

sperry-sun
DRILLING SERVICES

End of Well Report

39-29369

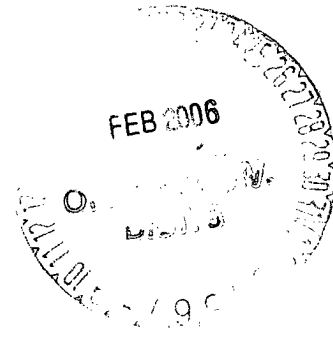
H

San Juan 29-7 # 577S

Surface: 1515/N 340/E Sec 34, 29N, 7W
BHL 1 1554/N 183/W Sec 35 " "
BHL 2 1718/N 2151/W Sec 35 " "

Williams Production Company

12/11/2005



HOLD C104 FOR NSL

HALLIBURTON

Sperry Drilling Services • 9800 W Reno • Oklahoma City, OK 73127
Phone 405.324.2222 • Fax 405.324.1009

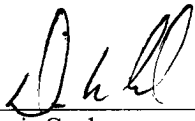
December 16, 2005

Re: Williams Production Co.
San Juan 29-7
Sec. 34-T29N-R07W
Rio Arriba County, New Mexico

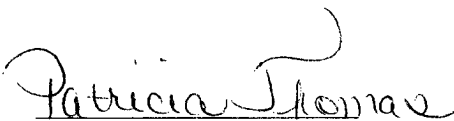
Enclosed please find the original and one copy of the surveys performed on the referenced well by Halliburton/Sperry Drilling Services.

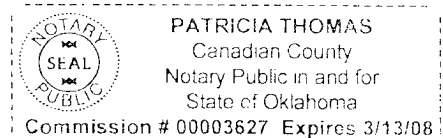
<u>Name & Title of Supervisor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Dennis Cook Directional Supervisor	Original	512' – 5,451'	11/30/05 – 12/08/05	MWD
Dennis Cook Directional Supervisor	Projection to TD	5,451' – 5,511'		MWD

If any other information is required, please contact the undersigned at the letterhead address and phone number.


Dennis Cook
Directional Supervisor

My Commission Expires: March 13, 2008


Patricia Thomas
Notary Public





Williams Production Company
New Mexico
Rio Arriba County
Sec. 34-T29N-R07W
San Juan 29-7 #577S - MWD Survey

Halliburton Sperry-Drilling

Survey Report

11 December, 2005

Surface Coordinates: 2068817.85 N, 583158.93 E (36° 41' 07.0000" N, 107° 32' 59.0000" W)
Grid Coordinate System: NAD27 New Mexico State Planes, Western Zone

Surface Coordinates relative to Global Coordinates: 563826.72 N, 285478.17 E (Grid)
Surface Coordinates relative to NE Cor Sec 34: 1515.00 S, 340.00 W (True)
Kelly Bushing Elevation: 6485.00ft above Mean Sea Level
Kelly Bushing Elevation: 0.00ft above Structure

