

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

As-Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30503		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 399A
*GRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6678'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	31N	4W		1035	SOUTH	1025	EAST	RIO ARriba

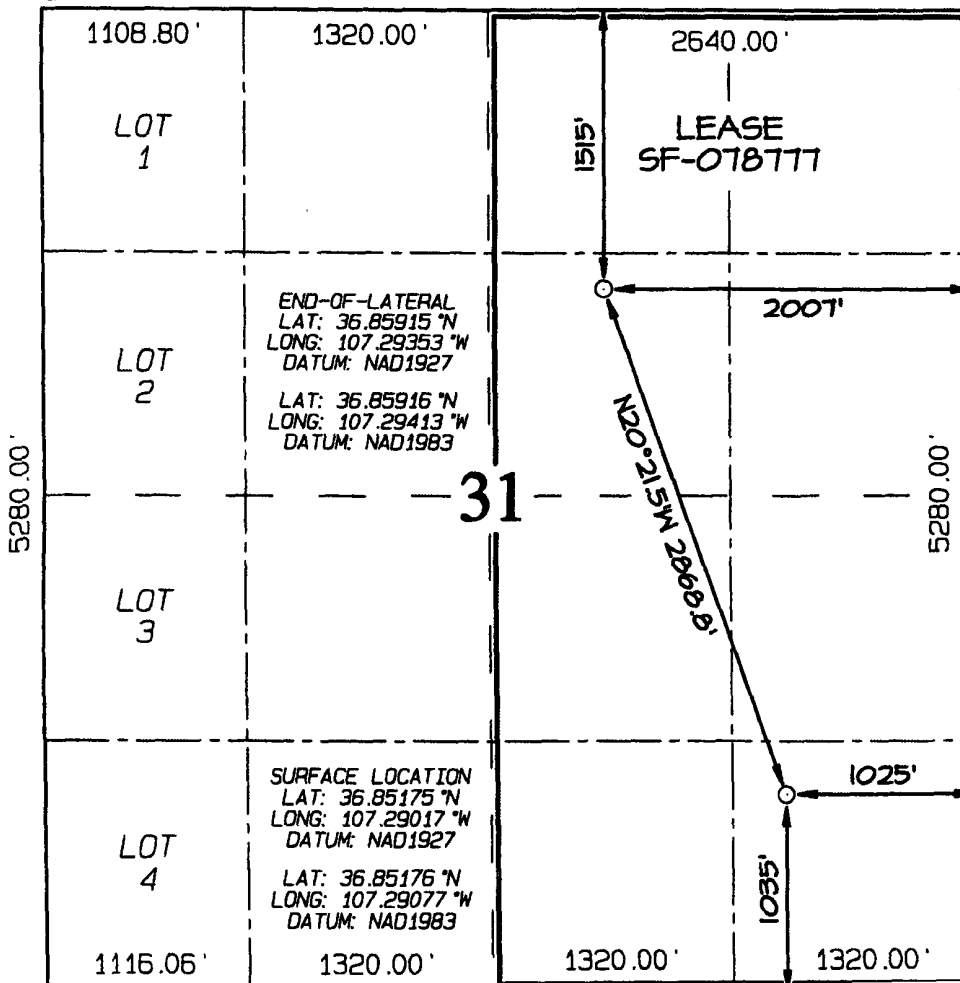
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	31	31N	4W		1515	NORTH	2007	EAST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (E/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. RCVD JUL 14 11 OIL CONS. DIV.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

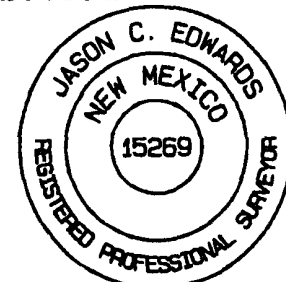
Ben Mitchell 7/11/2011
Signature Date
Ben Mitchell
Printed Name

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: JULY 11, 2011
Date of Survey: APRIL 13, 2011

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

ALB

PathFinder Energy Services, Inc.

