

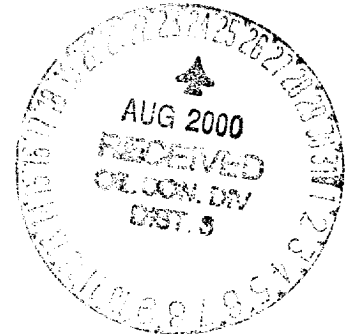


Cross Timbers Operating Company

TABULATION OF DEVIATION TESTS

CROSS TIMBERS OPERATING COMPANY

Please see the enclosed survey



A F F I D A V I T

THIS IS TO CERTIFY that to the best of my knowledge the above survey details the deviation tests taken on CROSS TIMBERS OPERATING COMPANY'S

Federal Gas Com 1 #1B Section 20, T32N, R12W, San Juan County, New Mexico.

Signed

Printed Name Jeffrey W. Patton

Title Drilling Engineer

THE STATE OF NEW MEXICO)

) SS.

COUNTY OF SAN JUAN)

BEFORE ME, the undersigned authority, on this day personally, Jeffrey W. Patton, known to me to be Drilling Engineer for Cross Timbers Operating Company and to be the person whose name is subscribed to the above statement, who, being by me duly sworn on oath, states that he has knowledge of the facts stated herein and that said statement is true and correct.

SUBSCRIBED AND SWORN to before me, a Notary Public in and for said County and State this 24th day of August, 2000.

Notary Public

My Commission Expires:

S:\Forms\Deviation Tests

6/10/03

Please note that this well required directional tools and equipment to maintain a vertical wellbore.

RECORD OF SURVEY

**CROSS TIMBERS OPERATING CO.
FEDERAL GAS COM 1 NO. 1B
SAN JUAN COUNTY, NEW MEXICO**

**BAKER HUGHES *INTEQ*
WEST TEXAS DISTRICT**

August 14, 2000



INTEQ



CROSS TIMBERS OPERATING CO.

