

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease	G21640	Area/Block	EI 223	Well Name	001	ST	00	BP	01	Well Type	Exploration
Application Status	Approved		Operator	02312		McMoRan Oil & Gas LLC					

Subject to the same conditions as was in the original approval to drill.

You must have the most current set of approved BOP drawings on the rig and available for inspection. If there are any revisions or changes made to the approved set of BOP control system drawings, then you must submit a RPD and receive approval for those revisions.

Once the Shear Boost System has been commissioned, a RBP is required to be submitted with the as-builds of the Shear Boost System. You must attach the completed Commissioning Procedure for the High Pressure Shear Boost Assembly document for the Rowan EXL I.

The Shear Boost System must be used during all blind shear ram function and pressure testing using the 3200 psi closing pressure. The Shear Boost System Regulator item 81 located on the Shear Boost Flow Diagram must be maintained at 3200 psi throughout the drilling of the well to 32020 ft md/ 32000 ft tvd.

For a well to be considered permanently abandoned, all annular spaces that communicate with open hole and extend to the mud line must be isolated with a cement plug at least 200 feet long that is set in the annulus, per regulation 30 CFR 250.1715 (a) (6).

You are required to submit the WARs per 30 CFR 250.468(b) and the time requirements outlined in NTL No. 2009-G20. Also 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).

Mitigations:

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease G21640 **Area/Block** EI 223 **Well Name** 001 **ST** 00 **BP** 01 **Well Type** Exploration
Application Status Approved **Operator** 02312 McMoRan Oil & Gas LLC

Geologic Information

H2S Designation Unknown	H2S TVD 16881
Anticipated Geologic Markers	
Name	Top MD
Upper Miocene Discoaster A	21000
Top Salt	22370
Base Salt	22597
Lower Miocene Sphenolithus belemnoides	24390
Lower Miocene Marginulina A	24930
Lower Miocene Siphonina davisii	27930
Lower Miocene Cyclocargolithus abisectus	28890
Upper Oligocene Dictyococcites bisecta	30100
Upper Oligocene Sphenolithus ciperoensis	30300
Upper Oligocene Paragloborotalia opima	31700

Rig Information

RIG SPECIFICATIONS		ANCHORS	No
Rig Name	ROWAN EXL I		
Type	JACKUP	ID Number	50519
Function	DRILLING	Constructed Year	2010
Shipyard	KEPPEL AMFELS	Refurbished Year	
RATED DEPTHS			
Water Depth	350	Drill Depth	35000
CERTIFICATES			
ABS/DNV	04/29/2015	Coast Guard	05/25/2012
SAFE WELDING AREA			
Approval Date	02/17/2011	District	
Remarks			

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease G21640 **Area/Block** EI 223 **Well Name** 001 **ST** 00 **BP** 01 **Well Type** Exploration
Application Status Approved **Operator** 02312 McMoRan Oil & Gas LLC

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?	YES	
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	N/A	
5	Will the proposed operation be covered by an EPA Discharge Permit? (please provide permit number in comments for this question)	YES	GMG290163
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	

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

Lease G21640 **Area/Block** EI 223 **Well Name** 001 **ST** 00 **BP** 01 **Well Type** Exploration
Application Status Approved **Operator** 02312 McMoRan Oil & Gas LLC

Permit Attachments

File Type	File Description	Status
-----------	------------------	--------

Required Attachments

pdf	Drilling prognosis and summary of drilling, cementing, and mud processes	Attached
-----	--	----------

Optional/Supplemental Attachments

pdf	BOP Diagram	Attached
pdf	Procedure for Shear Boost System	Attached
pdf	Flow Diagrams	Attached
pdf	Quick Exhaust Valves	Attached
pdf	PE Certification	Attached
pdf	Directional Projection	Attached
pdf	Blind Shear Procedure	Attached
pdf	West Shear Package	Attached
pdf	E-Mail - Shear Booster System Operation	Attached
pdf	Revised Wellbore Schematic	Attached
pdf	Waiver to 30 CFR 250.461 (a)	Attached
pdf	Worst Case Discharge Information	Attached
pdf	PP-MW-FG Plot	Attached
pdf	Casing Design	Attached
pdf	Flow Diagrams	Attached

Contacts Information

Name	Julie Bowen	
Company	02312	McMoRan Oil & Gas LLC
Phone Number	504-582-4535	
E-mail Address	julie_bowen@fmi.com	
Contact Description	Regulatory Supervisor	

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease G21640 Area/Block EI 223 Well Name 001 ST 00 BP 01 Well Type Exploration
Application Status Approved Operator 02312 McMoRan Oil & Gas LLC

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	218.3	X-56	2630	950	1266	1266	9.0

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	36.000		Type	Diverter		Annular Test (psi)	200	
Mud Weight (ppg)	9.3		Size (in)	36.5		BOP/Diverter Test (psi)	200	
Mud Type Code	Water Base		Wellhead Rating (psi)	N/A		Test Fluid Weight (ppg)	9.3	
Fracture Gradient (ppg)	11.5		Annular Rating (psi)	500		Casing/Liner Test (psi)	200	
Liner Top Depth (ft)	0.0		BOP/Diverter Rating (psi)	500		Formation Test (ppg)	0.0	
Cement Volume (cu ft)	7069							