Survey Ref: svy9559

HALLIBURTON

Sperry Drilling Services

Survey Report for Sec. 34-T29N-R07W - San Juan 29-7 #577S - MWD Survey

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	E-W (ft)	Dogleg Severit (°/100ft)	Lease Calls FNL-FSL (ft)	FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Grid X (ft)
0.00	0.000	0.000	0.00	0.00	0.00 N	0.00 E		1515.00 FNL	340.00 FEL	2068817.85 N	583158.93 E
512.00	0.920	65.780	511.98	3.59	1.69 N	3.75 E	0.18	1513.31 FNL	336.25 FEL	2068819.54 N	583162.68 E
1008.00	0.760	28.540	1007.93	8.38	6.21 N	8.95 E	0.11	1508.79 FNL	331.05 FEL	2068824.08 N	583167.86 E
1541.00	0.280	95.720	1540.91	11.10	9.19 N	11.94 E	0.13	1505.81 FNL	328.06 FEL	2068827.07 N	583170.84 E
1974.00	0.340	47.240	1973.90	13.03	9.95 N	13.93 E	0.06	1505.05 FNL	326.07 FEL	2068827.84 N	583172.83 E
2571.00	0.540	236.590	2570.90	12.01	9.61 N	12.88 E	0.15	1505.39 FNL	327.11 FEL	2068827.49 N	583171.79 E
2637.00	0.410	253.900	2636.89	11.55	9.37 N	12.40 E	0.29	1505.63 FNL	327.60 FEL	2068827.25 N	583171.30 E
2668.00	0.280	259.100	2667.89	11.37	9.32 N	12.22 E	0.43	1505.68 FNL	327.78 FEL	2068827.21 N	583171.12 E
2699.00	0.490	64.810	2698.89	11.41	9.37 N	12.26 E	2.47	1505.63 FNL	327.74 FEL	2068827.25 N	583171.17 E
2731.00	1.970	87.960	2730.88	12.08	9.44 N	12.94 E	4.79	1505.56 FNL	327.06 FEL	2068827.33 N	583171.84 E
2763.00	4.910	91.660	2762.82	13.99	9.42 N	14.86 E	9.21	1505.58 FNL	325.14 FEL	2068827.31 N	583173.76 E
2795.00	8.070	92.590	2794.61	17.60	9.28 N	18.47 E	9.88	1505.72 FNL	321.53 FEL	2068827.18 N	583177.37 E
2827.00	11.330	93.500	2826.15	22.99	8.99 N	23.85 E	10.20	1506.01 FNL	316.15 FEL	2068826.91 N	583182.76 E
2858.00	14.640	94.040	2856.36	29.95	8.53 N	30.80 E	10.68	1506.47 FNL	309.20 FEL	2068826.47 N	583189.71 E
2890.00	17.830	95.420	2887.08	38.90	7.78 N	39.71 E	10.04	1507.22 FNL	300.28 FEL	2068825.74 N	583198.62 E
2921.00	21.020	96.940	2916.31	49.20	6.66 N	49.96 E	10.42	1508.34 FNL	290.04 FEL	2068824.65 N	583208.87 E
2953.00	24.190	98.520	2945.85	61.49	4.99 N	62.15 E	10.09	1510.01 FNL	277.85 FEL	2068823.02 N	583221.06 E
2984.00	27.630	96.940	2973.73	75.01	3.18 N	75.57 E	11.32	1511.92 FNL	264.43 FEL	2068821.25 N	583234.49 E
3015.00	30.480	96.710	3000.82	90.06	1.39 N	90.51 E	9.20	1513.61 FNL	249.49 FEL	2068819.51 N	583249.44 E
3046.00	33.380	97.310	3027.13	106.44	0.61 S	106.78 E	9.41	1515.61 FNL	233.22 FEL	2068817.55 N	583265.72 E
3077.00	36.410	96.960	3052.55	124.16	2.81 S	124.38 E	9.80	1517.81 FNL	215.62 FEL	2068815.41 N	583283.32 E
3109.00	40.120	96.090	3077.67	143.97	5.06 S	144.06 E	11.72	1520.06 FNL	195.93 FEL	2068813.22 N	583303.01 E
3140.00	44.000	95.010	3100.68	164.73	7.06 S	164.73 E	12.73	1522.06 FNL	175.27 FEL	2068811.28 N	583323.68 E
3171.00	48.120	94.650	3122.19	187.04	8.93 S	186.97 E	13.32	1523.93 FNL	153.03 FEL	2068809.47 N	583345.93 E
3202.00	52.420	94.000	3142.00	210.88	10.73 S	210.74 E	13.96	1525.73 FNL	129.26 FEL	2068807.75 N	583369.70 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	E-W (ft)	Dogleg Severit ("'/100ft)	Lease Calls FNL-FSL (ft)	FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Grid X (ft)
3234.00	57.230	93.520	3160.43	237.02	12.44 S	236.83 E	15.08	1527.44 FNL	103.17 FEL	2068806.11 N	583395.80 E
