Name of Company	Address	
ENERGEN RESOURCES CORPORATION	2198 BLOOMFIELD HWY, FARMINGTON,	NM 87401

DEVIATION REPORT

Lease Name & Number	Unit Letter	Section	To	wnship	Range
San Juan 32-5 Unit #1R	þ	19	\mathbb{Z}	32N	5V/

Pool and Formation	API Number	County
Blanco Mesaverde – 72319	30-039-26427	Rio Arriba

B (F()	<u>Deviation</u>
<u>Depth (Ft.)</u>	<u>(Degrees)</u>
205	.50
681	.25
1143	.50
1642	.50
2143	.75
2673	.75
3199	.75
3700	1.00

FROM 3700' USED AIR HAMMER TO DRILL 6 1/4" HOLE,		
4670	1.00	
6070	1.00	
6110	1.00	

I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer for Energen Resources Corporation, am authorized by said Company to make this report; and that this report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.

Subscribed and sworn to before me this 17th day of August, 2000.

Notary Publicine and for San Juan County, New Mexico.
My. commission expires: April 2, 2001

OF NEW SJ 32-5 1R Dev.doc 9. Cement Program:

Surface String: 158.5 sx Type III cement + 2% bwoc Calcium Chloride + 0.25

#/sx Cello-flake + 60.6% FW (1.41 yield = 223 cf).

<u>Intermediate String:</u> <u>Lead Cement: 344.4 sx Type III cement + 0.25 #/sx Cello-flake + </u>

5#/sx Gilsonite + 14% bwoc Bentonite + 1% bwoc Sodium Metasilicate + 168.7% FW. (2.9 yield = 998.8 cf) Cement to

surface - 100% excess casing/hole annular volume.

<u>Tail Cement:</u> 100 sx Type III cement + 2% bwoc Calcium Chloride + 0.25#/sx Cello-flake + 60.6% FW. Cement to surface

with 110% excess of casing/hole annulus volume (1.41 yield = 141

<u>cf).</u>

Production String *: 244.4 sx (35:65) POZ Class H cement + 10 #/sx CSE + 0.25#/sx

Cello-Flake + 0.2% bwoc CD-32 + 5#/sx Gilsonite + 0.5% bwoc FL-52 + 6% bwoc Bentonite + 108.8% FW. The production string casing cement is designed to cover openhole section (with 60%)

excess) (2.13 yield = 520.6 cf).

*The cement for the 4-1/2" casing is designed to cover the openhole section to 100' above the Cliffhouse Sandstone. Circulation/Squeeze cementing will be conducted to isolate the Lewis Shale interval prior to it's completion.

Centralizer Program:

Surface: Total four (4) 1 @ 10' above shoe & top of 2nd, 4th & 6th joint

Intermediate: Total seven (7) – 10' above shoe, top of 1st, 2nd, 4th, 6th, & 8th its &

1 jt. Above surface casing.

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1st it. Below the Ojo

Alamo and next 2 its up.

10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are enclosed within the APD packet.

11. Drilling Mud Prognosis: Surface - spud mud on surface casing.

<u>Intermediate</u> - spud mud generated from natural clays with

gel sweeps pretreated w/LCM before entering coal interval.

Below Intermediate - air or gas drilled.