Survey Report

WILLIAMS PRODUCTION COMPANY

ROSA UNIT #399A

RIO ARriba COUNTY, NM

Rig: AZTEC 781

PathFinder Office Supervisor: TOM SCHMIDT

PathFinder Field Engineers: BRECK ENOCH

PAUL FOREMAN

API # 30-039-30503

Survey Horiz. Reference: WELLHEAD

Ref Coordinates: LAT: 36.51.6.3000 N LON: 107.17.24.6120 W

GRID Reference: NAD27 new mexico central Transverse Mercator

Ref GRID Coord: X: 195666.1905 Y: 2130919.8292

North Aligned To: TRUE NORTH

Total Magnetic Correction: 9.71° EAST TO TRUE

Vertical Section Plane: 339.42

Survey Vert. Reference: 14.00' Rotary Table To Ground

Altitude: 6678.00' Ground To MSL

Survey Calculations by RX5 V6.03E using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
THE FOLLOWING ARE GYRODATA GYRO SURVEYS.										
200.00	0.28	159.12	200.00	0.00	-0.49	0.46 S	0.17 E	0.49@	159.67	0.00
400.00	0.13	253.94	400.00	200.00	-0.96	0.98 S	0.13 E	0.99@	172.66	0.16
600.00	0.44	152.35	599.99	200.00	-1.70	1.72 S	0.26 E	1.74@	171.27	0.24
800.00	0.50	145.35	799.99	200.00	-3.31	3.12 S	1.12 E	3.31@	160.30	0.04
1000.00	0.71	142.23	999.98	200.00	-5.34	4.82 S	2.37 E	5.37@	153.78	0.11
1200.00	0.49	130.85	1199.97	200.00	-7.28	6.36 S	3.78 E	7.39@	149.27	0.12
1400.00	0.39	133.26	1399.96	200.00	-8.64	7.38 S	4.92 E	8.87@	146.31	0.05
1600.00	0.76	126.51	1599.95	200.00	-10.36	8.64 S	6.48 E	10.80@	143.11	0.19
1800.00	0.50	147.42	1799.94	200.00	-12.33	10.16 S	8.02 E	12.94@	141.72	0.17
2000.00	0.53	110.93	1999.93	200.00	-13.80	11.23 S	9.35 E	14.61@	140.21	0.16
2200.00	0.45	127.12	2199.92	200.00	-15.08	12.03 S	10.84 E	16.20@	137.98	0.08
2400.00	0.49	98.41	2399.92	200.00	-16.15	12.63 S	12.31 E	17.64@	135.73	0.12
2600.00	0.87	109.81	2599.90	200.00	-17.55	13.27 S	14.59 E	19.72@	132.29	0.20
2800.00	0.56	104.85	2799.89	200.00	-19.10	14.04 S	16.96 E	22.02@	129.61	0.16
3000.00	0.81	140.54	2999.87	200.00	-21.01	15.38 S	18.81 E	24.29@	129.27	0.24
**	TIED-INTO GYRODATA GYRO SURVEY AT 3021'MD.									
3021.00	0.75	158.68	3020.87	21.00	-21.28	15.62 S	18.95 E	24.56@	129.50	1.20
THE FOLLOWING ARE GYRODATA GYRO SURVEYS.										
3081.00	0.59	147.55	3080.87	60.00	-21.98	16.25 S	19.26 E	25.20@	130.15	0.34
3110.00	0.76	119.79	3109.86	29.00	-22.27	16.47 S	19.51 E	25.53@	130.17	1.25
3140.00	2.39	4.08	3139.86	30.00	-21.86	15.94 S	19.72 E	25.36@	128.95	9.35
THE FOLLOWING SURVEYS HAVE AN INTERPOLATED AZIMUTH.										
3166.00	6.60	351.90	3165.77	26.00	-19.91	13.92 S	19.55 E	24.00@	125.45	16.51
3194.00	12.75	338.78	3193.36	28.00	-15.24	9.44 S	18.20 E	20.51@	117.42	23.20

PathFinder Energy Services, Inc.

