

039-26389

Customer : Williams Production Company

Well : Rosa #171A

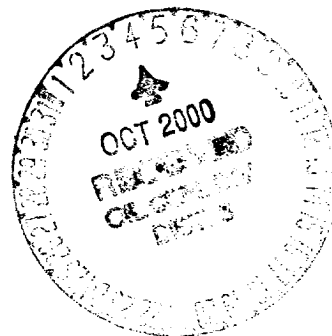
Rig : Bear Cat #2

Field : Mesa Verde

Legal : G - Sec. 07-T31N-R05W

County : Rio Arriba

State : New Mexico



Calculation Method :

Magnetic Declination Applied :

Vertical Section Direction :

Minimum Curvature

11.10° East

278.104° Azimuth

BHL 1591' N, 780' W, Sec 7, T31N, R5W

Note : See attached SSDS Certified Survey Worksheet for all survey information as recorded in the field.

I, Craig Davis, having personal knowledge of all the facts, hereby certify that the above listed Directional Survey is true and correct as determined from all available Sperry-Sun Drilling Services records.

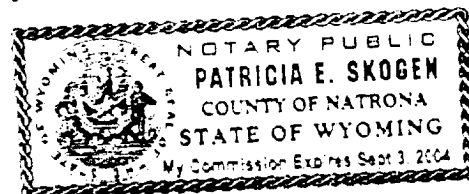
Craig Davis James R. Davidson P.E.

Directional Drilling Coordinator

On this 2nd day of October, 2000, before me personally appeared James R. Davidson to me known as the person described in and who executed the same as his/her free act and deed.

Patricia E. Skogen
Notary Public in and for the County of
Natrona, State of Wyoming

Sept. 3, 2004
My Commission Expires



**New Mexico Oil Conservation
Oil & Gas Division
1000 Rio Brazos Road
Aztec, New Mexico
87410**

For the attention of : Frank Chavez

Dear Sir,

Please find enclosed two (2) copies of our certified survey results on the well described below.

Customer : Williams Production Company

Well : Rosa #171A

Rig : Bear Cat #2

Field : Mesa Verde

Legal : Sec. 07-T31N-R05W

County : Rio Arriba

State : New Mexico

Please feel free to call upon me at any time should you have any questions regarding the enclosed information.

Sincerely,
 **Craig Davis James R. Davidson P.E.**

**Craig Davis
Directional Drilling Coordinator
7197 W. Derrick Drive
Casper, Wyoming 82604
(307) 472-5757**

For the attention of :

Dear Sir,

Please find enclosed one (1) copy of our certified survey results on the well described below.

Customer : Williams Production Company

Well : Rosa #171A

Rig : Bear Cat #2

Field : Mesa Verde

Legal : Sec. 07-T31N-R05W

County : Rio Arriba

State : New Mexico

Please feel free to call upon me at any time should you have any questions regarding the enclosed information.

Sincerely,

Craig Davis / James R. Davidson P.E.

Craig Davis
Directional Drilling Coordinator

Section 1

Survey Data

Contents: Final Well Survey submitted as the official certified survey.

Sperry-Sun Drilling Services

Survey Report for Rosa Unit # 171A - MWD Survey
Your Ref: Gary Sizemore

Williams Production Company
Mesa Verde Field

Rio Arriba Co., NM
Sec. 07-T31N-R05W

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00	
561.00	10.800	267.400	557.68	2.39 S	52.66 W	51.80	1.93
591.00	11.400	267.600	587.12	2.64 S	58.43 W	57.48	2.00
621.00	10.400	265.800	616.58	2.97 S	64.10 W	63.04	3.52
652.00	10.600	267.200	647.06	3.31 S	69.73 W	68.57	1.05
682.00	11.000	270.800	676.53	3.40 S	75.35 W	74.12	2.61
712.00	12.700	276.100	705.89	3.01 S	81.49 W	80.25	6.72
773.00	15.400	279.200	765.06	1.01 S	96.16 W	95.06	4.59
803.00	15.200	276.400	794.00	0.07 N	104.00 W	102.97	2.55
834.00	15.900	276.600	823.86	1.01 N	112.26 W	111.28	2.26
864.00	17.100	279.400	852.63	2.20 N	120.69 W	119.80	4.80
894.00	18.100	281.100	881.22	3.82 N	129.61 W	128.86	3.75
923.00	18.400	281.600	908.77	5.61 N	138.52 W	137.93	1.17
955.00	19.100	280.300	939.07	7.56 N	148.62 W	148.20	2.55
1017.00	20.800	279.800	997.34	11.25 N	169.45 W	169.34	2.76
1109.00	22.800	278.800	1082.76	16.76 N	203.16 W	203.50	2.21
1203.00	23.300	280.900	1169.26	23.06 N	239.42 W	240.28	1.02
1297.00	26.300	282.100	1254.58	30.94 N	278.04 W	279.63	3.24
1389.00	24.400	271.700	1337.76	35.78 N	316.99 W	318.87	5.25
1481.00	24.300	271.200	1421.57	36.74 N	354.91 W	356.54	0.25
1575.00	24.800	271.700	1507.08	37.73 N	393.95 W	395.34	0.58
1670.00	25.900	273.800	1592.93	39.70 N	434.57 W	435.83	1.50
1763.00	26.600	275.800	1676.34	43.15 N	475.55 W	476.89	1.21
1856.00	27.400	278.200	1759.21	48.30 N	517.45 W	519.09	1.45
1949.00	29.500	282.100	1840.98	56.16 N	561.03 W	563.34	3.01
2042.00	29.500	281.900	1921.92	65.68 N	605.82 W	609.03	0.11
2133.00	29.500	282.300	2001.12	75.07 N	649.64 W	653.73	0.22
2225.00	28.500	285.400	2081.59	85.72 N	692.94 W	698.10	1.96
2320.00	27.100	282.100	2165.63	96.28 N	735.95 W	742.17	2.19
2414.00	27.400	283.300	2249.20	105.74 N	777.93 W	785.07	0.67
2506.00	25.600	278.800	2331.54	113.66 N	818.18 W	826.04	2.93
2598.00	28.200	281.400	2413.58	121.00 N	859.14 W	867.62	3.10
2689.00	27.600	279.500	2494.00	128.72 N	901.01 W	910.16	1.18
2783.00	27.600	279.300	2577.30	135.84 N	943.98 W	953.70	0.10
2875.00	27.600	281.400	2658.84	143.49 N	985.90 W	996.28	1.06
2966.00	25.200	283.300	2740.34	152.12 N	1025.42 W	1036.63	2.80
3060.00	21.400	283.700	2826.66	160.79 N	1061.57 W	1073.64	4.05
3152.00	20.000	285.400	2912.72	168.94 N	1093.05 W	1105.95	1.66
3246.00	17.800	282.100	3001.65	176.22 N	1122.60 W	1136.23	2.60
3337.00	16.800	277.400	3088.54	180.83 N	1149.25 W	1163.26	1.89

Continued...