

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

WELL API NO.	30-025-33713
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	Townsend State
8. Well No.	1
9. Pool name or Wildcat	South Big Dog Strawn

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL ☒ GAS WELL ☐ OTHER ☐	
2. Name of Operator UMC Petroleum Corporation	
3. Address of Operator 410 17th Street, Suite 1400, Denver, Co. 80202	
4. Well Location Unit Letter 16 : 3526 Feet From The South Line and 727 Feet From The East Line Section 2 Township 16S Range 35E NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) GR 3983'	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
OTHER: ☐	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☐
	OTHER: Additional Completion information ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Logs, cementing reports and inclination reports were filed with original completion report filed 4/23/97.

Well was originally drilled as a horizontal well. UMC filed for a horizontal permit on 5/27/97.

SHL : 16- Sec 2-T16S-R35E Lea County, 3526' FSL & 727' FEL

BHL : 17- Sec 2-T16S-R35E Lea County, 2625' FSL & 346' FEL
2626

KOP : 11462' MD Lateral Portion: 958'

TD : 12,420' MD 11,471' TVD Open Hole Interval: 11,462' to 12,420'

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

SIGNATURE Scott M. Webb TITLE Regulatory Coordinator DATE 9/30/97

TYPE OR PRINT NAME Scott M. Webb

TELEPHONE NO. (303) 573-4721

(This space for State Use)

Orig. Signed by
Paul Kautz
Geologist

APPROVED BY _____ TITLE _____

DATE OCT 06 1997

CONDITIONS OF APPROVAL, IF ANY:

Townsend State #1
Lot 16, Sec. 2-T16S-R35E
Lea County, New Mexico
Horizontal Recompletion

13-3/8" 48# Casing @ 400'.
Cemented to surface with 405 sx.

SHL: 3526' FSL & 727' FEL
Lot 16, Section 2-T16S-R35E

8-5/8" 32# surface casing @ 4750'
Cemented to surface with 1675 sx

TOC @ 7140'

BHL: 2625' FSL & 346' FEL
Lot 17, Section 2-T16S-R35E

Build Rate :
71 Degrees/100 feet

2-7/8" Tubing @ 11,335'
Packer @ 11,330'

KOP: 11,462' md

40' Cement Plug

Strawn Perfs:
11,501' - 11,540'

Lateral Section 958' md

(Open Hole)

5-1/2" 17# @ 11,805'
Cemented with 1200 sx

TD: 12,420' MD
TD: 11,471' TVD

TD 11,805'

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Revised 1-1-89

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DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

WELL API NO. 30-015-33713
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Townsend State
8. Well No. 1
9. Pool name or Wildcat South Big Dog Strawn

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL ☒ GAS WELL ☐ OTHER	
2. Name of Operator UMC Petroleum Corporation OGRID # 23654	
3. Address of Operator 410 17th St., STE 1400, Denver, CO 80202	
4. Well Location Unit Letter 16 : 3526 Feet From The South Line and 727 Feet From The East Line Section 2 Township 16S Range 35E NMPM Leg Country	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3983' GR	

11.

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: attachment to C-104 ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Attachment to C-104 filing for temporary allowable.

TD 12420' MD 11471' TVD

2626'
BHL 2526' FSL & 346' FEL 17-2-16S-35E

Spud Date: 12/19/96

Pipeline hook-up/ ready date 9/17/97

Requested directional survey plat attached.

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

SIGNATURE Scott M. Webb TITLE Regulatory Coordinator DATE 9/22/97

TYPE OR PRINT NAME Scott M. Webb

TELEPHONE NO. (303) 573-4721

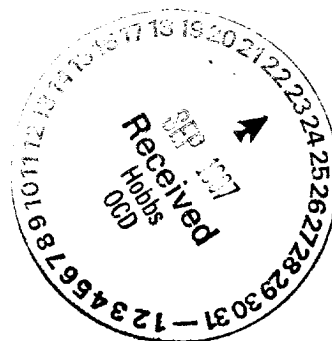
(This space for State Use)

Orig. Signed by
Paul Kautz
Geologist

OCT 06 1997

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



WF

UMC PETROLEUM CORP.