Survey Report

WILLIAMS PRODUCTION COMPANY
ROSA UNIT #399A
RIO ARriba COUNTY, NM
RIG:AZTEC 781

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
3226.00	20.31	323.79	3224.03	32.00	-6.34	1.66 S	13.64 E	13.74@	96.93	26.94
3258.00	27.00	325.68	3253.33	32.00	6.07	8.84 N	6.25 E	10.82@	35.28	21.04
3290.00	32.18	333.39	3281.15	32.00	21.62	22.47 N	1.67 W	22.53@	355.75	20.06
3304.00	34.03	332.09	3292.88	14.00	29.21	29.26 N	5.17 W	29.72@	349.98	14.15
3336.00	39.39	327.68	3318.53	32.00	48.05	45.77 N	14.80 W	48.11@	342.08	18.66
3369.00	45.99	328.46	3342.77	33.00	69.98	64.76 N	26.62 W	70.01@	337.65	20.06
3400.00	52.94	329.95	3362.91	31.00	93.15	84.99 N	38.66 W	93.37@	335.54	22.71
3432.00	58.04	332.00	3381.03	32.00	119.23	108.04 N	51.44 W	119.66@	334.54	16.79
3464.00	61.11	335.59	3397.24	32.00	146.68	132.80 N	63.60 W	147.24@	334.41	13.62
3495.00	63.40	338.62	3411.67	31.00	174.09	158.07 N	74.27 W	174.65@	334.83	11.37
3527.00	67.09	339.87	3425.07	32.00	203.14	185.24 N	84.56 W	203.63@	335.46	12.06
3560.00	70.52	341.18	3437.00	33.00	233.90	214.24 N	94.81 W	234.28@	336.13	11.03
3592.00	72.81	342.20	3447.07	32.00	264.25	243.08 N	104.35 W	264.53@	336.77	7.77
3623.00	77.21	343.00	3455.08	31.00	294.14	271.65 N	113.30 W	294.33@	337.36	14.41
3655.00	81.78	344.01	3460.91	32.00	325.51	301.81 N	122.23 W	325.62@	337.95	14.61
3688.00	84.33	344.47	3464.90	33.00	358.15	333.33 N	131.13 W	358.20@	338.53	7.85
3752.00	89.78	343.68	3468.19	64.00	421.83	394.77 N	148.66 W	421.83@	339.36	8.60
3816.00	89.52	343.15	3468.58	64.00	485.68	456.11 N	166.93 W	485.69@	339.90	0.92
3880.00	89.16	342.81	3469.32	64.00	549.55	517.30 N	185.66 W	549.61@	340.26	0.77
3944.00	89.25	340.55	3470.21	64.00	613.49	578.04 N	205.77 W	613.58@	340.41	3.53
4008.00	88.11	340.48	3471.68	64.00	677.46	638.36 N	227.11 W	677.56@	340.42	1.78
4072.00	88.81	341.35	3473.40	64.00	741.41	698.82 N	248.03 W	741.53@	340.46	1.74
4137.00	88.29	340.19	3475.05	65.00	806.37	760.17 N	269.43 W	806.51@	340.48	1.96
4201.00	89.16	340.66	3476.47	64.00	870.35	820.46 N	290.87 W	870.49@	340.48	1.55
4265.00	90.48	339.48	3476.67	64.00	934.34	880.62 N	312.69 W	934.49@	340.45	2.77
4328.00	91.36	339.39	3475.66	63.00	997.33	939.60 N	334.81 W	997.47@	340.39	1.40
4392.00	90.48	339.35	3474.63	64.00	1061.32	999.49 N	357.36 W	1061.45@	340.33	1.38
4455.00	91.10	340.33	3473.76	63.00	1124.31	1058.62 N	379.07 W	1124.44@	340.30	1.84
4519.00	90.31	339.65	3472.98	64.00	1188.30	1118.75 N	400.97 W	1188.44@	340.28	1.63

PathFinder Energy Services, Inc.