Structure : Federal Gas Com 1 No. 1B

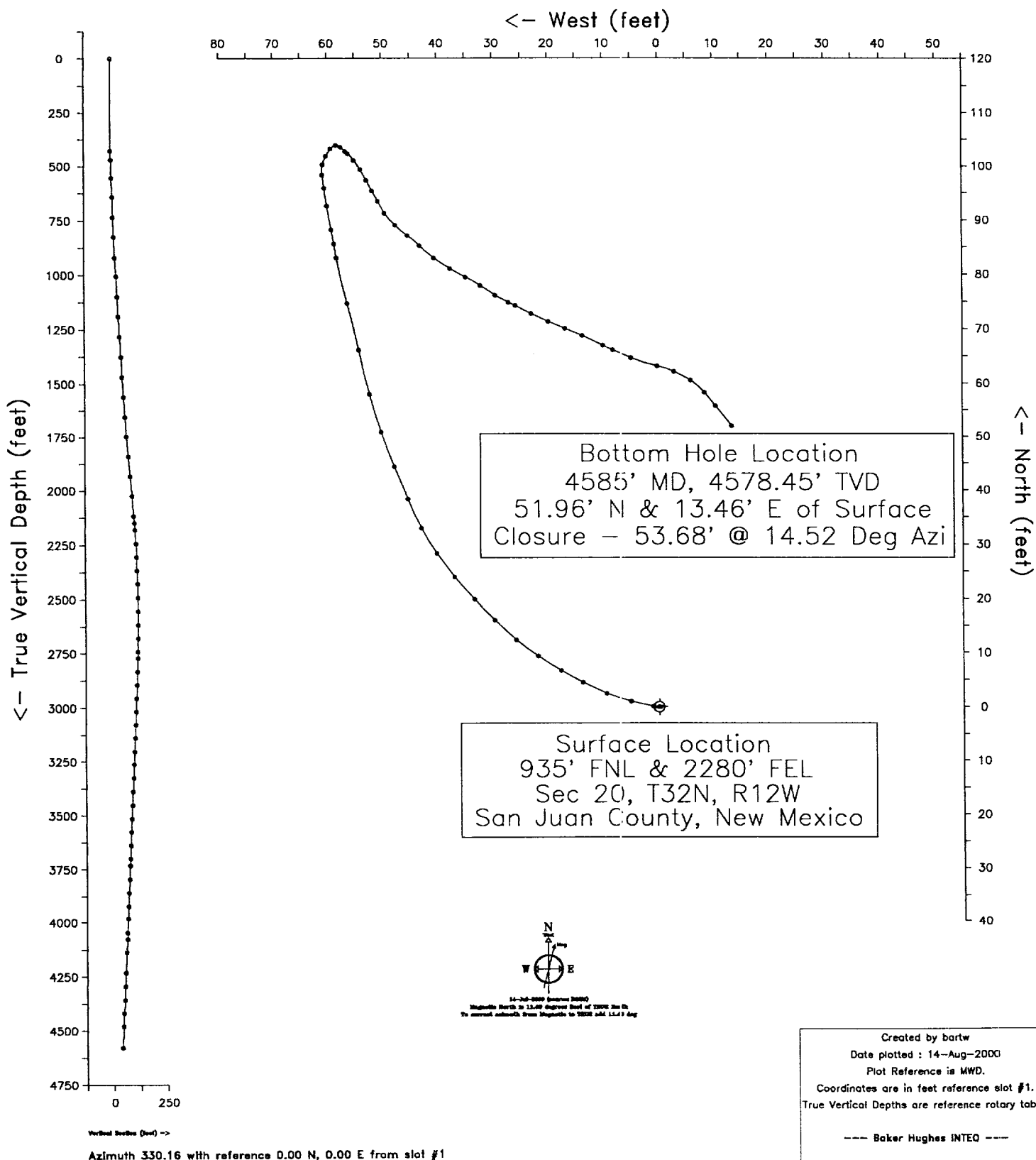
Slot : slot #1

Field :

Location : SAN JUAN COUNTY, NEW MEXICO



INTEQ



CROSS TIMBERS OPERATING CO.
Federal Gas Com 1 No. 1B

slot #1

SAN JUAN COUNTY, NEW MEXICO

S U R V E Y L I S T I N G

by
Baker Hughes INTEQ

Your ref : MWD
Our ref : svy1424
License :

Date printed : 14-Aug-2000
Date created : 17-Jul-2000
Last revised : 14-Aug-2000

Field is centred on 0.000,0.000,999.00000,N
Structure is centred on n37 0 0.000,w108 0 0.000,3

Slot location is n36 59 59.999,w108 0 0.000
Slot Grid coordinates are N 2203903.437, E -570916.437
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is True North

CROSS TIMBERS OPERATING CO.
Federal Gas Com 1 No. 1B, slot #1
, SAN JUAN COUNTY, NEW MEXICO

SURVEY LISTING Page 1
Your ref : MWD
Last revised : 14-Aug-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
0.00	0.00	0.00	0.00	0.00 E	0.00	0.00
427.00	0.00	0.00	427.00	0.00 E	0.00	0.00
468.00	2.80	279.00	467.98	0.16 N	6.83	0.63
552.00	3.00	284.70	551.88	1.04 N	0.42	3.46
642.00	2.90	292.70	641.76	2.51 N	0.47	6.92
734.00	2.90	297.00	733.64	4.47 N	0.24	10.71
824.00	2.90	300.70	823.52	6.66 N	0.21	14.60
918.00	3.20	303.70	917.39	9.33 N	0.36	19.02
1006.00	3.30	311.80	1005.25	12.38 N	0.53	23.62
1098.00	3.30	314.70	1097.10	16.01 N	0.18	28.69
1190.00	3.30	318.30	1188.95	19.85 N	0.23	33.83
1284.00	3.40	320.90	1282.78	24.03 N	0.19	39.23
1376.00	3.30	325.50	1374.63	28.33 N	0.31	44.56
1469.00	3.40	331.70	1467.47	32.97 N	0.40	49.98
1562.00	3.90	339.00	1560.28	38.35 N	0.73	55.87
1655.00	4.20	337.70	1653.05	44.45 N	0.34	62.37
1748.00	4.30	342.20	1745.79	50.92 N	0.37	69.15
1841.00	4.90	345.10	1838.49	58.08 N	0.69	76.40
1934.00	5.40	348.00	1931.12	66.20 N	0.61	84.40
2027.00	5.50	344.80	2023.70	74.78 N	0.34	92.88
2121.00	5.00	349.70	2117.30	83.16 N	0.71	101.10
2152.00	4.70	349.70	2148.19	85.74 N	0.97	103.57
2184.00	4.60	349.60	2180.09	88.29 N	0.31	106.02
2246.00	3.70	349.70	2241.92	92.70 N	1.45	110.25
2308.00	2.40	354.40	2303.83	95.96 N	2.13	113.32

All data is in feet unless otherwise stated.

