

sperry-sun
DRILLING SERVICES

End of Well Report

30-045-32125

Cox Canyon # 204

Surface 1920/S 1950/W
Enter coal 1996/S 1534/W
BHL 2308/S 100/W

Williams Production

5/4/2005

HOLD C104 FOR MSL

ORIGINAL

HALLIBURTON

9800 W RENO • OKLA CITY, OK 73127
PHONE 405.324.2222 • FAX 405.324.1009

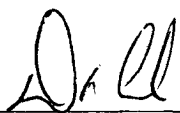
May 05, 2005

Re: Williams Production Company
Cox Canyon #204
Sec. 21-T32N-R11W
San Juan, New Mexico

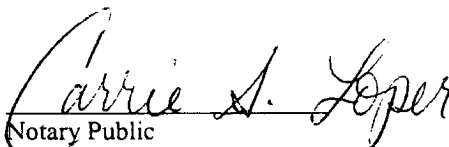
Enclosed please find the original and one copy of the surveys performed on the referenced well by Halliburton/Sperry Drilling Services.

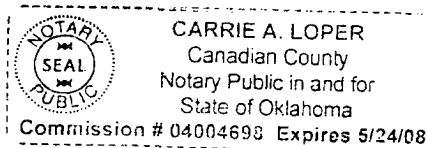
<u>Name & Title of Supervisor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Dennis Cook Field Supervisor	Original	382' – 5,081'	04/21/05 – 05/02/05	MWD
Dennis Cook Field Supervisor	Projection to TD	5,081' – 5,144'		MWD

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


Dennis Cook
Field Supervisor

My Commission Expires: _____


Notary Public





Williams Production Company
New Mexico
San Juan County
Sec. 21-T32N-R11W
Cox Canyon Unit # 204 - MWD Surveys

Haliburton Sperry-Drilling

Survey Report

4 May, 2005

Surface Coordinates: 2003257.58 N, 428475.90 E (36° 30' 18.9867" N, 108° 04' 36.1142" W)
Grid Coordinate System: NAD27 New Mexico State Planes, Western Zone

Surface Coordinates relative to Global Coordinates: 1914.93 N, 1954.98 E (Grid)
Surface Coordinates relative to SW Corner of Sec. 21: 1920.00 N, 1950.00 E (True)
Kelly Bushing Elevation: 6893.00ft above Mean Sea Level
Kelly Bushing Elevation: 14.00ft above Ground Level

