

Form MMS 123A/123S - Electronic Version

Application for Bypass

Lease G22968 **Area/Block** GC 504 **Well Name** 001 **ST** 00 **BP** 01 **Well Type** Exploration
Application Status Approved **Operator** 00687 Nexen Petroleum U.S.A. Inc.

Pay.gov **Agency** **Pay.gov**
Amount: \$1,959 **Tracking ID:** EWL-ABP-11231 **Tracking ID:** 255CHGEA

General Well Information

API Number 608114058101	Approval Date 01/17/2012	Approved By Amy Wilson
Date of Request 01/05/2012	Req Spud Date 12/28/2011	Kickoff Point 23500
Water Depth (ft.) 3600	Drive Size (in) 36	Mineral Code Hydrocarbon
RKB Elevation 86	Drive Depth (ft.) 4039	Subsea BOP Yes
Verbal Approval Date		Verbal Approval By

Proposed Well Location

Surface Location

LEASE (OCS) G22968	Area/Block GC 504	Authority Federal Lease
Entered NAD 27 Data	Calculated NAD 27 Departures	Calculated NAD 27 X-Y Coordinates
Lat: 27.48001448	N 1720	X 2312025.489907
Lon: -90.9281688	E 615	Y 9977480.111871
Surface Plan R 5083	Plan Lease (OCS) G22968	Area/Block GC 504

Bottom Location

LEASE (OCS) G22968	Area/Block GC 504	
Entered NAD 27 Data	Calculated NAD 27 Departures	Calculated NAD 27 X-Y Coordinates
Lat: 27.47711056	N 2830	X 2308795.793443
Lon: -90.93818361	E 3844	Y 9976370.377891
Bottom Plan R 5083	Plan Lease (OCS) G22968	Area/Block GC 504

Approval Comments This Permit is subject to any applicable conditions stated in the previous approval(s) for this well as well as recognizes those applicable attachments accepted in previous approval(s).

Mitigations:

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Geologic Information

H2S Designation Known	H2S TVD
Anticipated Geologic Markers	
Name	Top MD
Tathiti	28039

Rig Information

RIG SPECIFICATIONS		ANCHORS	No
Rig Name	ENSCO 8502		
Type	DP SEMISUBMERSIBLE	ID Number	50540
Function	DRILLING	Constucted Year	2010
Shipyard	SINGAPORE	Refurbished Year	
RATED DEPTHS			
Water Depth	8500	Drill Depth	35000
CERTIFICATES			
ABS/DNV	01/14/2015	Coast Guard	07/06/2012
SAFE WELDING AREA			
Approval Date	11/23/2010	District	2
Remarks			

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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	Well will drilling in accordance with NPDES GMG 290058
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	N/A	
4	If requesting a waiver of the conductor casing, have you submitted a log to government agency G&G that is with in 500 feet of the proposed bottor	NO	
5	Will the proposed operation be covered by an EPA Discharge Permit? (please provide permit number in comments for this question)	YES	GMG 290000
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 we	N/A	
7	Is the calculated daily volume possible from an uncontrolled blowout of this well greater than the daily volume included in the worst case discharge	NO	

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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	WCST Approval	Attached
pdf	WCST	Attached
pdf	Operations Re-cap	Attached
pdf	Pore Pressure Plot	Attached
pdf	Wellbore Schematic	Attached
pdf	Directional Plan	Attached
pdf	Revsied Cement Program	Attached
pdf	BSEE 123S	Attached

Contacts Information

Name	Cary Bradford
Company	00687 Nexen Petroleum U.S.A. Inc.
Phone Number	972-450-4489
E-mail Address	cary_bradford@nexeninc.com
Contact Description	

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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	22.000	277.0	X 80	7950	6670	3779	3779	9.0	
2	22.000	224.0	X 80	6360	3870	5983	5982	9.0	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	26.000		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	9.1		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Gelled Sea Water		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	8.7	
Fracture Gradient (ppg)	14.8		Annular Rating (psi)	10000		Casing/Liner Test (psi)	3400	
Liner Top Depth (ft)			BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	14.8	
Cement Volume (cu ft)	7571							

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	18.000	117.0	P-110	6680	2110	9279	9278	10.5	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	21.000		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	12.1		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Synthetic Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	12.0	
Fracture Gradient (ppg)	16.0		Annular Rating (psi)	10000		Casing/Liner Test (psi)	2470	
Liner Top Depth (ft)	3791.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	13.5	
Cement Volume (cu ft)	1853							

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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 TVD		Pore Pressure (ppg)	
1	16.000	97.0	Q-125HC	7860	2990	13982	13981	12.1	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	19.500		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	13.0		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Gelled Sea Water		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	13.0	
Fracture Gradient (ppg)	16.6		Annular Rating (psi)	10000		Casing/Liner Test (psi)	3155	
Liner Top Depth (ft)	7956.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	15.2	
Cement Volume (cu ft)	2369							

Interval Number 4		Type	Casing			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	14.000	112.6	HCQ125	12450	8920	18851	18850	15.5	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	17.500		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	15.6		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Synthetic Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	15.6	
Fracture Gradient (ppg)	16.2		Annular Rating (psi)	10000		Casing/Liner Test (psi)	7400	
Liner Top Depth (ft)			BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	16.2	
Cement Volume (cu ft)	3051							

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	11.750	65.0	Q125HC	9940	5740	21900	21899	14.1	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	14.750		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	15.6		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Synthetic Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	15.6	
Fracture Gradient (ppg)	17.6		Annular Rating (psi)	10000		Casing/Liner Test (psi)	4100	
Liner Top Depth (ft)	18517.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	16.7	
Cement Volume (cu ft)	634							

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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	9.875	62.8	HC Q125	13840	11640	23387	23384	14.5	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	12.250		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	15.2		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Synthetic Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	15.2	
Fracture Gradient (ppg)	16.0		Annular Rating (psi)	10000		Casing/Liner Test (psi)	1500	
Liner Top Depth (ft)	22887.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	16.0	
Cement Volume (cu ft)	1057							

Interval Number 7		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	7.625	39.0	Q125 HC	14340	12810	26990	26538	15.3	
2	7.625	39.0	P-110	12620	11080	27543	27000	15.3	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	9.875		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	15.4		Size (in)	18.75		BOP/Diverter Test (psi)	12000	
Mud Type Code	Synthetic Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	15.4	
Fracture Gradient (ppg)	16.8		Annular Rating (psi)	10000		Casing/Liner Test (psi)	2500	
Liner Top Depth (ft)	22885.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	16.8	
Cement Volume (cu ft)	462							

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Interval Number 8		Type Open Hole			Name Open Hole			
Section Number	Casing Size (in)	Casing Weight (lb/ft)	Casing Grade	Burst Rating	Collapse Rating (psi)	Depth (ft)		Pore Pressure (ppg)
						MD	TVD	
1						30039	29084	15.6

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	6.500		Type	Blowout		Annular Test (psi)	7800	
Mud Weight (ppg)	15.7		Size (in)	18.75		BOP/Diverter Test (psi)	10200	
Mud Type Code	Synthetic Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	0.0	
Fracture Gradient (ppg)	17.1		Annular Rating (psi)	10000		Casing/Liner Test (psi)	0	
Liner Top Depth (ft)			BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	0.0	
Cement Volume (cu ft)	0							

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 27 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 for the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849