Foi 3160-3 (August-2007)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

ADDITION FOR DEDMIT TO DOLL OF DEENTER

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

5. Lease Serial No.

ALL LIGATION FOR LIMIT TO DIVILL	OK KELIFE	rminoton Finla on	.	USA SF 07797	2		
la. Type of Work X DRILL REENTE					6. If Indian, Allotee or Tribe Name		
lb. Type of Well Oil Well X Gas Well Other	Single Zon	e Multiple Zon	e 7	Unit or CA Agreem	ent Name and No.		
2. Name of Operator			8	3. Lease Name and We	ell No.		
Energen Resources Corporation	Lat. Di-	and the desired		Richardson #2	200		
Ba. Address	36. Pho	ne No. (include area co	ode) 5	API Well No.	35239		
2010 Afton Place Farmington, New Mexico 87401 Location of Well (Report location clearly and in accordance with any Sta	ta aquiramanta	<u>(505)325-6800</u>	_				
	•).	110). Field and Pool, or E			
At surface (P) Sec. 3-T27N-R13W; 509'FSL, 694'FE	L			Basin Fruitla	Blk. and Survey or A		
At proposed prod. zone			1.				
		<u>-</u>		Sec.3-T27N-R			
4. Distance in miles and direction from nearest town or post office*				2. County or Parish	13.State		
5 miles south of Farmir				an Juan	<u>l nm</u>		
15. Distance from proposed* location to nearest property or lease line, ft. 509'	16. No. of A	cres in lease	17.Spac	ing Unit dedicated to	this well		
(Also to nearest drg. unit line, if any)		2278.2		319.46 acre	5 acres (E/2)		
8. Distance from proposed location*	19. Proposed	l Depth	20. BLM	BLM/BIA Bond No. on file			
to nearest well, drilling, completed, applied for, on this lease, ft. 1,159	1,	696' MD		NM270	7		
21. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approxi	mate date work will sta	rt*	23. Estimated duration			
6,044' GL		05/01/2011		15 days			
	4. Attachmer						
The following, completed in accordance with the requirements of Onshore Oil Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).	4. Bo	No. 1, must be attached and to cover the operate 20 above). Determine the coverage of the coveration of the coveration of the coverage of the	ions unles	s covered by an exist			
		LM		Date			
25. Signature	Name (Printed/	Typed)					
Title Title	Andrew Soto				1/26/11		
Drilling Engineer							
Approved by (Signoufe) Name (Printed/Typed)				Date	1/16/11		
Title AFM	Office FF	3		•			
Application approval does not warrant or certify that the applicant holds legal onduct operations thereon. Conditions of approval, if any, are attached.	al or equitable	title to those rights in	the subjec	et lease which would	entitle the applicant		
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crimitates any false, fictitious or fraudulent statements or representations as to any			illy to mal	ke to any department	or agency of the Unit		
A COMPLETE C-144 MUST BE SUBMITTED TO AND ADDROVED BY THE NMOCD FOR: A RIT CLOSED DFC. O. A	-			*(Instructions o	n page 2) IOV 23 '11		

LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

This action is subject to technical and procedural review pursuant to 43 CFR 3165 3

and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE

SUBJECT TO COMPLIANCE WITH ATTACHED

"GENERAL REQUIREMENTS".

EC U 5 2011 CO

NMOCD

A

OIL CONS. DIV.

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

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

District I 1625 N. Franch Dr., Hobbs, N.M. 86240

State of New Mexico

²Pool Code

OIL CONS. DIV. Form C-102 Revised bottober 12, 2005

DISTRICT II 1301 W. Grand Avenue , Artesia. NM 68210

Energy, Minerals & Natural Resources Department

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

³Pool Name

DISTRICT III 1000 Rio Brasos Rd., Astec, N.M. 87410

¹API Number

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe. NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