Structure : TOWNSEND STATE NO. 1

Slot : slot #1

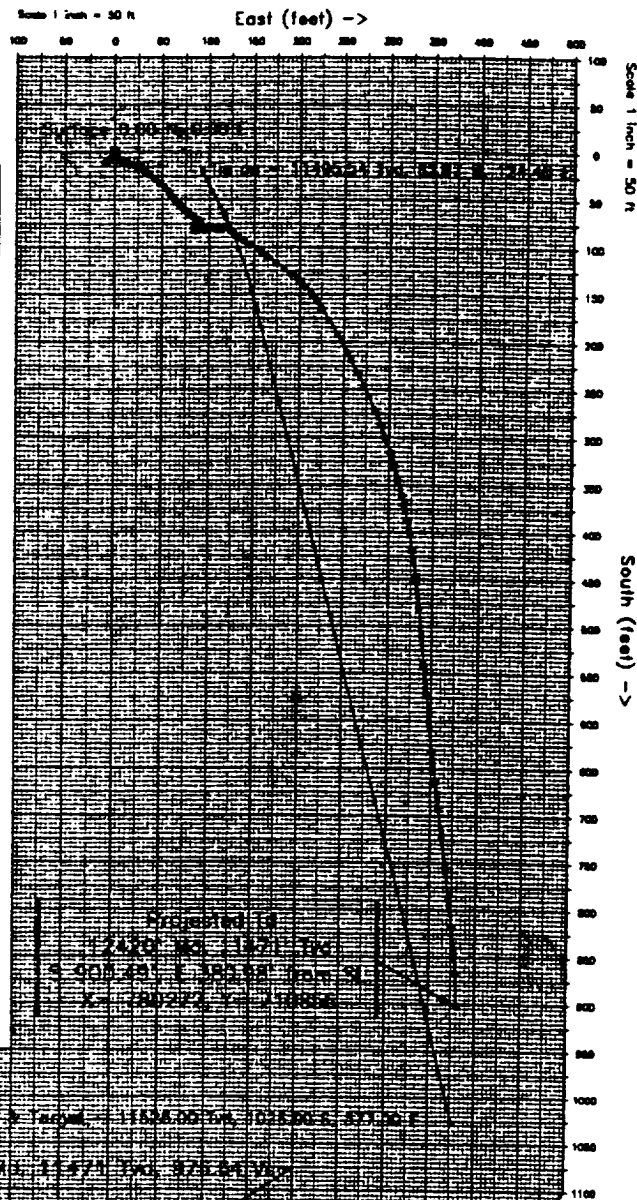
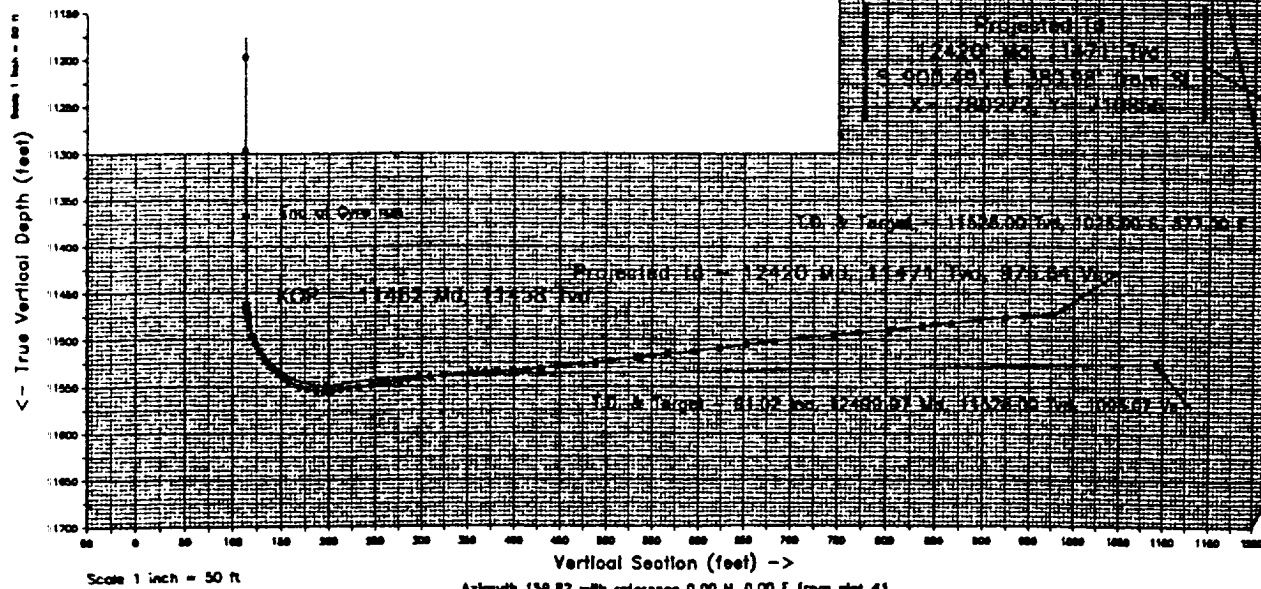
Field : WEST LOVINGTON