Survey Report

WILLIAMS PRODUCTION COMPANY
ROSA UNIT #399A
RIO ARriba COUNTY, NM
RIG:AZTEC 781

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
4581.00	90.13	339.36	3472.74	62.00	1250.30	1176.83 N	422.67 W	1250.43@	340.24	0.55
4644.00	90.48	339.36	3472.40	63.00	1313.30	1235.78 N	444.88 W	1313.42@	340.20	0.56
4708.00	90.48	339.33	3471.87	64.00	1377.30	1295.67 N	467.46 W	1377.41@	340.16	0.05
4772.00	89.08	338.21	3472.11	64.00	1441.29	1355.32 N	490.63 W	1441.39@	340.10	2.80
4835.00	88.90	338.91	3473.22	63.00	1504.27	1413.95 N	513.65 W	1504.36@	340.04	1.15
4898.00	89.96	338.39	3473.85	63.00	1567.26	1472.63 N	536.59 W	1567.34@	339.98	1.87
4960.00	89.87	338.77	3473.94	62.00	1629.26	1530.34 N	559.23 W	1629.32@	339.93	0.63
5024.00	90.84	337.51	3473.55	64.00	1693.24	1589.74 N	583.06 W	1693.29@	339.86	2.49
5088.00	90.31	337.56	3472.90	64.00	1757.20	1648.88 N	607.51 W	1757.23@	339.77	0.83
5151.00	89.87	337.28	3472.80	63.00	1820.16	1707.05 N	631.70 W	1820.18@	339.69	0.83
5213.00	90.40	336.79	3472.66	62.00	1882.11	1764.13 N	655.89 W	1882.12@	339.61	1.16
5277.00	90.57	336.91	3472.12	64.00	1946.04	1822.98 N	681.05 W	1946.04@	339.51	0.32
5341.00	89.78	339.13	3471.92	64.00	2010.02	1882.32 N	705.01 W	2010.02@	339.47	3.68
5405.00	90.31	339.30	3471.87	64.00	2074.02	1942.16 N	727.72 W	2074.02@	339.46	0.87
5469.00	90.22	340.30	3471.58	64.00	2138.01	2002.22 N	749.82 W	2138.01@	339.47	1.57
5532.00	90.04	340.08	3471.43	63.00	2201.01	2061.49 N	771.17 W	2201.01@	339.49	0.45
5596.00	91.10	339.17	3470.80	64.00	2265.00	2121.48 N	793.45 W	2265.00@	339.49	2.18
5660.00	89.96	339.91	3470.20	64.00	2329.00	2181.44 N	815.82 W	2329.00@	339.50	2.12
5724.00	90.22	340.18	3470.10	64.00	2392.99	2241.60 N	837.66 W	2393.00@	339.51	0.59
5788.00	90.40	340.08	3469.76	64.00	2456.99	2301.79 N	859.41 W	2456.99@	339.53	0.32
5852.00	89.96	340.74	3469.56	64.00	2520.98	2362.08 N	880.87 W	2520.98@	339.55	1.24
5916.00	89.78	340.73	3469.70	64.00	2584.96	2422.50 N	901.99 W	2584.97@	339.58	0.28
5980.00	88.55	340.28	3470.63	64.00	2648.94	2482.82 N	923.34 W	2648.95@	339.60	2.05
6044.00	87.41	340.19	3472.89	64.00	2712.89	2543.01 N	944.97 W	2712.91@	339.62	1.79
6108.00	88.72	340.11	3475.05	64.00	2776.85	2603.17 N	966.69 W	2776.87@	339.63	2.05
6144.00	88.55	340.04	3475.91	36.00	2812.84	2637.01 N	978.95 W	2812.86@	339.63	0.51
STRAIGHT LINE PROJECTION TO BIT DEPTH AT 6200'MD.										
6200.00	88.55	340.04	3477.33	56.00	2868.82	2689.63 N	998.06 W	2868.84@	339.64	0.00

2730 982

PathFinder Energy Services, Inc.

Survey Report

**WILLIAMS PRODUCTION COMPANY
ROSA UNIT #399A
RIO ARriba COUNTY, NM
RIG:AZTEC 781**

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- ** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.**