Survey Ref: svy8409

HALLIBURTON

Sperry Drilling Services

Survey Report for Sec. 21-T32N-R11W - Cox Canyon Unit # 204 - MWD Surveys

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		1920.00 FSL	1950.00 FWL	2003257.58 N	428475.90 E
1st MWD survey of vertical hole											
382.00	0.440	148.585	382.00	-0.97	1.25 S	0.76 E	0.12	1918.75 FSL	1950.76 FWL	2003256.33 N	428476.66 E
632.00	0.790	200.795	631.98	-1.29	3.68 S	0.65 E	0.25	1916.32 FSL	1950.65 FWL	2003253.90 N	428476.54 E
881.00	0.770	206.685	880.96	-0.49	6.78 S	0.71 W	0.03	1913.22 FSL	1949.29 FWL	2003250.80 N	428475.17 E
1128.00	0.520	147.585	1127.95	-0.77	9.21 S	0.85 W	0.27	1910.79 FSL	1949.15 FWL	2003248.37 N	428475.02 E
1375.00	0.940	165.535	1374.93	-2.37	12.12 S	0.26 E	0.19	1907.88 FSL	1950.26 FWL	2003245.46 N	428476.12 E
1622.00	1.250	166.415	1621.88	-4.30	16.70 S	1.39 E	0.13	1903.30 FSL	1951.39 FWL	2003240.88 N	428477.25 E
1870.00	0.900	184.165	1869.84	-5.58	21.27 S	1.89 E	0.19	1898.73 FSL	1951.89 FWL	2003236.30 N	428477.73 E
2119.00	0.470	192.245	2118.82	-5.75	24.22 S	1.53 E	0.18	1895.78 FSL	1951.53 FWL	2003233.36 N	428477.36 E
2368.00	0.710	260.425	2367.81	-4.25	25.47 S	0.21 W	0.28	1894.53 FSL	1949.79 FWL	2003232.10 N	428475.62 E
2616.00	0.400	207.725	2615.80	-2.55	26.50 S	2.13 W	0.23	1893.50 FSL	1947.87 FWL	2003231.09 N	428473.70 E
2834.00	0.180	203.085	2833.80	-2.24	27.49 S	2.61 W	0.10	1892.51 FSL	1947.39 FWL	2003230.10 N	428473.21 E
2900.00	0.280	259.765	2899.79	-2.06	27.61 S	2.81 W	0.36	1892.39 FSL	1947.19 FWL	2003229.98 N	428473.01 E
2931.00	0.310	304.925	2930.79	-1.92	27.57 S	2.96 W	0.74	1892.43 FSL	1947.04 FWL	2003230.01 N	428472.87 E
2962.00	0.570	250.865	2961.79	-1.71	27.58 S	3.17 W	1.49	1892.42 FSL	1946.83 FWL	2003230.01 N	428472.65 E
2992.00	1.350	280.675	2991.79	-1.22	27.56 S	3.66 W	3.00	1892.44 FSL	1946.34 FWL	2003230.03 N	428472.17 E
3024.00	3.040	285.965	3023.76	0.00	27.26 S	4.85 W	5.31	1892.74 FSL	1945.15 FWL	2003230.33 N	428470.98 E
3055.00	5.660	287.185	3054.67	2.33	26.58 S	7.10 W	8.46	1893.42 FSL	1942.90 FWL	2003231.02 N	428468.73 E
3086.00	8.790	286.405	3085.42	6.21	25.46 S	10.83 W	10.10	1894.54 FSL	1939.17 FWL	2003232.15 N	428465.00 E
3117.00	12.130	287.275	3115.90	11.79	23.82 S	16.21 W	10.79	1896.18 FSL	1933.79 FWL	2003233.80 N	428459.62 E
3149.00	15.910	289.385	3146.94	19.46	21.37 S	23.56 W	11.92	1898.63 FSL	1926.44 FWL	2003236.27 N	428452.28 E
3181.00	20.130	291.145	3177.37	29.20	17.93 S	32.84 W	13.30	1902.07 FSL	1917.16 FWL	2003239.74 N	428443.01 E
3212.00	24.610	291.675	3206.03	40.76	13.62 S	43.82 W	14.47	1906.38 FSL	1906.18 FWL	2003244.08 N	428432.04 E
3244.00	29.180	291.325	3234.56	54.95	8.32 S	57.29 W	14.29	1911.68 FSL	1892.71 FWL	2003249.41 N	428418.59 E
3275.00	33.930	290.095	3260.97	70.89	2.59 S	72.46 W	15.46	1917.41 FSL	1877.54 FWL	2003255.17 N	428403.43 E
3307.00	38.230	288.685	3286.82	89.48	3.65 N	90.24 W	13.68	1923.65 FSL	1859.76 FWL	2003261.46 N	428385.67 E