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 TVD		Pore Pressure (ppg)
1	20.000	133.0	N-80	4451	1600	4189	4189	9.0

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	26.000		Type	Blowout		Annular Test (psi)	3500	
Mud Weight (ppg)	9.5		Size (in)	18.75		BOP/Diverter Test (psi)	5000	
Mud Type Code	Water Base		Wellhead Rating (psi)	5000		Test Fluid Weight (ppg)	9.5	
Fracture Gradient (ppg)	14.5		Annular Rating (psi)	10000		Casing/Liner Test (psi)	2980	
Liner Top Depth (ft)	0.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	14.5	
Cement Volume (cu ft)	14499							

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	16.000	138.0	Q125HC	11660	8070	4062	4062	9.0
2	16.000	138.0	Q125HC	11660	8070	4304	4304	9.0
3	16.000	138.0	Q125HC	11660	8070	15299	15298	11.4

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	22.000		Type	Blowout		Annular Test (psi)	6100	
Mud Weight (ppg)	11.8		Size (in)	18.75		BOP/Diverter Test (psi)	6100	
Mud Type Code	Oil Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	11.8	
Fracture Gradient (ppg)	18.4		Annular Rating (psi)	10000		Casing/Liner Test (psi)	6706	
Liner Top Depth (ft)	0.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	16.5	

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease G21640 **Area/Block** EI 223 **Well Name** 001 **ST** 00 **BP** 01 **Well Type** Exploration
Application Status Approved **Operator** 02312 McMoRan Oil & Gas LLC

Cement Volume (cu ft)	9392		
------------------------------	------	--	--

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	13.625	88.2	HCQ 125	10030	6360	18727	18726	12.7	
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION			
Hole Size (in)		16.000	Type		Blowout	Annular Test (psi)		7500	
Mud Weight (ppg)		13.0	Size (in)		18.75	BOP/Diverter Test (psi)		9100	
Mud Type Code		Oil Base	Wellhead Rating (psi)		15000	Test Fluid Weight (ppg)		13.0	
Fracture Gradient (ppg)		18.9	Annular Rating (psi)		10000	Casing/Liner Test (psi)		5900	
Liner Top Depth (ft)		14959.0	BOP/Diverter Rating (psi)		15000	Formation Test (ppg)		18.9	
Cement Volume (cu ft)		851							

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	HCQ 125	10720	7800	22985	22982	17.0	
GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION			
Hole Size (in)		14.750	Type		Blowout	Annular Test (psi)		7500	
Mud Weight (ppg)		17.2	Size (in)		18.75	BOP/Diverter Test (psi)		10700	
Mud Type Code		Oil Base	Wellhead Rating (psi)		15000	Test Fluid Weight (ppg)		17.2	
Fracture Gradient (ppg)		19.3	Annular Rating (psi)		10000	Casing/Liner Test (psi)		1850	
Liner Top Depth (ft)		18296.0	BOP/Diverter Rating (psi)		15000	Formation Test (ppg)		18.9	
Cement Volume (cu ft)		1409							

Form MMS 123A/123S - Electronic Version

Application for Revised Bypass

Lease G21640 **Area/Block** EI 223 **Well Name** 001 **ST** 00 **BP** 01 **Well Type** Exploration
Application Status Approved **Operator** 02312 McMoRan Oil & Gas LLC

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	9.625	36.0	EX-80	4470	1630	24100	24097	18.0	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	12.250		Type	Blowout		Annular Test (psi)	7500	
Mud Weight (ppg)	18.3		Size (in)	18.75		BOP/Diverter Test (psi)	10700	
Mud Type Code	Oil Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	18.3	
Fracture Gradient (ppg)	18.6		Annular Rating (psi)	10000		Casing/Liner Test (psi)	900	
Liner Top Depth (ft)	22617.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	18.6	
Cement Volume (cu ft)	110							

Interval Number 7		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	12.750	123.7	Q 125	16880	16760	14171	14171	10.2	
2	11.875	71.8	Q 125HC	10720	7800	14799	14799	10.8	
3	9.875	65.1	HCQ125SL	14400	12760	21058	21055	14.7	
4	9.875	62.8	Q125HC	13840	13050	22244	22241	18.0	
5	9.375	39.0	HCQ-125	9330	4850	26900	26895	17.9	

GENERAL INFORMATION			PREVENTER INFORMATION			TEST INFORMATION		
Hole Size (in)	11.250		Type	Blowout		Annular Test (psi)	7500	
Mud Weight (ppg)	18.2		Size (in)	18.75		BOP/Diverter Test (psi)	13000	
Mud Type Code	Oil Base		Wellhead Rating (psi)	15000		Test Fluid Weight (ppg)	18.2	
Fracture Gradient (ppg)	18.8		Annular Rating (psi)	10000		Casing/Liner Test (psi)	6250	
Liner Top Depth (ft)	0.0		BOP/Diverter Rating (psi)	15000		Formation Test (ppg)	18.8	
Cement Volume (cu ft)	680							

