

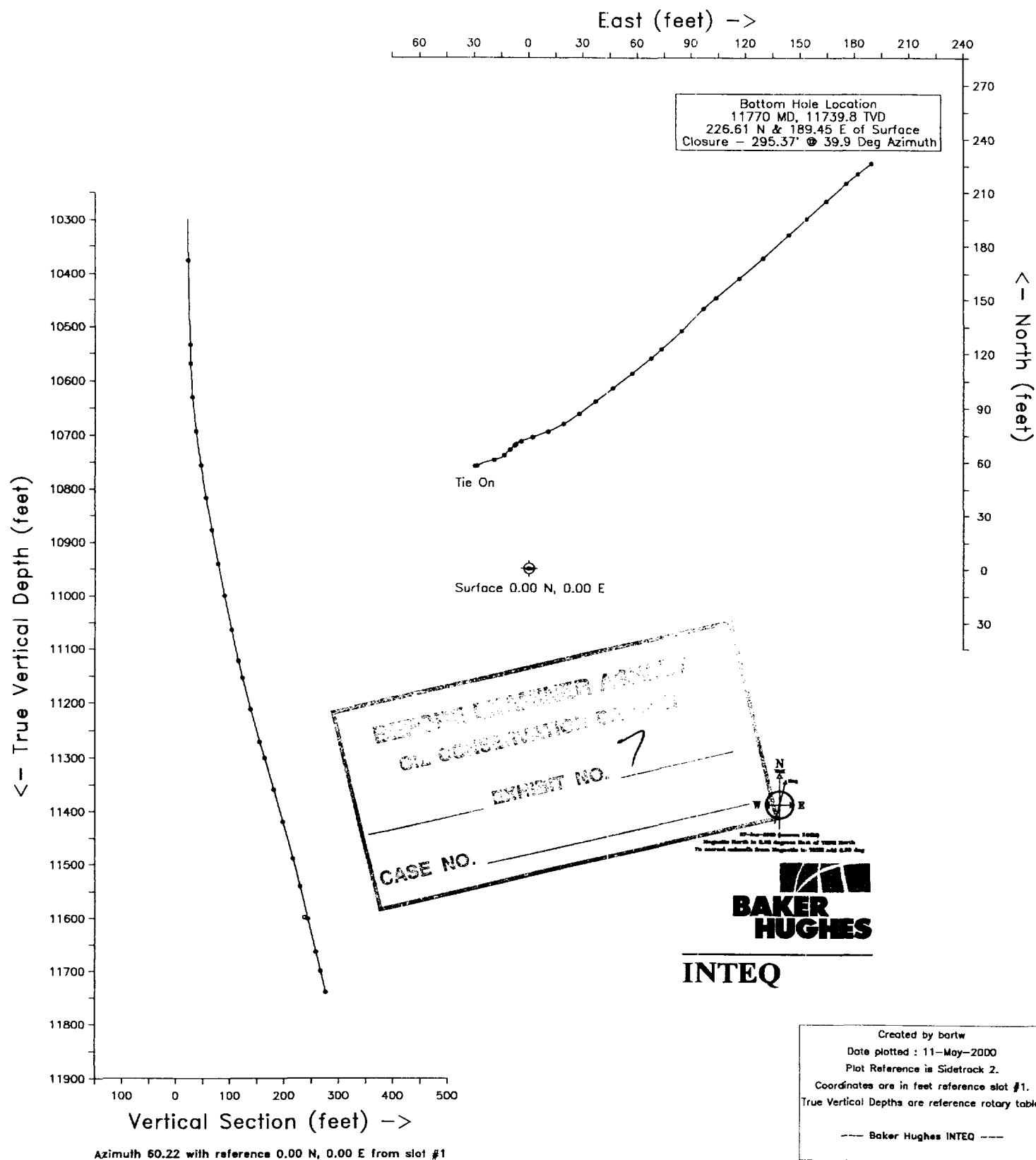
Manzano Oil Company

Structure : Cayuma 1A

Slot : slot #1

Field : UNKNOWN

Location : LEA COUNTY, NEW MEXICO



Manzano Oil Company
Cayuma 1A

slot #1
UNKNOWN
LEA COUNTY, NEW MEXICO

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

by
Baker Hughes INTEQ

Your ref : Sidetrack 2
Our ref : svy1354
License :

