

WELL NAME AND NUMBER: JICARILLA 119N #4M

LOCATION: SEC. 6, TOWNSHIP 26N, RANGE 4W NMPM; JICARILLA COUNTY, NEW MEXICO
(New Mexico give U, S, T, & R)

OPERATOR: **ENERGEN**

DRILLING CONTRACTOR: **AZTEC WELL SERVICING COMPANY INC.**

The undersigns hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that the deviation tests obtained the following results:

Degrees @ Depth

0 ° @	152
1 ° @	5811
1.25 ° @	6795
75 ° @	7752
1.25 ° @	8085
1 ° @	8181
1 ° @	8440
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Degrees @ Depth

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DRILLING CONTRACTOR: **AZTEC WELL SERVICING CO. INC.**

BY *Jessi Thompson*

Subscribed and sworn to before me this 25 day of August, 2011.

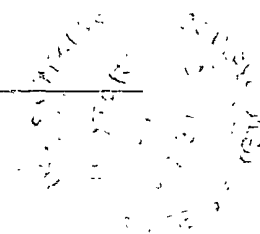
My Commission Expires:

3/16/2013

[Signature]
Notary Public

San Juan County, New Mexico

AV



Job Number: 1106
 Company: Energen Resources
 Lease/Well: Jicarilla 119N #4M
 Location: Sec. 06, T26N, R04W
 Rig Name: Aztec 545
 RKB: 7326
 G.L. or M.S.L.: 7314

State/Country: New Mexico
 Declination: 9.86
 Grid: ☐
 File name: C:\WINSERVE\1106.SVY
 Date/Time: 14-Jul-11 / 15:09
 Curve Name: ☐



WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
265.00	.00	.00	265.00	.00	.00	.00	.00	.00	.00
302.00	.30	15.50	302.00	.09	.03	.09	.10	15.50	.81
351.00	.30	23.20	351.00	.33	.11	.33	.35	18.29	.08
507.00	.20	61.60	507.00	.84	.51	.84	.98	31.33	.12
666.00	.20	94.10	666.00	.95	1.03	.95	1.40	47.31	.07
825.00	.10	61.80	825.00	1.00	1.43	1.00	1.74	55.12	.08
984.00	.20	164.60	984.00	.80	1.63	.80	1.81	63.94	.15
1141.00	.10	68.80	1141.00	.58	1.83	.58	1.92	72.36	.15
1300.00	.20	225.50	1300.00	.44	1.76	.44	1.81	76.06	.19
1459.00	.30	211.40	1458.99	-.11	1.34	-.11	1.35	94.81	.07
1618.00	.20	206.20	1617.99	-.72	1.00	-.72	1.23	125.53	.06
1777.00	.40	148.00	1776.99	-1.44	1.18	-1.44	1.86	140.70	.21
1937.00	.20	173.00	1936.99	-2.19	1.51	-2.19	2.66	145.45	.15
2096.00	.10	264.30	2095.99	-2.48	1.40	-2.48	2.85	150.49	.14

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
2255.00	.10	220.70	2254.99	-2.60	1.17	-2.60	2.85	155.67	.05
2414.00	.30	200.90	2413.99	-3.09	.93	-3.09	3.23	163.17	.13
2573.00	.20	235.20	2572.98	-3.64	.56	-3.64	3.68	171.27	.11
2731.00	.10	13.40	2730.98	-3.66	.36	-3.66	3.68	174.33	.18
2889.00	.30	272.30	2888.98	-3.51	-.02	-3.51	3.51	180.29	.21
3048.00	.30	290.70	3047.98	-3.35	-.82	-3.35	3.45	193.82	.06
3207.00	.30	340.80	3206.98	-2.81	-1.35	-2.81	3.11	205.68	.16
3366.00	.30	151.70	3365.98	-2.78	-1.29	-2.78	3.06	204.88	.38
3523.00	.70	167.70	3522.97	-4.08	-.89	-4.08	4.17	192.31	.27
3682.00	.30	191.00	3681.97	-5.44	-.76	-5.44	5.49	187.98	.28
3840.00	.60	213.60	3839.96	-6.53	-1.30	-6.53	6.66	191.25	.22
3999.00	1.20	215.20	3998.94	-8.58	-2.72	-8.58	9.01	197.58	.38
4062.00	.70	192.70	4061.93	-9.50	-3.18	-9.50	10.02	198.53	.98
4220.00	1.50	205.90	4219.90	-12.30	-4.30	-12.30	13.03	199.27	.53
4284.00	.70	210.50	4283.89	-13.39	-4.86	-13.39	14.25	199.96	1.26
Projection to Bit									
4334.00	.70	210.50	4333.89	-13.92	-5.17	-13.92	14.85	200.39	.00