3265.00	61.980	93.950	3176.11	263.75	14.18 S	263.50 E	15.37	1529.18 FNL	76.50 FEL	2068804.45 N	583422.48 E
3295.00	67.490	94.510	3188.91	290.86	16.19 S	290.55 E	18.44	1531.19 FNL	49.45 FEL	2068802.52 N	583449.53 E
3327.00	72.680	94.550	3199.81	320.94	18.56 S	320.53 E	16.22	1533.56 FNL	19.47 FEL	2068800.24 N	583479.52 E
3358.00	76.220	94.570	3208.11	350.80	20.94 S	350.30 E	11.42	1535.94 FNL	10.30 FWL	2068797.95 N	583509.29 E
3389.00	79.250	94.890	3214.70	381.09	23.44 S	380.48 E	9.83	1538.44 FNL	40.48 FWL	2068795.54 N	583539.48 E
3420.00	83.810	95.590	3219.26	411.74	26.24 S	411.01 E	14.88	1541.24 FNL	71.01 FWL	2068792.83 N	583570.02 E
3452.00	86.110	95.940	3222.08	443.61	29.44 S	442.72 E	7.27	1544.44 FNL	102.72 FWL	2068789.72 N	583601.74 E
3533.00	88.310	97.110	3226.02	524.48	38.63 S	523.09 E	3.08	1553.63 FNL	183.10 FWL	2068780.77 N	583682.14 E
3585.00	87.200	96.550	3227.27	556.44	42.44 S	554.84 E	3.88	1557.44 FNL	214.84 FWL	2068777.06 N	583713.90 E
3597.00	86.080	96.060	3229.15	588.37	45.95 S	586.59 E	3.82	1560.95 FNL	246.59 FWL	2068773.64 N	583745.66 E
3629.00	89.290	96.090	3230.44	620.33	49.33 S	618.38 E	10.03	1564.33 FNL	278.38 FWL	2068770.35 N	583777.46 E
3661.00	89.630	94.760	3230.74	652.33	52.36 S	650.24 E	4.29	1567.35 FNL	310.24 FWL	2068767.42 N	583809.32 E
3693.00	88.580	92.910	3231.24	684.32	54.50 S	682.16 E	6.65	1569.50 FNL	342.16 FWL	2068765.38 N	583841.25 E
3725.00	90.400	93.340	3231.53	716.30	56.24 S	714.11 E	5.84	1571.24 FNL	374.11 FWL	2068763.73 N	583873.21 E
3757.00	90.680	93.660	3231.22	748.29	58.19 S	746.05 E	1.33	1573.19 FNL	406.05 FWL	2068761.87 N	583905.15 E
3789.00	90.090	92.100	3231.01	780.27	59.80 S	778.01 E	5.21	1574.80 FNL	438.01 FWL	2068760.36 N	583937.11 E
3821.00	90.090	91.600	3230.96	812.22	60.84 S	809.99 E	1.56	1575.84 FNL	469.99 FWL	2068759.42 N	583969.10 E
3853.00	90.370	90.710	3230.83	844.15	61.48 S	841.98 E	2.92	1576.48 FNL	501.98 FWL	2068758.87 N	584001.09 E
3886.00	90.770	91.290	3230.50	877.07	62.06 S	874.98 E	2.13	1577.06 FNL	534.98 FWL	2068758.39 N	584034.09 E
3918.00	89.410	91.480	3230.45	909.01	62.83 S	906.97 E	4.29	1577.83 FNL	566.97 FWL	2068757.71 N	584066.08 E
3950.00	89.450	91.480	3230.77	940.95	63.66 S	938.95 E	0.13	1578.66 FNL	598.95 FWL	2068756.98 N	584098.07 E
3982.00	90.920	91.050	3230.67	972.88	64.36 S	970.94 E	4.79	1579.36 FNL	630.95 FWL	2068756.37 N	584130.06 E
4014.00	88.890	90.580	3230.72	1004.80	64.82 S	1002.94 E	6.51	1579.82 FNL	662.94 FWL	2068756.01 N	584162.06 E
4046.00	88.330	90.240	3231.50	1036.69	65.05 S	1034.93 E	2.05	1580.05 FNL	694.93 FWL	2068755.87 N	584194.05 E
4078.00	89.910	90.900	3231.99	1068.59	65.37 S	1066.92 E	5.35	1580.37 FNL	726.92 FWL	2068755.65 N	584226.04 E
4109.00	88.280	92.140	3232.48	1099.53	66.19 S	1097.91 E	6.61	1581.19 FNL	757.91 FWL	2068754.92 N	584257.03 E
4141.00	86.480	92.750	3233.94	1131.47	67.55 S	1129.84 E	5.94	1582.55 FNL	789.84 FWL	2068753.65 N	584288.97 E
4173.00	87.100	92.770	3235.73	1163.39	69.09 S	1161.75 E	1.94	1584.09 FNL	821.76 FWL	2068752.20 N	584320.89 E
4205.00	87.930	92.970	3237.12	1195.34	70.69 S	1193.68 E	2.67	1585.69 FNL	853.69 FWL	2068750.70 N	584352.82 E

