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

VOUNIE	MOTICES	AND	DEDODTS	ON	WELL	ıc

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

5	Lease	Serial	No.

CE	077952
JI	0//902

6-If Indian Allottee or Tribe Na	ne ,
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abandoned well. Use Form 3160-3 (APD) for such proposals.				RECEIMEN		
ODDINI III TIII EIONIE Oliioi iiioli dolloilo oli pago E				7. If Unit or CAI Agreement, Name and/or Paureau of Land Management		
1. Type of Well				Farminato 8. Well Name a	n Field Office and No.	
2. Name of Operator				Gordon A	2E	
ENERGEN RESOURCES CORPORATION  3a. Address		21 Diaments (Cont. Jan.		9. API Well No		
2010 Afton Place, Farmington, NM 8	37401	3b. Phone No. ( <i>include ai</i> (505) 325-680		30-045-348	11 Pool, or Exploratory Area	
4. Location of Well (Footage, Sec., T., R., M., or Survey)		(303) 323 000	70	Basin Dako		
SHL: 1793'FNL 857'FEL Sec.24 T27N,						
BHL: 2500'FNL 1900'FEL Sec.24 T27N	R10WG			11. County or		
12 CHECK ADDRODDIAT	E DOVÆS) TO INI	DICATE NATURE OF	NOTICE DEDO	San Juan	N.M.	
12. CHECK APPROPRIATE	E BOX(ES) TO IN		-	KI, OK OTHE	KDATA	
TYPE OF SUBMISSION	·	TY	PE OF ACTION			
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off	
`	Alter Casing	Fracture Treat	Reclamation	on	Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recomplet	te	Other	
Final Abandonment Notice	X Change Plans	Plug and Abandon	Temporaril	ly Abandon		
	Convert to Injection	on Plug Back	Water Disp	oosal		
testing has been completed. Final Abandonment Netermined that the final site is ready for final inspection of the production casing the first stage of the production casing the first stage: Change from 400'-5500'MD 7-7/8" hole from 5500'-7550'MD 7-7/8" hole from 195sx to 2nd Stage: Change from 195sx to 2nd Stage: Change lead from 205s 3rd Stage: Change lead from 220s	change hole size change hole size change hole size clows:	s for the Gordon A	∦2E. A tap	pered hole s RCVD		
A revised operations plan is atta  14. I hereby certify that the foregoing is true and correct	ched	<u>-</u>				
Name (Printed/Typed)  Jason Kincaid	Title Drilli	ng Engineer				
Signature		Date 1/20/09				
THIS	SPACE FOR FED	ERAL OR STATE OF	FICE USE			
Approved by Original Signed: Stepher	n Mason	Title		Da	te JAN 2 1 2003	
Conditions of approval, if any, are attached. Approval of this noti the applicant holds legal or equitable title to those rights in the sub entitle the applicant to conduct operations thereon.	ice does not warrant or certi	ify that Office				

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person support fictitious or fraudulent statements or representations as to any matter within its jurisdiction in the company of the company o Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false,



#### **OPERATIONS PLAN**

WELL NAME	Gordon A #2E
JOB TYPE	Deviated Dakota
DEPT	Drilling and Completions
	Jason Kincaid

## **GENERAL INFORMATION**

Surface Location 1793 FNL 857 FEL
Bottom Hole Location 2500 FNL 1900 FEL
S-T-R Sec.24, T27N, R10W
County, State San Juan, New Mexico

Elevations 6543' GL

Total Depth 7550' +/- (MD); 7305' (TVD)

Formation Objective Basin Dakota

## **FORMATION TOPS**

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	Nacimiento	Surface	Point Lookout Ss	4785'
	Ojo Alamo Ss	1460'	Mancos Shale	5115'
	Kirtland Sh	1625'	Gallup Ss	5935'
	Fruitland Fm	2155'	Greenhorn	6750'
	Pictured Cliffs Ss	2430'	Graneros	6800'
	Lewis Shale	2620'	Dakota "Twowells" Ss	6830' 7069'MD
	Cliff House Ss	3965'	Dakota "Paguate" Ss	6920' 7160'MD
	Menefee Fm	4060'	Dakota "Main Body" Ss	6985' 7226'MD
			Total Depth	7550' MD

#### **DRILLING**

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

The 8-3/4" wellbore will be drilled to approximately 5500' and a 7-7/8" wellbore will be drilled to TD. A polymer/water mud system will be used. Mud density is expected to range from 8.6ppg to 8.9ppg.