Date printed : 11-May-2000
Date created : 9-Feb-2000
Last revised : 23-Feb-2000

Field is centred on n33 30 0.000,w103 30 0
Structure is centred on n33 30 0.000,w103 30 0

Slot location is n33 30 0.000,w103 30 0.000
Slot Grid coordinates are N 910447.292, E 754038.883
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

Manzano Oil Company
Cayuma 1A, slot #1
UNKNOWN, LEA COUNTY, NEW MEXICO

SURVEY LISTING Page 1
Your ref : Sidetrack 2
Last revised : 23-Feb-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
9200.00	0.93	219.95	9199.50	57.45 N	0.00	2.87
9351.00	1.75	60.00	9350.48	57.66 N	1.75	4.02
9704.00	1.50	80.00	9703.34	61.16 N	0.17	13.76
10038.00	0.75	40.00	10037.28	63.59 N	0.31	19.93
10378.00	0.75	49.00	10377.25	66.76 N	0.03	24.20
10536.00	1.80	44.50	10535.21	69.21 N	0.67	27.60
10571.00	1.90	46.80	10570.19	70.00 N	0.36	28.69
10632.00	4.30	69.80	10631.10	71.48 N	4.36	31.93
10696.00	7.70	70.70	10694.74	73.73 N	5.31	38.52
10759.00	8.70	69.20	10757.09	76.81 N	1.62	47.37
10821.00	9.00	60.60	10818.36	80.86 N	2.19	56.85
10883.00	10.20	53.20	10879.49	86.53 N	2.77	67.15
10946.00	11.00	52.10	10941.42	93.56 N	1.31	78.64
11007.00	11.60	52.70	11001.23	100.85 N	1.00	90.48
11071.00	12.20	52.30	11063.86	108.89 N	0.95	103.56
11132.00	13.40	51.30	11123.34	117.25 N	2.00	116.93
11164.00	13.70	49.50	11154.45	122.03 N	1.62	124.31
11224.00	15.70	44.50	11212.49	132.43 N	3.94	139.11
11286.00	17.20	46.50	11271.95	144.73 N	2.59	156.09
11317.00	16.80	48.30	11301.59	150.86 N	2.13	164.93
11378.00	16.20	49.70	11360.08	162.23 N	1.18	181.92
11441.00	15.70	48.10	11420.66	173.61 N	1.06	198.89
11513.00	15.00	47.20	11490.09	186.45 N	1.03	217.50
11566.00	13.90	46.60	11541.41	195.48 N	2.09	230.37
11629.00	13.20	49.10	11602.66	205.39 N	1.45	244.78

All data is in feet unless otherwise stated.

Coordinates from slot #1 and TVD from rotary table.

Bottom hole distance is 295.37 on azimuth 39.90 degrees from wellhead.

Vertical section is from wellhead on azimuth 60.22 degrees.

Calculation uses the minimum curvature method.

Presented by Baker Hughes INTEQ

Manzano Oil Company
 Cayuma 1A, slot #1
 UNKNOWN, LEA COUNTY, NEW MEXICO

SURVEY LISTING Page 2
 Your ref : Sidetrack 2
 Last revised : 23-Feb-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
11693.00	13.40	48.80	11664.94	215.06 N 175.60 E	0.33	259.22
11730.00	13.60	50.60	11700.92	220.64 N 182.18 E	1.26	267.71
11770.00	13.60	50.60	11739.80	226.61 N 189.45 E	0.00	276.98

All data is in feet unless otherwise stated.
 Coordinates from slot #1 and TVD from rotary table.
 Bottom hole distance is 295.37 on azimuth 39.90 degrees from wellhead.
 Vertical section is from wellhead on azimuth 60.22 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