Form 3160-3 (August 2007) KECEMED

JUL 0 6 2010

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

5. Lease Serial No. NM 070361

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO	DRILL OF	REENTER	and Off	36. If Indian, Allotee	or Tribe Name	.
la. Type of work: ✓ DRILL REENTER			7 If Unit or CA Agr Canada Oj	reement, Name a		
lb. Type of Well: ✓ Oil Well Gas Well Other ✓ Single Zone Multiple Zone			8. Lease Name and # 46	Well No.		
Name of Operator Benson-Montin-Greer Drilling Corporation				9. API Well No. 30-039-3098/		
3a. Address 4900 College Blvd Farmington, NM 87402	4900 College Divd			10. Field and Pool, or Exploratory Puerto Chiquito Mancos West		
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 424' FSL and 281' FEL, Unit P			11. Sec., T. R. M. or Blk. and Survey or Area Sec 27, T 25N, R 1W			
At proposed prod. zone (Same) 14. Distance in miles and direction from nearest town or post office* approximatly 4 miles north and 5 miles east of Lindrith, NN	Л			12. County or Parish Rio Arriba	13. NN	State 1
15. Distance from proposed* (See attached) location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a		17. Spacir	ng Unit dedicated to this	well	13'10
18. Distance from proposed location* +/- 2900 ft. to nearest well, drilling, completed, applied for, on this lease, ft.	l and a special specia		BIA Bond No. on file 1/0092			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7296 GL	22. Approxi	mate date work will sta O	rt*	23. Estimated duration 3 weeks		
TIGU OCNOR IS SUDJOCT TO WEATHER HATE STEED OF WHATE PURSUANT TO 43 OFR 3165. CALCEDED PURSUANT TO 43 OFR 3105.4 The following, completed in accordance with the requirements of Onsho	3 24. Attac		ull - d	SUBJECT TO	PERATIONS AL COMPLIANCE REQUIREMENT	MICHIEU ARE WITH ATTACHE S.
Well plat certified by a registered surveyor. A Drilling Plan.	ire Oil and Gas			ns unless covered by an		
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	Lands, the	5. Operator certific 6. Such other site BLM.		ormation and/or plans a	s may be requir	ed by the
25. Signature	T T	(Printed/Typed) Diede			Date #-6	-2010
Title Drilling and Completions						
Approved by (Signature) Man Color	(Signature) Man (Printed/Typed)			Date //	3/10	
Title AFM	Office	FFO			·	
Application approval does not warrant or certify that the applicant hole conduct operations thereon. Conditions of approval, if any, are attached.	ds legal or equi	table title to those righ	ts in the sub	oject lease which would	entitle the appli	cant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	rime for any p to any matter v	erson knowingly and vithin its jurisdiction.	willfully to n	nake to any department	or agency of the	e United

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

(Continued on page 2)

DEC 1 7 2010 NMOCD SEE ATTACHED FOR CONDITIONS OF APPROVAL

*(Instructions on page 2)

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Form C-102

Energy, Minerals & Natural Resources Department

Revised October 15,2009

JUL 0 6 2018 ubmit one copy to appropriate OIL CONSERVATION DIVISION

District Office

1220 South St. Francis Dr.

Suregu of Land Management Farmington Field Official AMENDED REPORT

Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

⁴ Property C		8900	<u> </u>	⁵ Property Name ⁶ Well Number					Vell Number
001954	1			CANADA OJITOS UNIT 46					
OGRID N			DEM	·					Elevation
002096			BEN	BENSON-MONTIN-GREER DRILLING CORPORATION 7296'					
					¹⁰ Surface	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	27	25-N	1-W		424	SOUTH	281	EAST	RIO ARRIBA
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres	13 Joint o	r Infill 14	Consolidation	Code ¹⁵ Or	der No.			,	
636,14	1	N	U		NSL PENDIN	1G //	56 6234	/	