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)
3338.00	42.280	287.455	3310.48	109.32	9.85 N	109.28 W	13.31		1929.85 FSL	1840.72 FWL	2003267.71 N	428366.64 E
3369.00	46.760	286.045	3332.58	130.90	16.10 N	130.09 W	14.80		1936.10 FSL	1819.91 FWL	2003274.02 N	428345.85 E
3401.00	51.680	285.175	3353.47	155.01	22.61 N	153.42 W	15.51		1942.61 FSL	1796.58 FWL	2003280.59 N	428322.53 E
3433.00	56.780	284.115	3372.17	180.89	29.16 N	178.54 W	16.16		1949.16 FSL	1771.46 FWL	2003287.21 N	428297.44 E
3464.00	61.760	283.185	3388.01	207.47	35.44 N	204.42 W	16.27		1955.44 FSL	1745.58 FWL	2003293.55 N	428271.57 E
3496.00	66.800	282.115	3401.89	236.26	41.75 N	232.55 W	16.04		1961.75 FSL	1717.45 FWL	2003299.93 N	428243.46 E
3526.00	71.190	280.775	3412.64	264.25	47.30 N	259.99 W	15.22		1967.30 FSL	1690.01 FWL	2003305.55 N	428216.03 E
3558.00	74.530	280.075	3422.07	294.83	52.83 N	290.06 W	10.64		1972.83 FSL	1659.94 FWL	2003311.16 N	428185.98 E
3589.00	76.990	279.545	3429.70	324.87	57.94 N	319.67 W	8.11		1977.94 FSL	1630.33 FWL	2003316.35 N	428156.38 E
3620.00	80.160	278.845	3435.84	355.25	62.79 N	349.66 W	10.46		1982.79 FSL	1600.34 FWL	2003321.28 N	428126.40 E
3652.00	83.670	277.965	3440.34	386.91	67.42 N	380.99 W	11.30		1987.42 FSL	1569.01 FWL	2003325.99 N	428095.08 E
3687.00	85.080	277.615	3443.77	421.72	72.14 N	415.50 W	4.15		1992.14 FSL	1534.50 FWL	2003330.80 N	428060.58 E
3775.00	89.120	275.855	3448.22	509.43	82.44 N	502.76 W	5.01		2002.44 FSL	1447.24 FWL	2003341.32 N	427973.35 E
3807.00	88.940	275.675	3448.76	541.34	85.65 N	534.60 W	0.80		2005.65 FSL	1415.40 FWL	2003344.61 N	427941.52 E
3839.00	88.680	276.555	3449.42	573.25	89.05 N	566.41 W	2.87		2009.05 FSL	1383.59 FWL	2003348.10 N	427909.72 E
3871.00	87.450	277.265	3450.50	605.18	92.90 N	598.16 W	4.44		2012.90 FSL	1351.84 FWL	2003352.03 N	427877.98 E
3903.00	86.570	277.085	3452.17	637.10	96.89 N	629.86 W	2.81		2016.89 FSL	1320.14 FWL	2003356.10 N	427846.29 E
3934.00	87.190	276.735	3453.86	668.01	100.61 N	660.59 W	2.30		2020.61 FSL	1289.41 FWL	2003359.90 N	427815.57 E
3966.00	89.210	276.385	3454.87	699.93	104.26 N	692.37 W	6.41		2024.26 FSL	1257.63 FWL	2003363.64 N	427783.80 E
3998.00	88.770	276.205	3455.43	731.85	107.77 N	724.17 W	1.49		2027.77 FSL	1225.83 FWL	2003367.23 N	427752.01 E
4030.00	87.540	276.025	3456.46	763.76	111.17 N	755.97 W	3.88		2031.17 FSL	1194.03 FWL	2003370.71 N	427720.22 E
4062.00	87.890	276.025	3457.74	795.65	114.53 N	787.77 W	1.09		2034.53 FSL	1162.23 FWL	2003374.15 N	427688.43 E
4094.00	89.210	276.555	3458.55	827.57	118.03 N	819.56 W	4.44		2038.03 FSL	1130.44 FWL	2003377.73 N	427656.64 E
4126.00	90.700	276.735	3458.57	859.51	121.73 N	851.35 W	4.69		2041.73 FSL	1098.65 FWL	2003381.52 N	427624.87 E
4158.00	90.530	276.025	3458.23	891.44	125.28 N	883.15 W	2.28		2045.28 FSL	1066.85 FWL	2003385.15 N	427593.08 E
4190.00	90.880	275.155	3457.83	923.34	128.40 N	914.99 W	2.93		2048.40 FSL	1035.01 FWL	2003388.35 N	427561.24 E
4222.00	91.140	274.795	3457.27	955.21	131.17 N	946.87 W	1.39		2051.17 FSL	1003.13 FWL	2003391.21 N	427529.37 E
4253.00	91.580	275.505	3456.53	986.09	133.95 N	977.73 W	2.69		2053.95 FSL	972.27 FWL	2003394.07 N	427498.51 E
4285.00	90.880	276.905	3455.85	1018.01	137.41 N	1009.54 W	4.89		2057.41 FSL	940.46 FWL	2003397.60 N	427466.72 E
4317.00	90.000	278.495	3455.60	1049.98	141.69 N	1041.25 W	5.68		2061.69 FSL	908.75 FWL	2003401.97 N	427435.02 E

