Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

***SUBMIT IN TRIPLICATE** - Other instructions on page 2*

RECEIVED
MAR 13 2009
Bureau of Land Management
Farmington Field Office

5. Lease Serial No.
SF 077764

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Schumacher 12E

2. Name of Operator
ENERGEN RESOURCES CORPORATION

9. API Well No.
30-045-34874

3a. Address
2010 Afton Place, Farmington, NM 87401

3b. Phone No. (include area code)
(505) 325-6800

10. Field and Pool, or Exploratory Area
Basin Dakota

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SHL: 1372'FNL 680'FEL Sec.17 T30N, R10W
BHL: 1700'FNL 1850'FWL Sec.17 T30N R10W

11. County or Parish, State
San Juan N.M.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Energen Resources would like to add an intermediate casing string to the Schumacher #12E due to loss circulation in the Mesa Verde formation.

Casing Revisions:
* 7" Intermediate Casing will be set from suface to approximately 6391'MD and will be run as follows: 24 jts (1098') of 7" 26# L-80 LT&C will be on the bottom followed by 5300'of 7" 23# J-55 LT&C on top in the 8-3/4" hole section.
* A 6-1/4" hole will be drilled to TD @ 8456'MD (7740'TVD)
* A production liner will be set (200' overlap) and cemented from 6191'-8456'MD.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

Cementing Revisions:
* Intermediate Casing (Stage Packer Collar @ 4000'MD)
  1st Stage: 155 sx lead, 50 sx tail (359 cuft. of slurry, 50% excess to circ. to surface)
  2nd Stage: 595 sx lead, 50 sx tail (1203 cuft. of slurry, 100% excess to circ. to surface)
* Production Liner
  210 sx lead, 50 sx tail (465 cuft. of slurry, 100% excess to circ. to surface)

RCVD APR 7 '09
OIL CONS. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* Jason Kincaid — Title Drilling Engineer

Signature — Date 3/12/09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L Salyers — Title Petroleum Engineer — Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

3/13/2009

ENERGEN RESOURCES

OPERATIONS PLAN

WELL NAME.....Schumacher #12E
JOB TYPE.....Deviated New Drill
DEPT.....Drilling and Completions
PREPARED BY.....Jason Kincaid

GENERAL INFORMATION

Surface Location	1372 fnl, 680 fel
S-T-R	NE Sec.17, T30N, R10W
Bottom Hole Location	1700 fnl, 1850 fwl
S-T-R	NW Sec.17, T30N, R10W
County, State	San Juan, New Mexico
Elevations	6466' GL
Total Depth	8456' +/- (MD); 7740' (TVD)
Formation Objective	Basin Dakota

FORMATION TOPS

Nacimiento	Surface	Point Lookout Ss	5237'
Ojo Alamo Ss	1617'	Mancos Shale	5705'
Kirtland Sh	1738'	Gallup Ss	6544'
Fruitland Fm	2449'	Greenhorn	7295'
Pictured Cliffs Ss	3000'	Graneros	7349'
Lewis Shale	3653'	Dakota "Paguate" Ss	7492' 8200'MD
Cliff House Ss	4628'	Dakota "Cubero" Ss	7532' 8205'MD
Menefee Fm	4810'	Dakota "Encinal Canyon"	7582' 8300'MD
		Morrison	7665' 8350'MD
		Total Depth	**8456' MD**

DRILLING

The 12-1/4" wellbore will be drilled with a fresh water mud system.
The 8-3/4"and 6-1/4" wellbore will be drilled with a LSND mud essentially un-weighted. Mud density is expected to range from 8.6ppg to 8.9ppg. Keep fluid loss between 4 and 6. KOP is 500' TVD. An "S" curve will be drilled initially building angle at 2°/100' and then dropping angle to 10° with a drop of 6.72°/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: 6-1/4" wellbore gamma/induction density logs.
Mudlogs: From 7000' TVD to total depth
Surveys: Every 500' for vertical hole section and 250' while directional drilling to TD.

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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
Intermediate	0	5300	8-3/4"	7"	23 lb/ft	J-55 LT&C
	5300	6391	8-3/4"	7"	26 lb/ft	L-80 LT&C
Liner	6191	8456	6-1/4"	4-1/2"	11.6 lb/ft	J-55 LT&C
Tubing	0	8300		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.

Intermediate Casing: String will be cemented in multiple (2) stages. Cement float shoe on bottom with float collar on top of 1st shoe joint. Starting from bottom, centralizers will be placed on every 4th joint.

Production Liner: H-latch drop off liner hanger. Will be cemented. Centralizer every 3rd jt.

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 % $CaCl_2$ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft^3/sk 250 ft^3 of slurry). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min. Test BOP as outlined in the drilling section

Intermediate Casing: Before cementing, circulate hole at least 1 ½ hole volumes of mud and reduce funnel viscosity to minimum to aide in hole cleanout.

First Stage: Depending on wellbore conditions, cement may consist a lead of 155 sks 65/35 Type V with 2.0% $CaCl_2$, 10 #/sk Gilsonite, and ½ #/sk Flocele and a tail of 50 sks Type V with 1.0 % $CaCl_2$. (12.3 ppg, 1.93 ft^3/sk and 15.6 ppg, 1.18 ft^3/sk respectively). (359 ft^3 of slurry, 50% excess to circulate to surface). **Stage Packer Collar at 4000'.**

Second Stage: Depending on wellbore conditions, cement may consist a lead of 595 sks 65/35 Type V with 2.0% $CaCl_2$, 10 #/sk Gilsonite, and ½ #/sk Flocele and a tail of 50 sks Type V with 1.0 % $CaCl_2$. (12.3 ppg, 1.93 ft^3/sk and 15.6 ppg, 1.18 ft^3/sk respectively). (1203 ft^3 of slurry, 100% excess to circulate to surface).

Production Liner: 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 210 sks 65/35 Type V with 2.0% $CaCl_2$, 10 #/sk Gilsonite, and ½ #/sk Flocele and a tail of 50 sks Type V with 1.0 % $CaCl_2$. (12.3 ppg, 1.93 ft^3/sk and 15.6 ppg, 1.18 ft^3/sk respectively). (465 ft^3 of slurry, 100% excess to circulate to surface).

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

3/13/2009

ENERGEN RESOURCES

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.