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	Control to the second s		
116	N89°25'06"W 5295.84'	- W	¹⁷ OPERATOR CERTIFICATION
}		4	. I hereby certify that the information contained herein is true and complete to the
X			best of my knowledge and belief, and that this organization either owns a
		1	working interest or unleased mineral interest in the land including the proposed
1		4	bottom hole location or has a right to drill this well at this location pursuant to
1		1	a contract with an owner of such a mineral or working interest, or to a
K		4	voluntary pooling agreement or a compulsory pooling order heretofore entered
l		4	by the division
			7-6-2010
Y			Signature Date
4			3.00
			Loven Diede
6		~	Printed Name
5280'		5280'	·
2.		25	
<u> </u>	27	≥	
S01°27'06°E			¹⁸ SURVEYOR CERTIFICATION
<u> </u>		7,0	I hereby certify that the well location shown on this plat was
1 2		[2]	plotted from field notes of actual surveys made by me or under
S		Z	
1		/	my supervision, and that the same is true and correct to the
4			best of my belief.
A .			JUNE 2, 2010 DENDE
4		2½" B.C. G.L.O. 1917	Date of Survey
1			Signature and Sonot Cartes in the Control of the Co
		27 26	
4		34 35	1 11/1126521 1
Ä	N 1951999.76	AT:36 21 45.920	
21⁄2" B.C.		G:106 55 18.927	
G.L.O. 1917	(STATE PLANE,	#46 281'	12652
28 27	CENTRAL ZONE)		12652 Certificate Number LAND SUFFER
33 34	S89°24'06"E 5293.20'	\$ X	35

424' FSL, 281' FEL Unit P Sec. 27, T25N R01W Rio Arriba County, NM GL Elev: 7296'

Drilling Program

1. <u>ESTIMATED FORMATION TOPS: (KB)</u>

Formation Name	<u>Depth</u>
San Jose	Surface
Ojo Alamo	2876'
Kirtland	2949'
Fruitland	3014'
Pictured Cliffs	3074'
Lewis	3229'
Cliffhouse	4904'
Menefee	4987
Point Lookout	5363'
Mancos	5542'
Niobrara "A"	6600'
Niobrara "B"	6663'
Niobrara "C"	6794'
Greenhorn	7448'
Graneros	7519'
Total Depth	7550'
Intermediate TD (7 5/8" Csg)	6350'
Production TD (5 ½" Liner)	
Top	6150'
Bottom .	7550'

2. NOTABLE ZONES (with oil, gas or mineral potential)

Fruitland	Coal / Water / Gas
Pictured Cliffs	Water / Oil / Gas
Cliffhouse	Water / Gas
Menefee	Water / Gas
Point Lookout	Water / Gas
Mancos	Oil / Gas / Water
Greenhorn	Oil / Water

Water zones will be protected by setting and cementing the 10 $\frac{3}{4}$ " surface casing at 500ft. All zones containing commercial quantities of oil or gas will be cased and cemented with either the 7 5/8" intermediate casing or the 5 $\frac{1}{2}$ " production liner.

424' FSL, 281' FEL Unit P Sec. 27, T25N R01W Rio Arriba County, NM GL Elev: 7296'

3. PRESSURE CONTROL: Maximum expected pressure is ~1000 psi. The drilling contract has not yet been awarded, thus the exact BOP and Choke Manifold model to be used is not yet known. A typical 2,000 psi model is pictured in Exhibits A & B. A remote accumulator will be used, the pressures, capacities location of the remote and manual controls will be identified at the time of the BLM supervised BOP test.

BOP equipment, accumulator, choke manifold and all accessories will meet or exceed BLM requirements as listed in Onshore Order #2 for the 2M systems. The pressure control equipment considerations include but will not be limited to:

- 1. BOP will be either double gate rams or an annular preventer.
- 2. Accumulator will have sufficient capacity to close all BOPs and retain 200 psi above pre charge.
- 3. 2" kill line and kill line valve.
- 4. Choke manifold (2" lines) with 2 chokes with valves and gauge.
- 5. Upper Kelly cock with handle available.
- 6. Safety valve and sub(s) available for all drill strings used.
- 7. Fill line above the upper-most BOP.