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)
4349.00	88.860	279.725	3455.92	1081.97	146.75 N	1072.84 W	5.24	2066.75 FSL	877.16 FWL	2003407.12 N	427403.44 E
4381.00	89.910	280.425	3456.26	1113.97	152.35 N	1104.35 W	3.94	2072.35 FSL	845.65 FWL	2003412.79 N	427371.95 E
4413.00	89.820	280.075	3456.34	1145.97	158.04 N	1135.84 W	1.13	2078.04 FSL	814.16 FWL	2003418.57 N	427340.47 E
4445.00	88.680	279.545	3456.76	1177.96	163.49 N	1167.37 W	3.93	2083.49 FSL	782.63 FWL	2003424.10 N	427308.96 E
4477.00	88.330	279.015	3457.59	1209.95	168.65 N	1198.94 W	1.98	2088.65 FSL	751.06 FWL	2003429.34 N	427277.40 E
4509.00	88.680	278.845	3458.43	1241.93	173.61 N	1230.54 W	1.22	2093.61 FSL	719.46 FWL	2003434.38 N	427245.81 E
4541.00	88.680	278.135	3459.16	1273.91	178.33 N	1262.18 W	2.22	2098.33 FSL	687.82 FWL	2003439.19 N	427214.18 E
4572.00	89.910	278.845	3459.55	1304.89	182.91 N	1292.84 W	4.58	2102.91 FSL	657.16 FWL	2003443.84 N	427183.54 E
4604.00	89.740	279.195	3459.64	1336.89	187.92 N	1324.44 W	1.22	2107.92 FSL	625.56 FWL	2003448.94 N	427151.95 E
4636.00	89.380	279.365	3459.89	1368.88	193.08 N	1356.02 W	1.24	2113.08 FSL	593.98 FWL	2003454.18 N	427120.38 E
4668.00	89.560	280.605	3460.19	1400.88	198.62 N	1387.54 W	3.92	2118.62 FSL	562.46 FWL	2003459.80 N	427088.88 E
4700.00	90.000	281.475	3460.31	1432.88	204.75 N	1418.94 W	3.05	2124.75 FSL	531.06 FWL	2003466.01 N	427057.49 E
4732.00	90.880	282.355	3460.06	1464.86	211.35 N	1450.25 W	3.89	2131.35 FSL	499.75 FWL	2003472.70 N	427026.20 E
4763.00	90.610	282.185	3459.66	1495.83	217.94 N	1480.54 W	1.03	2137.94 FSL	469.46 FWL	2003479.36 N	426995.93 E
4796.00	90.700	282.535	3459.28	1528.81	225.00 N	1512.78 W	1.10	2145.00 FSL	437.22 FWL	2003486.51 N	426963.71 E
4827.00	90.610	282.885	3458.93	1559.77	231.82 N	1543.01 W	1.17	2151.82 FSL	406.99 FWL	2003493.40 N	426933.49 E
4859.00	90.610	282.885	3458.59	1591.73	238.95 N	1574.21 W	0.00	2158.95 FSL	375.79 FWL	2003500.62 N	426902.31 E
4889.00	90.530	283.415	3458.29	1621.69	245.78 N	1603.42 W	1.79	2165.78 FSL	346.58 FWL	2003507.51 N	426873.12 E
4921.00	89.910	284.645	3458.17	1653.61	253.53 N	1634.46 W	4.30	2173.53 FSL	315.54 FWL	2003515.35 N	426842.10 E
4954.00	90.350	285.175	3458.09	1686.49	262.02 N	1666.35 W	2.09	2182.02 FSL	283.65 FWL	2003523.92 N	426810.23 E
4986.00	91.320	284.995	3457.62	1718.37	270.34 N	1697.25 W	3.08	2190.34 FSL	252.75 FWL	2003532.33 N	426779.36 E
5018.00	91.230	285.175	3456.91	1750.24	278.67 N	1728.14 W	0.63	2198.67 FSL	221.86 FWL	2003540.73 N	426748.49 E
5049.00	89.910	285.175	3456.60	1781.11	286.78 N	1758.06 W	4.26	2206.78 FSL	191.94 FWL	2003548.92 N	426718.59 E
Current deepest MWD Survey											
5081.00	88.590	285.175	3457.02	1812.98	295.15 N	1788.94 W	4.13	2215.15 FSL	161.06 FWL	2003557.37 N	426687.73 E
Projection to TD											
5144.00	88.590	285.175	3458.57	1875.72	311.64 N	1849.72 W	0.00	2231.64 FSL	100.28 FWL	2003574.01 N	426626.99 E