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Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates		Dogleg Severit (°/100ft)	Lease Calls		Global Coordinates	
					N-S (ft)	E-W (ft)		FNL-FSL (ft)	FEL-FWL (ft)	Grid Y (ft)	Grid X (ft)
4237.00	90.340	94.020	3237.60	1227.32	72.65 S	1225.62 E	8.21	1587.65 FNL	885.02 FWL	2068748.84 N	584384.76 E
4269.00	90.620	94.590	3237.33	1259.32	75.05 S	1257.53 E	1.98	1590.05 FNL	917.53 FWL	2068746.53 N	584416.68 E
4301.00	91.420	95.850	3236.76	1291.31	77.96 S	1289.39 E	4.66	1592.96 FNL	949.39 FWL	2068743.72 N	584448.55 E
4333.00	89.040	95.690	3236.64	1323.31	81.18 S	1321.22 E	7.45	1596.18 FNL	981.22 FWL	2068740.59 N	584480.39 E
4365.00	89.410	96.470	3237.07	1355.30	84.57 S	1353.04 E	2.70	1599.57 FNL	1013.04 FWL	2068737.30 N	584512.22 E
4397.00	89.630	97.230	3237.34	1387.28	88.38 S	1384.81 E	2.47	1603.38 FNL	1044.81 FWL	2068733.58 N	584544.00 E
4429.00	88.980	98.070	3237.72	1419.24	92.64 S	1416.52 E	3.32	1607.64 FNL	1076.52 FWL	2068729.41 N	584575.72 E
4461.00	89.630	98.770	3238.11	1451.18	97.33 S	1448.17 E	2.99	1612.33 FNL	1108.18 FWL	2068724.82 N	584607.39 E
4493.00	90.680	99.700	3238.03	1483.09	102.46 S	1479.76 E	4.38	1617.46 FNL	1139.76 FWL	2068719.78 N	584638.99 E
4556.00	91.760	101.520	3236.69	1545.76	114.06 S	1541.66 E	3.36	1629.06 FNL	1201.67 FWL	2068708.36 N	584700.93 E
4620.00	89.880	100.680	3235.77	1609.38	126.38 S	1604.46 E	3.22	1641.38 FNL	1264.46 FWL	2068696.23 N	584763.76 E
4652.00	88.770	100.680	3236.15	1641.22	132.31 S	1635.90 E	3.47	1647.31 FNL	1295.90 FWL	2068690.39 N	584795.22 E
4684.00	88.150	99.770	3237.01	1673.07	137.99 S	1667.38 E	3.44	1652.99 FNL	1327.38 FWL	2068684.81 N	584826.71 E
4716.00	87.940	99.560	3238.10	1704.94	143.36 S	1698.91 E	0.93	1658.36 FNL	1358.91 FWL	2068679.53 N	584858.26 E
4748.00	88.370	98.680	3239.13	1736.84	148.43 S	1730.49 E	3.06	1663.43 FNL	1390.49 FWL	2068674.56 N	584889.85 E
4779.00	88.950	97.490	3239.85	1767.78	152.79 S	1761.17 E	4.27	1667.79 FNL	1421.17 FWL	2068670.29 N	584920.55 E
4843.00	91.200	97.690	3239.77	1831.71	161.24 S	1824.60 E	3.53	1676.24 FNL	1484.60 FWL	2068662.02 N	584984.01 E
4875.00	91.360	97.840	3239.05	1863.66	165.56 S	1856.30 E	0.69	1680.56 FNL	1516.30 FWL	2068657.80 N	585015.72 E
4939.00	89.260	96.150	3238.71	1927.62	173.36 S	1919.82 E	4.21	1688.36 FNL	1579.82 FWL	2068650.19 N	585079.26 E
4971.00	89.350	95.480	3239.10	1959.61	176.60 S	1951.65 E	2.11	1691.60 FNL	1611.65 FWL	2068647.04 N	585111.10 E
5003.00	90.370	95.330	3239.17	1991.61	179.62 S	1983.51 E	3.22	1694.62 FNL	1643.51 FWL	2068644.12 N	585142.97 E
5065.00	89.510	93.940	3239.24	2053.60	184.63 S	2045.30 E	2.64	1699.63 FNL	1705.31 FWL	2068639.30 N	585204.77 E
5129.00	90.280	93.260	3239.36	2117.59	188.65 S	2109.18 E	1.61	1703.65 FNL	1769.18 FWL	2068635.47 N	585268.66 E
5161.00	88.980	93.200	3239.56	2149.57	190.45 S	2141.12 E	4.07	1705.45 FNL	1801.13 FWL	2068633.76 N	585300.61 E
5193.00	88.800	91.260	3240.18	2181.53	191.69 S	2173.09 E	6.09	1706.69 FNL	1833.09 FWL	2068632.61 N	585332.58 E
5225.00	90.800	91.510	3240.30	2213.46	192.47 S	2205.08 E	6.30	1707.47 FNL	1865.08 FWL	2068631.93 N	585364.57 E
5257.00	92.680	92.330	3239.32	2245.40	193.54 S	2237.05 E	6.41	1708.54 FNL	1897.05 FWL	2068630.95 N	585396.54 E
5321.00	89.690	92.080	3238.00	2309.31	196.00 S	2300.98 E	4.69	1711.00 FNL	1960.98 FWL	2068628.68 N	585460.48 E
5353.00	89.140	91.800	3238.33	2341.26	197.09 S	2332.96 E	1.93	1712.09 FNL	1992.96 FWL	2068627.69 N	585492.47 E
5385.00	88.770	91.960	3238.91	2373.21	198.14 S	2364.94 E	1.26	1713.14 FNL	2024.94 FWL	2068626.73 N	585524.45 E

