Form 3160-3 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEIVED

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

APR 1 0 2009

APPLICATION FOR PERMIT TO DRILL OR REENTER						5. Lease Serial No.		
la. Type of Work	X DRILL	REENTE	R B	ureau of Land M Farmington Fie	Id Off ce	If Indian, Allotee o	r Tribe Name	
1b. Type of Well	Oil Well X Gas Well	Other	Single Zone	Multiple Zon	e 7.1	Unit or CA Agreen	ment Name and No.	
2. Name of Operato	r				8.1	Lease Name and W	/ell N	
Energen Resou	rces Corporation					CJ Holder #		
3a. Address				No. (include area co	ode) 9	API Well No.		
2010 Afton P	<u>lace Farmington, New Me</u>	exico 87401	(505)325-6800		30-045	-34946	
	(Report location clearly and in acc	cordance with any Sta	te equirements)*			Field and Pool, or I	Exploratory	
At surface 70	0'FSL 700'FEL					<u>Basin Fruitl</u>		
At proposed prod.	zone				[11.3	Sec., T., R., M., or	Blk. and Survey or Are	
						P - Sec.27,		
14. Distance in miles a	and direction from nearest town or	post office*			12.0	County or Parish	13. State	
	5 miles south	southwest of F	armington,	NM	Saı	n Juan	NM	
15. Distance from pro			16.No. of Acre	es in lease	17. Spacing	g Unit dedicated to	this well	
location to neares property or lease (Also to nearest of)'		3 20 520 .00		320 E/2		
18. Distance from pro	oposed location*		19. Proposed D	epth	20.BLM/	BIA Bond No. on	file	
	rilling, completed,							
applied for, on th	1000'		18	800 '		Nm 2707	7	
21. Elevations (Show	whether DF, KDB, RT, GL, etc.		22. Approxima	te date work will star	rt*	23. Estimated dura	ation	
6045' GL			A	PRIL 2009		1!	5 days	
		2	4. Attachments			RCVD JU	12210	
The following compl	eted in accordance with the require	ments of Onchare Oil	and Gas Order No	a 1 must be attached	d to this for	m: OIL CON	56" 5" 80 8	
 A Drilling Plan. A Surface Use Pl 	I by a registered surveyor. an (if the location is on National Followith the appropriate Forest Ser		Item 5. Oper	20 above). rator certification. other site specific in		covered by an exist	ting bond on file (see	
25. Signature	1_	1	Name (<i>Printed/Ty</i>)	ned)		Date		
-/2		1,	JASON KINCA	(D		[02/09/09	
Drilling Er Approved by (Signau)			Jame (<i>Printed/Ty</i>)			Date		
Approved to (organia	MM an lee Ce	4 N	anc (1 rinear y			7/-	20/2018	
Title /	1 I II		Office FF	Z				
Application approval	does not warrant or certify that th	ne applicant holds lega	ι /		he subject	lease which would	entitle the applicant to	
conduct operations the Conditions of approva	ereon.		or o q	o to those rights at t			отпольно по другини то	
	on 1001 and Title 43 U.S.C. Section ous or fraudulent statements or rep				lly to make	to any department	or agency of the United	
(Continued on page 2))					*(Instructions o		
			P	JOTIFY A	ZTE	C OCD 2	4 HRS	
		fr	<i></i>	RIOR TO	CAS	ING & C	EMENI	
	CLAOM OBTAINING ANS							
	ZATION REQUIRED FOR C AL AND INDIAN LANDS		0 2010					
		JUL 2	O LUIU	_	OBILLING!	ODED ATIONS ATIT	HORIZED ARE	

NMOCD

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

District I 1625 N. French Dr., Hobbs, N.M. 88240

1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT II 1301 W. Grand Avenue , Artesia. NM 86210

State of New Mexico

RECEIVED

Form C-102 Revised October 12, 2005

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

Revised October 12, 2005

Revised October 12, 2005

Appropriate District Office
State Lease - 4 Conics

State Lease - 4 Copies
1220 South St. Francis Discreau of Land Management Fee Lease - 3 Copies

Farmington Field Office Santa Fe. NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-3494 W	² Pool Code 71629	³ Pool Name FC				
⁴ Property Code		porty name	Number 201			
**OGRID No. 162928	•		evation 6045			

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
P	27	28-N	13-W		700'	SOUTH	700'	EAST	SAN JUAN