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to RKB. Northings and Eastings are relative to Wellhead.

Based upon Minimum Curvature type calculations, at a Measured Depth of 5144.00ft.,
The Bottom Hole Displacement is 1875.79ft., in the Direction of 279.567° (True).

Survey Report for Sec. 21-T32N-R11W - Cox Canyon Unit # 204 - MWD Surveys**Comments**

Measured Depth (ft)	Station Coordinates			Comment
	TVD (ft)	Northings (ft)	Eastings (ft)	
382.00	382.00	1.25 S	0.76 E	1st MWD survey of vertical hole
5081.00	3457.02	295.15 N	1788.94 W	Current deepest MWD Survey
5144.00	3458.57	311.64 N	1849.72 W	Projection to TD

North Reference Sheet for Sec. 21-T32N-R11W - Cox Canyon Unit # 204

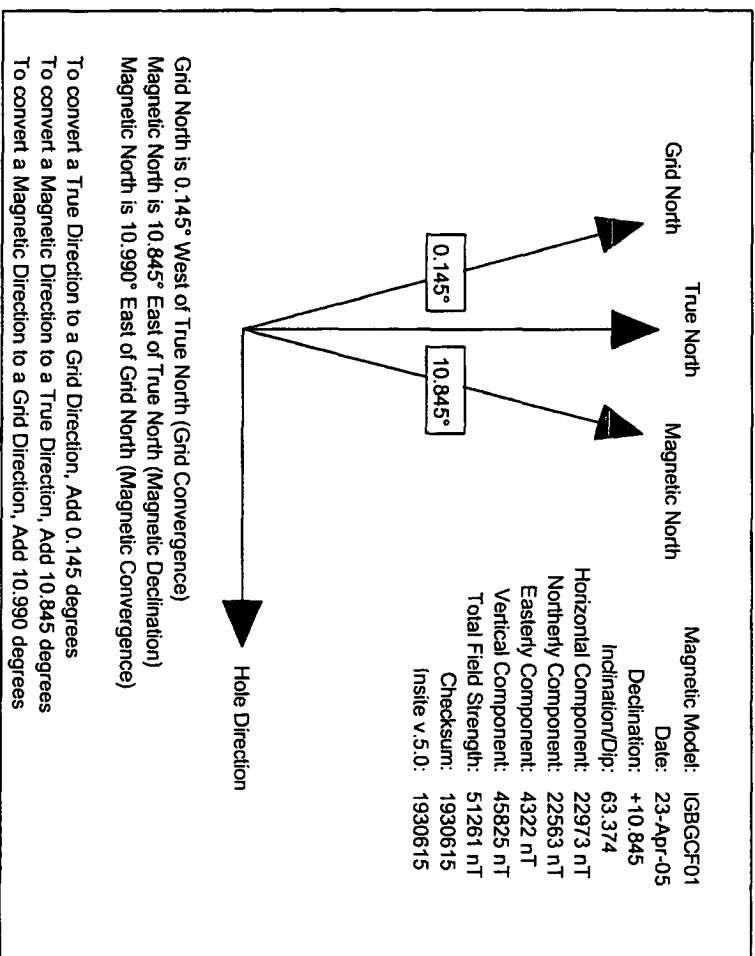
Coordinate System is NAD27 New Mexico State Planes, Western Zone, US Foot
Source: Snyder, J.P., 1987, Map Projections - A Working Manual