BOPs will be pressure tested; after initial installation, before drilling out from under all set and cemented casing strings, any time a seal is broken.

Ram type preventors and related pressure control equipment will be pressure tested to 1000 psi.

Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 1000 psi. All casing strings will be pressure tested to 0.22 psi/ft or 1000 psi, whichever is greater, not to exceed 70% of internal yield.

Additionally, the BOPs will be operationally checked every 24 hours. The BOPs will also be pressure tested once every 30 days by a 3rd party.

All tests and pressure tests will be recorded on IADC log.

4. CASING & CEMENT

Hole Size	O.D. Weight (lb/ft)	<u>Grade</u>	Age	Connection	GL Setting Depth
	(Conductor Casing v	vill be used if w	arrented	d)	
14 3/4"	10 3/4"	40.5# J-55	New	ST&C	500'
9 7/8"	7 5/8"	26.4# N-80	New	LT&C	6350'
6-3/4"	5-1/2"	17# N-80	New	LT&C	6150' to 7550'

424' FSL, 281' FEL Unit P Sec. 27, T25N R01W Rio Arriba County, NM GL Elev: 7296'

Surface casing will be cemented to the surface.

Cement and properties; +/- 568 cu. ft. (+/- 409 sx) Type III cement (14.6 ppg density, 1.39 ft3/sx yield) with 2% CaCl2 and ½#/sx celloflake. Volume based on 100% excess.

Two centralizers will be run on the shoe joint, one centralizer each on the next two joints and then one centralizer on every third joint thereafter.

Intermediate casing will be cemented to surface in 2 stages, stage tool to be set at +/- 3150'. Cement will be circulated to surface. Volumes based on 45% excess in OH.

Stage 1:

Lead cement will be +/- 899 cu. ft. (+/- 426 sx) Premium Lite w/2% CaCl2, ¼#/sx cello flake, 6-1/4#/sx gilsonite, 8% gel (12.1 ppg density, 2.11 ft3/sx yield). Tail cement will be +/- 111 cu. ft. (+/- 80 sx) Type III w/2% CaCl2, ¼#/sx Cello flake (14.6 ppg density, 1.39 ft3/sx yield).

Stage 2:

Lead cement will be +/- 899 cu. ft. (+/- 426 sx) Premium Lite w/2% CaCl2, ¼#/sx cello flake, 6-1/4#/sx gilsonite, 8% gel (12.1 ppg density, 2.11 ft3/sx yield). Tail cement will be +/- 69 cu. ft. (+/- 50 sx) Type III w/2% CaCl2, ¼#/sx Cello flake (14.6 ppg density, 1.39 ft3/sx yield).

Two centralizers will be run on the shoe joint, one centralizer on every other joint for 14 joints and then one centralizer on every third joint thereafter.

Production liner will be cemented to the top of liner ensuring cement coverage inside the intermediate casing with a single stage.

Cement and properties; +/- 184 cu. ft. (+/- 91 sx) Premium Lite High Strength FM w/0.3% retarder, 2% KCl, ½#/sx cello flake, 0.3% dispersant, 5#/sx gilsonite, 1% Fluid loss agent (12.5 pps density, 2.02 ft3/sx yield).

Volumes based on 46% excess in OH.

Two centralizers will be run on the shoe joint, one centralizer on every other joint into the intermediate casing.

The production liner will be pressure tested to 5000 psi for 30 minutes during completion operations.

Where cement has not been circulated to surface (or top of liner) a CBL or temperature survey will be run to determine the TOC for that casing string.

Cement specifications may vary slightly due to cement and cement contractor availability.