Measure Depth (ft)	Incl. Angle (Deg)	Drift Direction (Deg)	True Vertical Depth	Vertical Section (ft)	Local Coordinates N-S (ft)	E-W (ft)	Dogleg Severit (°/100ft)	Lease Calls FNL-FSL (ft)	FEL-FWL (ft)	Global Coordinates Grid Y (ft)	Grid X (ft)
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last MWD survey

5451.00	90.460	92.230	3239.35	2439.13	200.55 S	2430.89 E	2.59	1715.55 FNL	2090.89 FWL	2068624.52 N	585590.40 E
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projection to TD

5511.00	90.460	92.230	3238.87	2499.06	202.88 S	2490.84 E	0.00	1717.88 FNL	2150.84 FWL	2068622.36 N	585650.36 E
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All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to RKB(6471' +14' KB). Northings and Eastings are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 5511.00ft.,
The Bottom Hole Displacement is 2499.09ft., in the Direction of 94.656° (True).

Survey Report for Sec. 34-T29N-R07W - San Juan 29-7 #577S - MWD Survey

Comments

Measured Depth (ft)	Station Coordinates		Comment
	TVD (ft)	Northings (ft)	Eastings (ft)
5451.00	3239.35	200.55 S	2430.89 E
5511.00	3238.87	202.88 S	2490.84 E

last MWD survey
projection to TD

North Reference Sheet for Sec. 34-T29N-R07W - San Juan 29-7 #577S

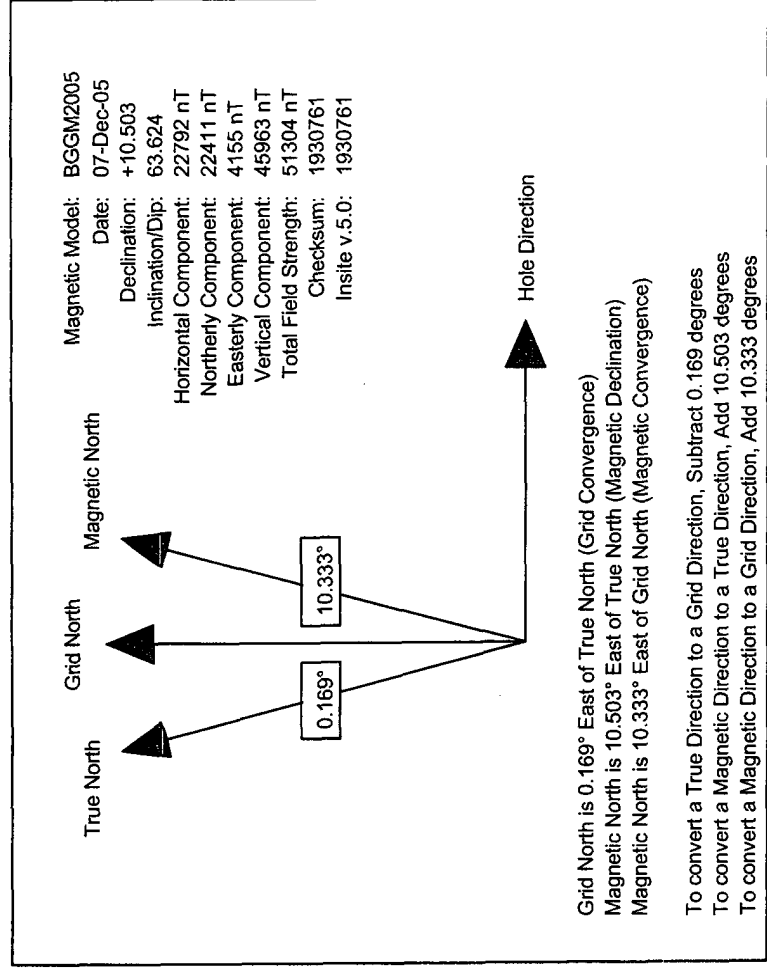
Coordinate System is NAD27 New Mexico State Planes, Western Zone, US Foot
Source: Snyder, J.P., 1987, Map Projections - A Working Manual