M AMENDED REPORT

30.00	15.3	<u>3523</u>	91	71629	9	FC					
Property Cod					⁶ Property Name						
2137	2			RICHARDSON						#200	
OGRID No.				*Operator Name					· ·	⁹ Elevation	
162928	<u> </u>			ENERGEN RESOURCES						6044'	
					¹⁰ Surface	Location					
UL or lot no.	Section	Township 27-N	Range	Lot Idn	Feet from the 509'	North/South line SOUTH		from the 94'	East/West line EAST	County	
P	3	27-N	13-W			l	1		EASI	SAN JUAN	
		1			ole Location I	f Different Fro					
UL or lot no.	Section 3	Township 27-N	Range 13-W	Lot Idn	509'	North/South line SOUTH		from the .	East/West line	SAN JUAN	
P Dedicated Acres			14Consolidation	n Code	¹⁵ Order No.	1 300 161	1_0	<u> </u>	EAST	JAN JUNN	
320 5/2	.										
division.	pe dazi	igned to th	iis completioi	n until G	ii interest nave be	en consolidated or	a non-	-stanaara	unit nos been aj	pproved by the	
)				-				17 00	77.4707.077		
,						FD 8 3 1/		OP	ERATOR CER		
						BC 1985 I hereby certify that the information contained herein true and complete to the best of my knowledge and					
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							ļ		unicased unineral interc e proposed bottom hole		
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	l							compulsory division.	cooling order haratefus	restered by the	
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			 	<i>3</i> —			79.88 CHAINS(R) 7"E 5273.69(M)	r			
				1			0.02'W 79.	18 SU	RVEYOR CER	RTIFICATION	
					İ		NO-02'W NO-04'27	I hereby ce	rtify that the well loc	ation shown on this pla	
	j					•	ž ~	-		ctual surveys made by I that the same is true	
	İ								to the best of my bel		
									NE MA		
								Date of	Survey of AAC	-	
				+				Signatur	e and Seal of Profess	ional Surveyor:	
	1			1						2	
	1				ENERGEN RESC	URCES			#8/60	12/	
	j			RIC	HARDSON #200	(NSL)		(7)		13/1/	
]	•			LAT. 36. LONG. 108.	59843 N 19991 W G 65	22'	1	60	المثلثة المثلثة	
FD BLM	1		EU 5111				GLO	"	8466	AT A	
3 1/4	- 1		FD BLM 3 1/4		N89"58"W 80.0 Ch	cins (R)	21/2	Cartificat			
BC 1985 N8	9*57*05*V	N 2639.08'(I		5 l	N89°57°52°W 264	∡10'(₩) ¯′ B	C1911	Certificat	e wandet		

1/31/2011



OPERATIONS PLAN

WELL NAME	Richardson #200
JOB TYPE	Vertical Fruitland Coal
DEPT	Drilling and Completions
PREPARED BY	

GENERAL INFORMATION

Surface Location 509' FSL & 694' FEL S-T-R (P) Sec.3-T27N-R13W County, State San Juan, New Mexico

Elevations 6,044' GL
Total Depth 1,696' +/- (MD)
Formation Objective Basin Fruitland Coal

FORMATION TOPS

 Ojo Alamo Ss
 181'

 Kirtland Sh
 296'

 Fruitland Fm
 1,196'

 Top Coal
 1,451'

 Base Coal
 1,496'

 Pictured Cliffs
 1,506'

 Total Depth
 1,696'

DRILLING

The 12 1/4" wellbore will be drilled with a fresh water mud system.

The 7 7/8" wellbore will be drilled with a low solids fresh water/polymer mud system. Weighting materials will be drill cuttings and, if needed, barite. Mud density is expected to range from 8.3 ppg to 8.9 ppg.

Blowout Control Specifications:

A 2,000 psi minimum double ram or annulus BOP stack will be used following nipple up of casing head. A 2" nominal, 2,000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations. **Pressure test BOP to 250 psi for 15 min and 2,000 psi for 15 min.**

Logging Program:

Open hole logs: 7 7/8" wellbore SLB Standard Platform Express

Mudlogs: none

Surveys: Surface and/or every 350' to TD.