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

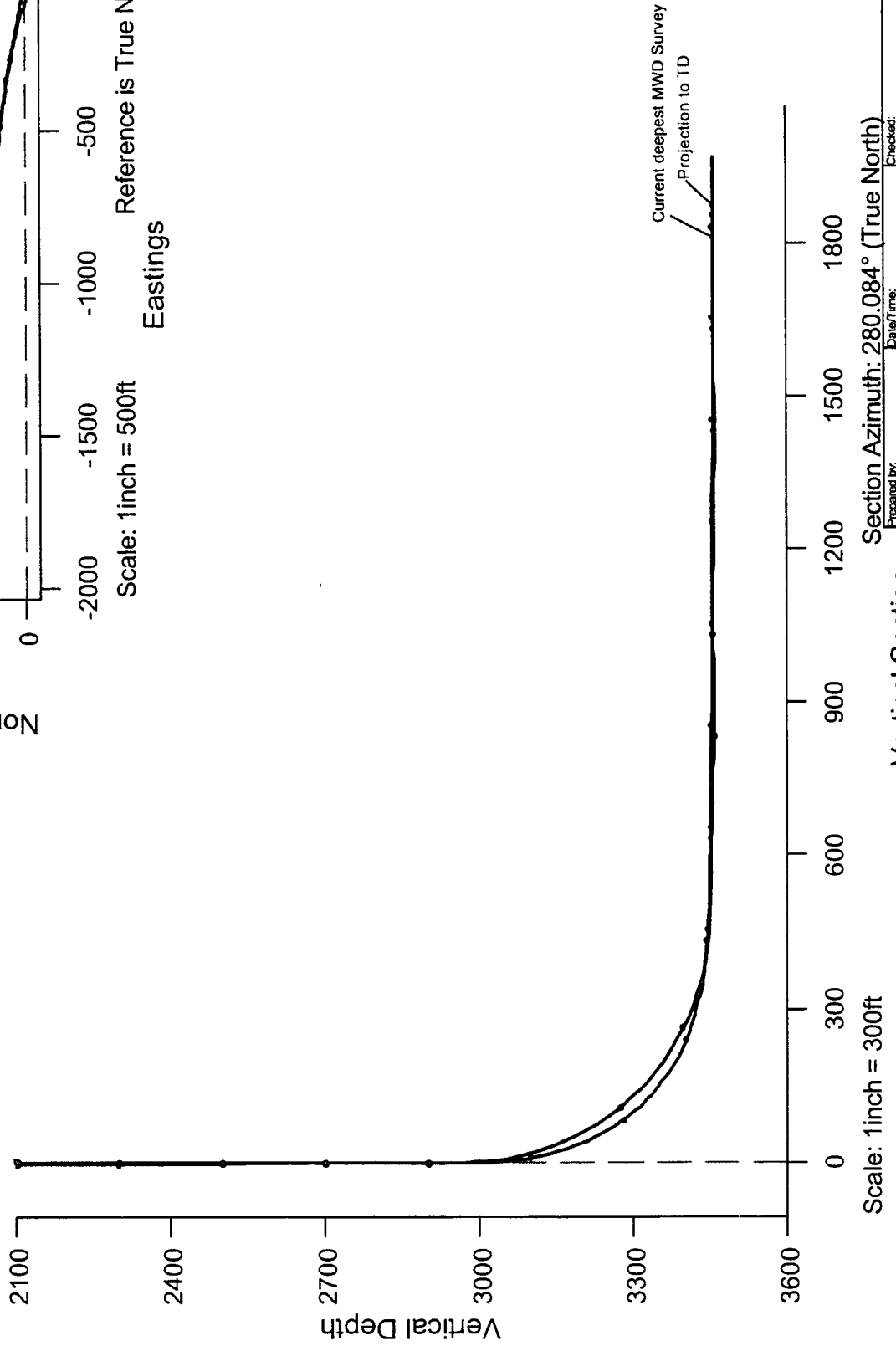
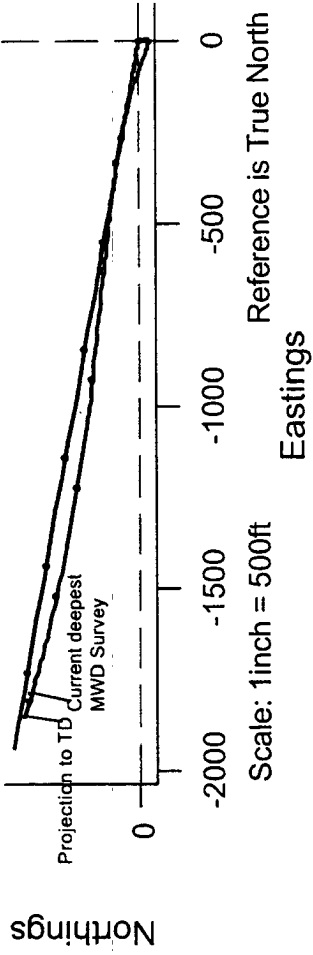
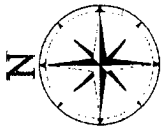
Spheroid is Clarke - 1866
Equatorial Radius: 6378206.400m.
Polar Radius: 6356583.800m.
Inverse Flattening: 294.978698213901