Datum is North American Datum of 1927 (US48, AK, HI, and Canada)

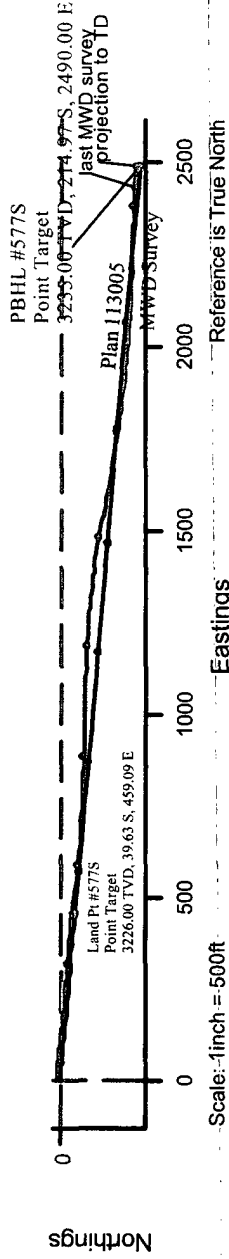
Spheroid is Clarke - 1866
Equatorial Radius: 6378206.400m.
Polar Radius: 6356583.800m.
Inverse Flattening: 294.978698213901

Projection method is Transverse Mercator or Gauss Kruger Projection
Central Meridian is -107.833°
Longitude Origin: 0.000°
Latitude Origin: 31.000°
False Easting: 152400.00m
False Northing: 0.00m
Scale Reduction: 0.99991667

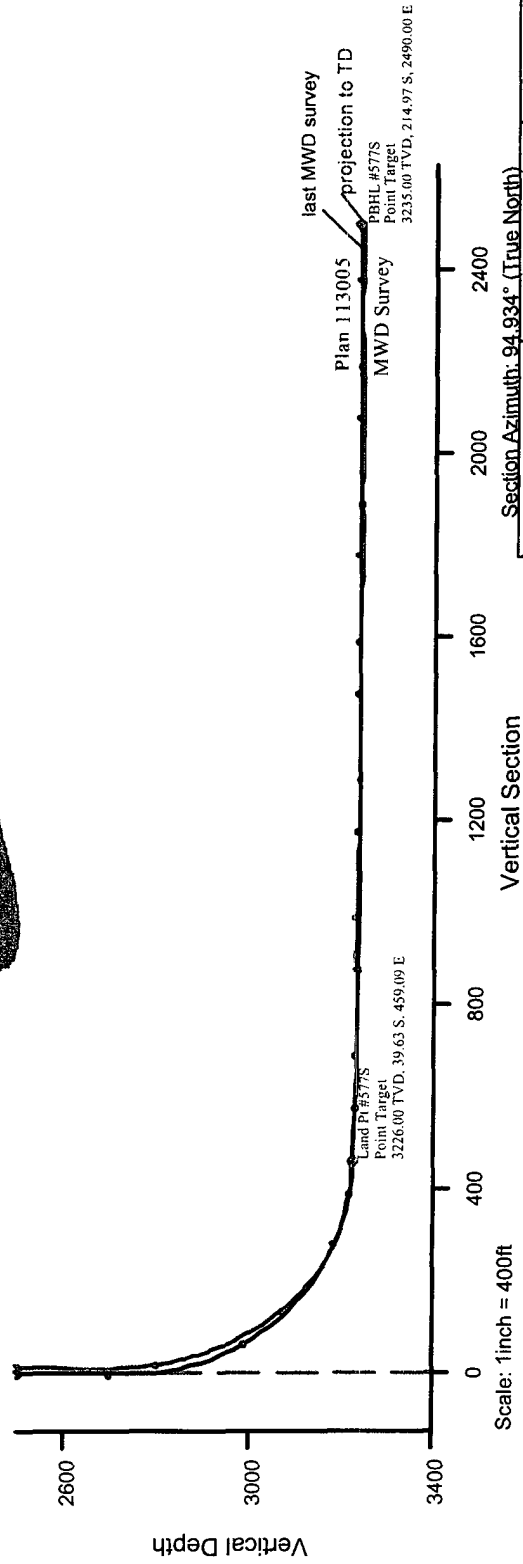
Grid Coordinates of Well: 2068817.85 N, 583158.93 E
Geographical Coordinates of Well: 36° 41' 07.0000" N, 107° 32' 59.0000" W
Surface Elevation of Well: 6485.00ft
Grid Convergence at Surface is +0.169°
Magnetic Declination at Surface is +10.503° (7 December, 2005)



