	15.0
Cement Volume (cu	1438.0				

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)

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1	9.875	62.8	Q125HC	13840.0	13050.0	31451 30240	14.1
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)	12.25		Type	Blowout		Annular Test (psi)	5100.0
Mud Weight (ppg)	14.4		Size (in)	18.75		BOP/Diverter Test	10300.0
Mud Type Code	Synthetic		Wellhead Rating	15000		Test Fluid Weight	14.4
Fracture Gradient	16.0		Annular Rating (psi)	10000		Casing/Liner Test	1900.0
Liner Top Depth (ft)	26634.0		BOP/Diverter Rating	15000		Formation Test (ppg)	15.6
Cement Volume (cu	592.0						

Interval Number 7		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						36145 34085	14.3
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION	
Hole Size (in)	8.5		Type	Blowout		Annular Test (psi)	5100.0
Mud Weight (ppg)	14.7		Size (in)	18.75		BOP/Diverter Test	10300.0
Mud Type Code	Synthetic		Wellhead Rating	15000		Test Fluid Weight	0.0
Fracture Gradient	0.0		Annular Rating (psi)	10000		Casing/Liner Test	0.0
Liner Top Depth (ft)			BOP/Diverter Rating	15000		Formation Test (ppg)	0.0
Cement Volume (cu							

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