Location : LEA CO., NEW MEXICO

Surface Location
3526' FSL & 727' FEL
Sec. 2, T16S, R35E



0-Degrees
Magnetic North is 0.19 degrees East of True North.
To convert magnetic from magnetic to True add 0.19 deg



Scale 1 inch = 50 ft
Azimuth 159.82 with reference 0.00 N, 0.00 E from slot #1

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1

slot #1
WEST LOVINGTON
LEA CO., NEW MEXICO

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

by
Baker Hughes INTEQ

Your ref :
Our ref : svy946
License :

Date printed : 27-Aug-97
Date created : 11-Aug-97
Last revised : 26-Aug-97

Field is centred on n32 55 0.000,w103 22 0
Structure is centred on 779884.000,711754.000,999.000000,N

Slot location is n32 57 12.068,w103 25 15.296
Slot Grid coordinates are N 711754.000, E 779884.000
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

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 1
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
0.00	0.00	0.00	0.00	0.00N	0.00	0.00	779884.00	711754.00
100.00	0.11	221.36	100.00	0.07S	0.11	0.05	779883.94	711753.93
200.00	0.32	170.28	200.00	0.42S	0.27	0.37	779883.92	711753.58
300.00	0.44	175.52	300.00	1.08S	0.12	1.01	779884.01	711752.92
400.00	0.49	183.08	399.99	1.89S	0.08	1.77	779884.02	711752.11
500.00	0.53	208.59	499.99	2.72S	0.23	2.47	779883.78	711751.28
600.00	0.30	219.50	599.99	3.33S	0.24	2.91	779883.40	711750.67
700.00	0.26	181.26	699.99	3.76S	0.19	3.25	779883.23	711750.24
800.00	0.37	230.34	799.98	4.19S	0.28	3.57	779882.98	711749.80
900.00	0.62	222.63	899.98	4.79S	0.26	3.92	779882.37	711749.19
1000.00	0.53	229.06	999.98	5.50S	0.11	4.34	779881.66	711748.48
1100.00	0.82	228.67	1099.97	6.27S	0.29	4.76	779880.78	711747.70
1200.00	0.52	234.70	1199.96	7.01S	0.31	5.13	779879.88	711746.96
1300.00	0.53	212.50	1299.96	7.66S	0.20	5.53	779879.27	711746.30
1400.00	0.60	228.89	1399.95	8.39S	0.18	6.00	779878.63	711745.56
1500.00	0.37	236.69	1499.95	8.91S	0.24	6.26	779877.97	711745.03
1600.00	0.36	228.33	1599.95	9.30S	0.05	6.45	779877.47	711744.64
1700.00	0.43	232.00	1699.95	9.74S	0.07	6.68	779876.95	711744.20
1800.00	0.53	258.44	1799.94	10.06S	0.24	6.73	779876.20	711743.87
1900.00	0.48	275.44	1899.94	10.12S	0.16	6.48	779875.33	711743.81
2000.00	0.19	277.11	1999.94	10.06S	0.29	6.22	779874.75	711743.86
2100.00	0.16	209.73	2099.94	10.16S	0.20	6.23	779874.52	711743.76
2200.00	0.25	193.93	2199.93	10.49S	0.11	6.50	779874.40	711743.43
2300.00	0.07	294.21	2299.93	10.68S	0.27	6.64	779874.29	711743.24
2400.00	0.13	93.48	2399.93	10.66S	0.20	6.64	779874.35	711743.26

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.