New Mexico
Rio Arriba County
Sec. 34-T29N-R07W
San Juan 29-7 #577S



Williams



Section Azimuth: 94.934° (True North)

Prepared by:
Dennis Cook

Checked:

Date/Time:
11 December, 2005 - 8:40

Approved:

District I
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994

District II
PJ Drewen CO, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District III
1000 F.O. Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number'	'Pool Code' 71629	'Pool Name' BASIN FRUITLAND COAL
'Precedence Code'	'Property Name' SAN JUAN 29-7 UNIT	'Well Number' 577S
'CEPID No.'	'Operator Name' BURLINGTON RESOURCES OIL & GAS COMPANY, LP	'Elevation' 5471'

¹⁰ Surface Location

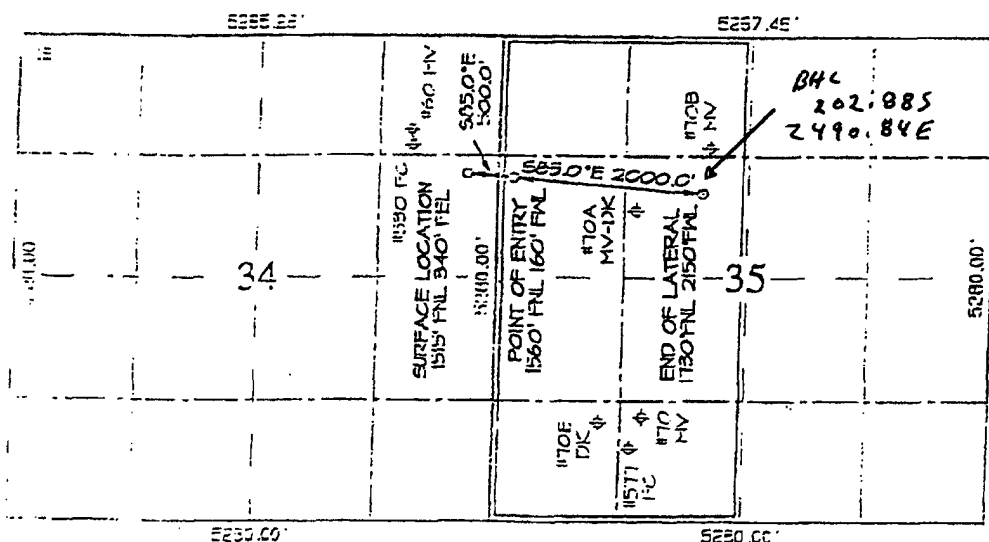
UL or Sec No.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
-	34	29N	7W		1515	NORTH	340	EAST	ARIZONA

¹¹ Bottom Hole Location If Different From Surface

UL or Sec No.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
-	35	29N	7W		1730	NORTH	2150	WEST	ARIZONA

¹² Dedicated Acres 320.0 Acres - (N/2)	¹³ Joint or Infill	¹⁴ Consolidation Area	¹⁵ Owner No.
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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



¹⁶ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Larry Higgins
Signature

Larry Higgins
Printed Name

Drillme COM
Title

12-3-04
Date

¹⁷ 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 of Survey: JUNE 22, 2004

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15259