KOP is 3500' TVD. An "S" curve will be drilled initially building angle at 3°/100' and then dropping angle to 10° with a drop of 1.25°/100'. Anticipated bottom-hole pressure is 1200 psi (8.38 ppg).

### **Blowout Control Specifications:**

A 3000 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. **Pressure test BOP to 250 psi for 15 min and 2000 psi for 15 min.** 

## Logging Program:

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

Mudlogs: From 6500' TVD to total depth

Surveys: Every 500' for vertical hole section and 250' while directional drilling to TD.



## **CASING, TUBING & CASING EQUIPMENT**

String	Start Depth	End Depth	Wellbore	Size	Wt	Grade
Surface	0	400	12-1/4"	9-5/8"	32.3 lb/ft	H-40 ST&C
Production	0	7550	8-3/4",7-7/8"	4-1/2"	11.6 lb/ft	J-55 LT&C
Tubing	0	7550		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:** String will be cemented in multiple (3) stages. Cement float shoe on bottom with float collar on top of 1<sup>st</sup> shoe joint. Starting from bottom, centralizers will be placed on every 4<sup>th</sup> joint. Location of centralizers as follows: 12 below and 12 above hydraulic <u>stage</u> packer collar and 20 centralizers above <u>third stage</u> collar for a total of 44 centralizers.

#### WELLHEAD

11" 3000 x 9 5/8" weld/slip on casing head. 11" 3000 x 7 1/16" Christmas Tree.

#### **CEMENTING**

Surface Casing: 220 sks Type V with 2.0 % CaCl<sub>2</sub> and ¼ #/sk Flocele (15.6 ppg, 1.18 ft<sup>3</sup>/sk 250 ft<sup>3</sup> of slurry). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min. Test BOP as outlined in the drilling section

**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.

<u>First Stage</u>: Depending on wellbore conditions, cement may consist of 460 sks 50/50 Class G with 0.60 % Halad-9, 0.10 % CFR-3, 5 #/sk Gilsonite, and ½ #/sk Flocele (13.5 ppg, 1.30 ft<sup>3</sup>/sk). (600 ft<sup>3</sup> of slurry, 30 % excess to circulate to surface). **Stage Collar at 5500**.

Second Stage: Depending on wellbore conditions, cement may consist a lead of 615 sks 65/35 Type V with 2.0% CaCl<sub>2</sub>, 10 #/sk Gilsonite, and ½ #/sk Flocele and a tail of 50 sks Type V with 1.0 % CaCl<sub>2</sub>. (12.3 ppg, 1.93 ft<sup>3</sup>/sk and 15.6 ppg, 1.18 ft<sup>3</sup>/sk respectively). (1250 ft<sup>3</sup> of slurry, 50% excess to circulate to surface). **Stage Collar at 2750'**. Circulate 4 hours starting at time of plug down.

Third Stage: Depending on wellbore conditions, cement may consist a lead of 700 sks 65/35 Type V with 2.0% CaCl<sub>2</sub>, 10 #/sk Gilsonite, and ½ #/sk Flocele and a tail of 50 sks Type V with 1.0 % CaCl<sub>2</sub>. (12.3 ppg, 1.93 ft<sup>3</sup>/sk and 15.6 ppg, 1.18 ft<sup>3</sup>/sk respectively). (1415 ft<sup>3</sup> of slurry, 70% excess to circulate to surface).

## Set slips with full string weight

If cement does not circulate, run temperature survey in 8 hrs. to determine TOC.



### 1/20/2009

## **OTHER INFORMATION**

- 1) This well will be cased and the Basin Dakota 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 1200 psi.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

# **CONTACT INFORMATION**

Contractor	Patterson	Office: 334-8361	
Water	Dawn Trucking	486-4302-Jay Robinson	
Mud	MI Swaco	215-9214	
Cement	Halliburton	324-3500	
Float Equipment	Big Red Tool	325-5045	
	Halliburton	324-3500	
Directional Serv.	Pathfinder	793-5375-Larry Hohle	
Open Hole Logging	Schlumberger	324-5006	
Casing	M & R	334-5541	
Bits	Smith Bits	320-2129-Jacob Waitman	
Wellhead	Big Red Tool	325-5045	
Operator	Energen Resources	325-6800	
Consultant	Jim Weatherford	320-1591	
Drilling Engineer	Jason Kincaid	Cell: 330-0361	
Drilling Superintendent	Doug Thomas	H: 334-3809, Cell: 330-1954	