424' FSL, 281' FEL Unit P Sec. 27, T25N R01W Rio Arriba County, NM GL Elev: 7296'

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	Wt./ppg.	Vis.	Fluid Loss
0'-500'	FW gel/lime spud mud	8.4-9.0	30-40	NC
500'-6350'	FW gel/Polymer	8.5-9.2	28-50	<20cc's
6350-7550'	Air/ Air/mist or Nitrogen	N/A	N/A	N/A

Viscosity, mud weight and other physical and chemical characteristics of the drilling mud will be varied as required to keep the hole clean, circulate drill cuttings, prevent caving, prevent lost circulation and maximize penetration rate.

Air /air mist or nitrogen will be used to drill the 6 3/4" section of the hole to reduce the hydrostatic pressure while drilling the pay zones. It is planned to drill the hole from 6350' to TD with an air hammer and 6 3/4" bit. An alternate plan will be in place to drill this section of the hole with mud should the hole conditions warrent.

Sufficient mud and materials will be kept on site to maintain mud properties and meet lost circulation or mud weight requirements at all times.

6. CORING, TESTING, & LOGGING

No cores or drill stem tests are planned. Open-hole logs to be run are:
500' to 6350'; GR/ Cement Bond Log, if cement is not circulated to surface.
6350 to TD; GR/Induction/Density Neutron and possible fracture identification log (caliper or camera for fracture identification).

7. DOWN HOLE CONDITIONS

a. Expected bottom hole pressure: +/- 1000 psi
 b. Anticipated abnormal pressure: None

c. Anticipated abnormal temperatures: Noned. Anticipated hazardous gas (H2S): None

If any of the foregoing are unexpectedly encountered, suitable steps will be taken to mitigate according to accepted industry best practices.

424' FSL, 281' FEL Unit P Sec. 27, T25N R01W Rio Arriba County, NM GL Elev: 7296'

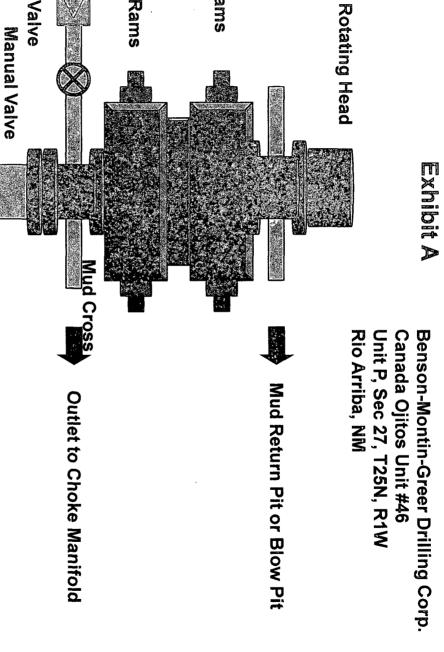
8. OTHER INFORMATION

The anticipated spud date is November 2010. The spud date will be dependent on the weather conditions, road conditions and the Conditions of Approval as provided by the US Forest Service.

The duration of drilling operations is expected to be from two to three weeks. The drilling rig and associated equipment will be removed and preparations will be made for the completion of the well.

Completion will start about one to two weeks after the finish of the drilling operations. A completion rig will be moved in for the completion phase. The completion phase of the well is expected to +/- two weeks. The completion phase will include; perforating, acidizing, fracture stimulation and well testing.