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: 2003257.58 N, 428475.90 E
Geographical Coordinates of Well: 36° 30' 18.9867" N, 108° 04' 36.1142" W
Surface Elevation of Well: 6893.00ft
Grid Convergence at Surface is -0.145°
Magnetic Declination at Surface is +10.845° (23 April, 2005)



New Mexico
San Juan County
Sec. 21-T32N-R11W
Cox Canyon Unit # 204



Section Azimuth: 280.084° (True North)

Prepared by: Dennis Cook
Date/Time: 4 May, 2005 - 9:00
Checked:
Approved:

Vertical Section

12/02/2003 08:04 3/05533305

District I
PO Box 1360, Hobbs, NM 88241-1990

District II
PO Box 00, Artesia, NM 88211-0719

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

District IV
PO Box 2055, Santa Fe, NM 87504-2055

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised February 21, 1993
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code 71623	*Pool Name BASIN FRUITLAND COAL
*Property Code	*Property Name CDX CANYON UNIT "Horizontal"		*Well Number 204
*OGRI No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6879

10 Surface Location

U. or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
K	21	32N	11W		1920	SOUTH	1950	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
L	21	32N	11W		2265	SOUTH	10	WEST	SAN JUAN

*Dedicated Acres 320.0 Acres - (W/2)	*Joint or (In/11)	*Consolidation Code	*Order 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

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

Signature _____

Printed Name _____

Title _____

Date _____

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.

Survey Date: NOVEMBER 24, 2003

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
Certificate Number 15269