CASING, TUBING & CASING EQUIPMENT

String	Start Depth	End Depth	Wellbore	Size	Wt	Grade
Surface	0	150	12 1/4"	8 5/8"	24.0 lb/ft	J-55 ST&C
Production	0	1,696	7 7/8"	5 1/2"	15.5 lb/ft	J-55 LT&C
Tubing	0	1,696		2 3/8"	4.7 lb/ft	J-55

Casing Equipment:

Surface Casing: Depending on wellbore conditions, a Texas Pattern Guide Shoe on first joint with and insert float valve on top. Run standard bow spring centralizers as follows: every other joint from TD to surface.

Production Casing: Depending on wellbore conditions, a cement nose guide shoe with self fill insert float collar on top of bottom joint and casing centralization with standard bow spring centralizers to optimize standoff. Turbolizers are to be placed in the base of the Ojo Alamo formation.

WELLHEAD

9 5/8" x 5 1/2" weld/slip on casing head. 5 1/2" x 2 3/8" 2000 psi weld/slip on tubing head.

CEMENTING

Surface Casing: 105 sks Type V with 2.0 % CaCl₂ and 1/4 #/sk Flocele (15.6 ppg, 1.18 ft³/sk 124 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min.

Production Casing: Before cementing, circulate at least 1 1/2 hole volume of mud and reduce funnel viscosity to minimum to aid in hole cleanout. Depending on wellbore conditions, cement may consist of 222 sks PRB II with 5.0 #/sk Gilsonite, and 1/4 #/sk Flocele (12.3 ppg, 2.24 ft³/sk) and a tail of 50 sks of PRB II cement with 5.0 #/sk Gilsonite, and 1/4 #/sk Flocele (13.5ppg, 1.81 ft³/sk). (588 ft³ of slurry, circulate 100% excess to surface). The top of tail is design to 1,174'.

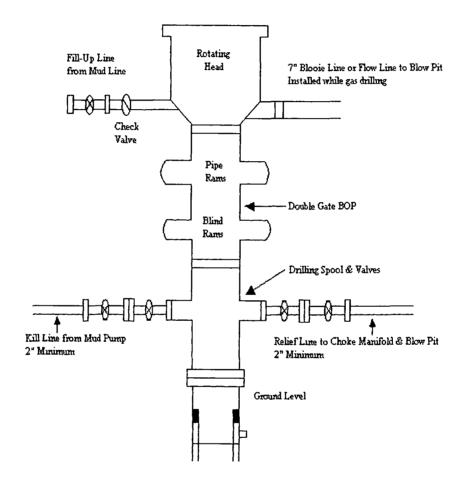
Cement volumes are subject to change if caliper logs are run and dictate otherwise.

OTHER INFORMATION

- 1) This well will be cased and the Basin Fruitland Coal fracture stimulated.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The production string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions. Anticipated pressure is 300 psi.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

Energen Resources Corporation

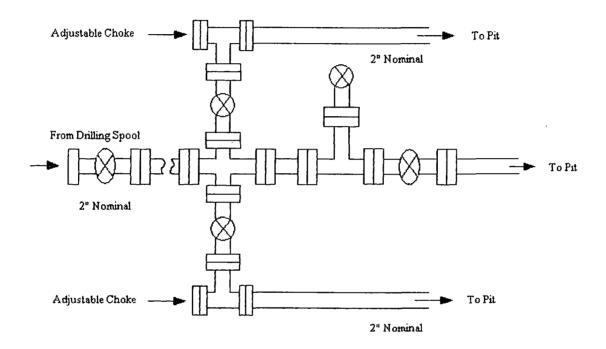
Typical BOP Configuration for Gas Drilling



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Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD

ENERGEN RESOURCES CORPORATION RICHARDSON #200 509' FSL & 694' FEL (NSL) LOCATED IN THE SE/4 SE/4 OF SECTION 3, T27N, R13W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO LATITUDE: 36.59843 N LONGITUDE: 108.19991 W DATUM: NAD 83 F+2.1 B' C-2.0 ANCHOR C-3.3 C-0.0 C F+5.1(6) C-0.9 F+4.0 **SPOIL STORAGE AREA** 0.34 AC F+1.4 25' 50' Scale: 1"=50' Red Skies Surveying & Mapping, Inc. A Native American Owned Company 101 Fauver Lane, Bloomfield, New Mexico 87413

Cell No: (505) 793-5325

Phone/Fax: (505) 632-8906