Blowout Preventer 2000 psi Exhibit A



Pipe Rams

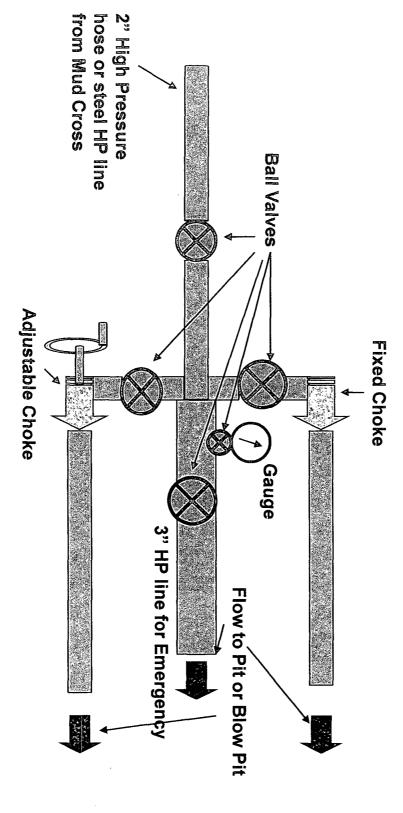
XIII Line

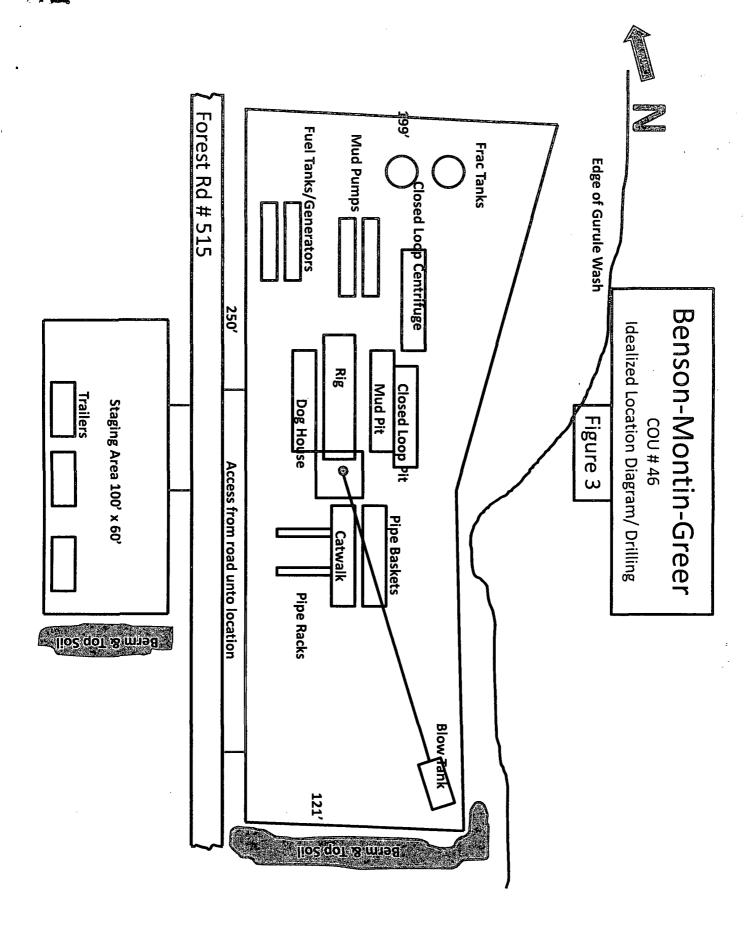
Blind Rams

Check Valve

Class 1 (2M) Normal Pressure Choke Manifold

Canada Ojitos Unit #46 Unit P, Sec 27, T25N, R1W Benson-Montin-Greer Drilling Corp. Rio Arriba, NM





DRILLING CONDITIONS OF APPROVAL

Operator:

BMG Corporation

Lease No.:

NMNM-070361

Well Name:

Canada Ojitos Unit #46

Well Location:

Sec.27, T25N, R1W; 424' FSL & 281' FEL

Refer to Onshore Order 2 III.

- 1) Two (2) adjustable chokes are required on the choke manifold for a 2M BOPE system. Refer to attachment I-1 in Onshore Order #2
- 2) Pressure test the surface casing to a minimum of 600 psi for 30 minutes.
- 3) Pressure test the intermediate casing to a minimum of 1500 psi for 30 minutes



After hour contact: Troy Salyers 505-360-9815