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
13 Dedicated Acres	is Joint or Infill	16Consolidation	n Code 16	Order No.				
320	Ela							

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

division.			
16			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and beltef, and that this organization either awas a working interest or unleased mineral interest in the land including the proposed bettom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the
-	27	NO'D1'W 80 Chains'(R)	Signature Date 2/10/09 Printed Name
		ED 2 1/2" BRASS CAP GLO 1913 FM (H), 447 FM (H)	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey
FD 3.1/4 BRASS CAP BLM	CJ	N RESOURCES HOLDER #201 LAT. 36.62794 N NG. 108.19993 W 700' FD 2 1/2' BRASS CAP GLD 1913	Signature and Seal of Professional Surveyor: 8466 Certificate Number

2/10/2009



OPERATIONS PLAN

WELL NAME	
JOB TYPE	Vertical Fruitland Coal
DEPT	Drilling and Completions
	Jason Kincaid

GENERAL INFORMATION

Surface Location 700 FSL 700 FEL
S-T-R P Sec.27-T28N-R13W
County, State San Juan, New Mexico

Elevations 6045' GL
Total Depth 1800' +/- (MD)
Formation Objective Basin Fruitland Coal

FORMATION TOPS

Nacimiento
Surface
Ojo Alamo Ss
410'
Fruitland Fm
980'
Top Coal
1435'
Bottom Coal
Pictured Cliffs
1600'
Total Depth
1800'

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 2000 psi minimum double ram or annulus BOP stack will be used following nipple up of casing head. A 2" nominal, 2000 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.

Logging Program:

Open hole logs: 7-7/8" wellbore induction/gamma ray and density logs.

Mudlogs: none

Surveys: Surface and/or every 500' to TD.



2/10/2009

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	1800	7-7/8"	5-1/2"	15.5 lb/ft	J-55 LT&C
Tubing	0	1800		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.

CEMENTING

Surface Casing: 105 sks Std (class B) with 2.0 % CaCl₂ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 59-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 hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout. Depending on wellbore conditions, cement may consist of 155 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.93 ft³/sk) and a tail of 150 sks of Class G cement with 5.0 #/sk Gilsonite, and ¼ #/sk Flocele (15.4ppg, 1.18 ft³/sk). (470 ft³ of slurry to circulate to surface, 50% excess).

Pump a 10 bbls water, 20 bbls gelled water, 5 bbls water spacer ahead of cement

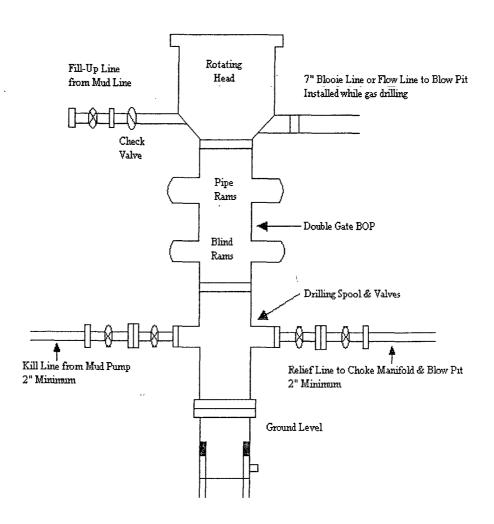
Cement volumes are subject to change if caliper logs are run and dictate otherwise.

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.

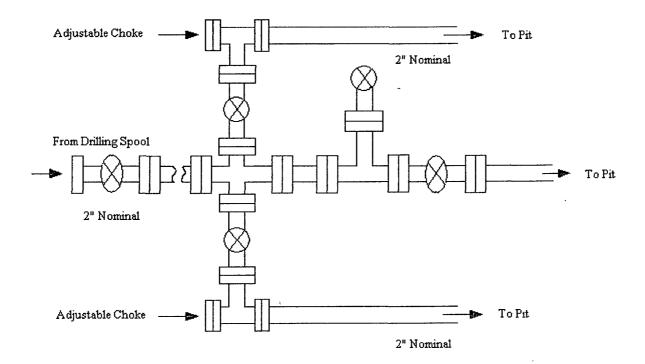
Energen Resources Corporation

Typical BOP Configuration for Gas Drilling



Energen Resources Corporation

Typical 2000 psi Choke Manifold Configuration



Choke manifold installed from surface to TD

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