Coordinates from slot #1 and TVD from rotary table.

Bottom hole distance is 53.68 on azimuth 14.52 degrees from wellhead.

Vertical section is from wellhead on azimuth 330.16 degrees.

Calculation uses the minimum curvature method.

Presented by Baker Hughes INTEQ

CROSS TIMBERS OPERATING CO.
Federal Gas Com 1 No. 1B, slot #1
, SAN JUAN COUNTY, NEW MEXICO

SURVEY LISTING Page 2
Your ref : MWD
Last revised : 14-Aug-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
2370.00	2.10	350.40	2365.79	98.37 N	0.55	115.57
2432.00	1.60	16.80	2427.76	100.32 N	1.57	117.23
2495.00	1.50	26.30	2490.73	101.90 N	0.44	118.29
2557.00	1.50	36.90	2552.71	103.28 N	0.45	119.06
2620.00	0.90	92.30	2615.70	103.92 N	1.96	119.12
2681.00	0.90	132.40	2676.69	103.58 N	1.01	118.41
2744.00	1.20	131.10	2739.68	102.81 N	0.48	117.32
2774.00	1.50	132.60	2769.67	102.34 N	1.01	116.65
2837.00	1.60	146.40	2832.65	101.05 N	0.61	114.98
2899.00	2.10	146.70	2894.62	99.38 N	0.81	112.99
2959.00	2.20	154.20	2954.58	97.42 N	0.50	110.74
3021.00	1.90	149.40	3016.54	95.47 N	0.56	108.53
3082.00	2.30	153.60	3077.49	93.50 N	0.70	106.29
3143.00	2.40	147.00	3138.44	91.33 N	0.47	103.80
3205.00	3.00	133.80	3200.37	89.12 N	1.39	100.94
3267.00	2.40	125.80	3262.31	87.24 N	1.14	98.20
3330.00	2.80	134.50	3325.24	85.39 N	0.89	95.52
3393.00	3.50	128.10	3388.15	83.12 N	1.24	92.26
3455.00	3.10	122.00	3450.04	81.07 N	0.86	89.02
3518.00	2.70	116.40	3512.96	79.50 N	0.78	86.29
3580.00	3.10	122.60	3574.88	77.95 N	0.82	83.59
3643.00	2.70	122.30	3637.80	76.24 N	0.64	80.77
3705.00	2.40	117.50	3699.74	74.86 N	0.59	78.38
3736.00	2.60	116.50	3730.71	74.25 N	0.66	77.25
3799.00	3.30	118.00	3793.63	72.76 N	1.12	74.53

All data is in feet unless otherwise stated.

Coordinates from slot #1 and TVD from rotary table.

Bottom hole distance is 53.68 on azimuth 14.52 degrees from wellhead.

Vertical section is from wellhead on azimuth 330.16 degrees.

Calculation uses the minimum curvature method.

Presented by Baker Hughes INTEQ

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
1861.00	3.10	111.20	3855.53	71.31 N 19.80 W	0.69	71.71
1925.00	2.80	114.40	3919.45	70.04 N 16.76 W	0.53	69.10
1987.00	3.50	112.90	3981.35	68.68 N 13.64 W	1.14	66.36
1051.00	3.90	117.10	4045.22	66.93 N 9.90 W	0.75	62.98
1082.00	3.30	114.30	4076.16	66.08 N 8.15 W	2.02	61.38
1143.00	3.40	111.90	4137.05	64.68 N 4.87 W	0.28	58.54
1236.00	2.80	103.00	4229.92	63.14 N 0.10 W	0.83	54.83
1299.00	3.00	113.00	4292.84	62.15 N 2.91 E	0.86	52.47
1362.00	3.30	122.00	4355.74	60.55 N 5.97 E	0.92	49.55
1424.00	3.10	141.90	4417.65	58.28 N 8.52 E	1.81	46.32
1486.00	2.80	142.00	4479.57	55.77 N 10.48 E	0.48	43.16
1585.00	2.80	142.00	4578.45	51.96 N 13.46 E	0.00	38.38

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