Vertical section is from wellhead on azimuth 159.82 degrees.
Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 2
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
2500.00	0.42	134.38	2499.93	10.92S	0.33	7.02	779874.72	711743.00
2600.00	0.32	79.43	2599.93	11.13S	0.35	7.40	779875.26	711742.80
2700.00	0.32	42.36	2699.93	10.87S	0.20	7.32	779875.72	711743.06
2800.00	0.54	49.29	2799.93	10.36S	0.23	7.02	779876.26	711743.58
2900.00	0.54	43.51	2899.92	9.71S	0.05	6.65	779876.94	711744.23
3000.00	0.96	50.88	2999.91	8.84S	0.43	6.17	779877.91	711745.11
3100.00	1.99	88.38	3099.88	8.26S	1.36	6.45	779880.29	711745.71
3200.00	2.79	94.56	3199.79	8.40S	0.84	8.02	779884.45	711745.60
3300.00	3.03	99.55	3299.67	9.04S	0.35	10.35	779889.49	711745.01
3400.00	3.68	106.24	3399.49	10.37S	0.76	13.56	779895.19	711743.73
3500.00	4.40	113.21	3499.24	12.78S	0.87	18.10	779901.81	711741.37
3600.00	4.32	117.30	3598.96	16.02S	0.32	23.51	779908.71	711738.19
3700.00	4.17	122.32	3698.68	19.69S	0.40	29.17	779915.17	711734.58
3800.00	4.01	124.86	3798.43	23.63S	0.24	34.92	779921.14	711730.69
3900.00	3.90	127.24	3898.19	27.69S	0.20	40.65	779926.75	711726.68
4000.00	3.55	130.84	3997.98	31.77S	0.42	46.23	779931.84	711722.64
4100.00	3.42	134.17	4097.79	35.88S	0.24	51.62	779936.35	711718.58
4200.00	3.04	137.25	4197.63	39.90S	0.42	56.76	779940.33	711714.59
4300.00	2.99	143.27	4297.50	43.94S	0.32	61.71	779943.72	711710.58
4400.00	2.90	140.13	4397.36	47.97S	0.18	66.59	779946.94	711706.57
4500.00	2.52	138.70	4497.25	51.56S	0.39	71.02	779950.04	711703.01
4600.00	1.97	135.32	4597.17	54.44S	0.57	74.64	779952.73	711700.16
4700.00	1.22	135.52	4697.14	56.42S	0.75	77.17	779954.70	711698.19
4800.00	1.20	137.91	4797.11	57.96S	0.05	79.11	779956.16	711696.67
4900.00	1.42	132.12	4897.09	59.56S	0.26	81.18	779957.79	711695.07

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.

Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.
Vertical section is from wellhead on azimuth 159.82 degrees.

Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 3
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
5000.00	1.30	131.61	4997.06	61.15S	0.12	83.28	779959.57	711693.50
5100.00	1.22	128.37	5097.03	62.56S	0.11	85.19	779961.27	711692.11
5200.00	1.01	134.01	5197.02	63.84S	0.24	86.89	779962.75	711690.84
5300.00	1.06	135.93	5297.00	65.11S	0.06	88.53	779964.04	711689.58
5400.00	1.12	133.00	5396.98	66.44S	0.08	90.25	779965.41	711688.26
5500.00	1.30	128.99	5496.96	67.82S	0.20	92.09	779967.02	711686.89
5600.00	1.43	124.91	5596.93	69.25S	0.16	94.09	779968.93	711685.48
5700.00	1.36	119.24	5696.90	70.55S	0.15	96.01	779971.00	711684.21
5800.00	1.01	122.92	5796.88	71.61S	0.35	97.62	779972.79	711683.16
5900.00	0.59	125.09	5896.87	72.38S	0.43	98.75	779973.96	711682.39
6000.00	0.49	139.93	5996.86	73.01S	0.17	99.58	779974.66	711681.78
6100.00	0.51	143.13	6096.86	73.69S	0.03	100.41	779975.21	711681.10
6200.00	0.50	179.27	6196.86	74.48S	0.31	101.24	779975.49	711680.31
6300.00	0.34	218.79	6296.85	75.15S	0.32	101.81	779975.32	711679.64
6400.00	0.39	247.91	6396.85	75.51S	0.19	101.97	779974.82	711679.28
6500.00	0.47	272.16	6496.85	75.62S	0.20	101.83	779974.09	711679.16
6600.00	0.63	289.13	6596.85	75.42S	0.23	101.32	779973.16	711679.34
6700.00	0.71	287.70	6696.84	75.06S	0.08	100.60	779972.05	711679.70
6800.00	0.42	290.09	6796.83	74.74S	0.29	99.98	779971.11	711680.01
6900.00	0.21	268.35	6896.83	74.62S	0.24	99.68	779970.58	711680.13
7000.00	0.17	222.75	6996.83	74.74S	0.15	99.69	779970.30	711680.01
7100.00	0.39	189.73	7096.83	75.18S	0.26	100.06	779970.15	711679.56
7200.00	0.47	188.95	7196.83	75.92S	0.08	100.71	779970.03	711678.82
7300.00	0.46	171.20	7296.82	76.72S	0.14	101.46	779970.04	711678.02
7400.00	0.52	175.90	7396.82	77.57S	0.07	102.29	779970.14	711677.17

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Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.

Vertical section is from wellhead on azimuth 159.82 degrees.
Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 4
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
7500.00	0.60	186.31	7496.82	78.54S	0.13	103.19	779970.12	711676.20
7600.00	0.47	201.67	7596.81	79.45S	0.19	103.97	779969.92	711675.29
7700.00	0.40	201.53	7696.81	80.15S	0.07	104.54	779969.65	711674.59
7800.00	0.27	192.07	7796.81	80.71S	0.14	105.00	779969.47	711674.03
7900.00	0.36	217.88	7896.81	81.19S	0.17	105.36	779969.24	711673.55
8000.00	0.33	258.37	7996.80	81.49S	0.24	105.48	779968.76	711673.24
8100.00	0.17	269.93	8096.80	81.55S	0.17	105.39	779968.33	711673.18
8200.00	0.30	129.08	8196.80	81.72S	0.44	105.56	779968.39	711673.01
8300.00	0.71	102.81	8296.80	82.02S	0.46	106.13	779969.20	711672.72
8400.00	1.05	89.47	8396.79	82.15S	0.39	106.77	779970.72	711672.60
8500.00	1.03	80.32	8496.77	81.99S	0.17	107.24	779972.52	711672.78
8600.00	0.80	79.03	8596.76	81.70S	0.23	107.52	779974.09	711673.07
8700.00	0.83	88.49	8696.75	81.55S	0.14	107.86	779975.50	711673.24
8800.00	0.82	91.74	8796.74	81.55S	0.05	108.36	779976.94	711673.25
8900.00	0.87	87.68	8896.73	81.54S	0.08	108.86	779978.41	711673.27
9000.00	0.84	79.45	8996.72	81.38S	0.13	109.22	779979.89	711673.45
9100.00	0.56	70.43	9096.71	81.08S	0.30	109.34	779981.07	711673.76
9200.00	0.47	66.08	9196.70	80.75S	0.10	109.32	779981.90	711674.09
9300.00	0.50	69.53	9296.70	80.43S	0.04	109.29	779982.68	711674.42
9400.00	0.64	60.15	9396.69	80.00S	0.17	109.20	779983.57	711674.86
9500.00	0.49	48.01	9496.69	79.44S	0.19	108.95	779984.37	711675.43
9600.00	0.52	64.76	9596.69	78.96S	0.15	108.75	779985.09	711675.91
9700.00	0.30	87.48	9696.68	78.75S	0.27	108.79	779985.76	711676.12
9800.00	0.29	95.83	9796.68	78.77S	0.04	108.98	779986.28	711676.12
9900.00	0.31	96.00	9896.68	78.82S	0.02	109.21	779986.80	711676.07

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.
Vertical section is from wellhead on azimuth 159.82 degrees.

Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 5
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
10000.00	0.37	89.09	9996.68	78.85S	0.07	109.43	779987.39	711676.05
10100.00	0.11	75.13	10096.68	78.82S	0.26	109.55	779987.80	711676.08
10200.00	0.05	178.82	10196.68	78.83S	0.13	109.60	779987.90	711676.06
10300.00	0.28	148.22	10296.68	79.09S	0.24	109.88	779988.03	711675.81
10400.00	0.29	80.01	10396.68	79.25S	0.32	110.16	779988.41	711675.65
10500.00	0.37	99.10	10496.68	79.26S	0.13	110.36	779988.98	711675.65
10600.00	0.47	100.55	10596.67	79.38S	0.10	110.73	779989.70	711675.53
10700.00	0.67	119.02	10696.67	79.74S	0.27	111.38	779990.62	711675.18
10800.00	0.92	98.10	10796.66	80.14S	0.38	112.21	779991.93	711674.79
10900.00	0.61	90.48	10896.65	80.26S	0.33	112.78	779993.26	711674.69
11000.00	0.53	82.13	10996.64	80.20S	0.12	113.06	779994.25	711674.76
11100.00	0.53	98.21	11096.64	80.20S	0.15	113.38	779995.16	711674.76
11200.00	0.70	80.02	11196.63	80.16S	0.26	113.71	779996.22	711674.81
11300.00	0.62	77.74	11296.63	79.94S	0.08	113.89	779997.35	711675.04
11370.00	0.82	85.94	11366.62	79.82S	0.32	114.08	779998.22	711675.16
11465.00	5.80	76.00	11461.43	78.61S	5.26	114.79	780003.55	711676.42
11470.00	9.00	87.30	11466.39	78.53S	70.01	114.93	780004.18	711676.50
11475.00	12.40	107.30	11471.31	78.67S	99.75	115.38	780005.09	711676.37
11480.00	12.70	121.80	11476.19	79.12S	63.14	116.14	780006.07	711675.93
11490.00	12.30	145.80	11485.96	80.59S	51.73	118.04	780007.62	711674.48
11500.00	20.60	148.30	11495.54	82.97S	83.28	120.80	780009.16	711672.11
11510.00	28.50	129.60	11504.64	85.99S	109.94	124.60	780011.96	711669.11
11520.00	35.50	120.10	11513.12	88.98S	86.04	128.90	780016.34	711666.17
11533.00	45.10	118.10	11523.03	93.05S	74.51	135.25	780023.72	711662.16
11543.00	49.50	121.30	11529.81	96.69S	49.88	140.87	780030.13	711658.57

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.

Vertical section is from wellhead on azimuth 159.82 degrees.
Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 6
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
11555.00	55.20	123.60	11537.13	101.80S	49.86	148.43	780038.19	711653.54
11563.00	59.50	124.80	11541.45	105.58S	55.21	153.90	780043.79	711649.80
11570.00	63.70	125.70	11544.78	109.14S	61.06	158.97	780048.84	711646.29
11584.00	72.00	126.00	11550.05	116.72S	59.32	169.71	780059.41	711638.79
11594.00	77.50	126.30	11552.68	122.41S	55.08	177.74	780067.25	711633.17
11605.00	84.10	128.10	11554.44	128.98S	62.13	186.88	780075.95	711626.68
11615.00	90.20	130.10	11554.94	135.27S	64.18	195.46	780083.75	711620.45
11625.00	96.00	133.60	11554.40	141.93S	67.71	204.28	780091.24	711613.86
11635.00	98.10	138.80	11553.17	149.09S	55.71	213.36	780098.17	711606.76
11645.00	98.80	143.60	11551.70	156.79S	47.99	222.73	780104.43	711599.11
11655.00	98.70	145.40	11550.18	164.84S	17.82	232.27	780110.24	711591.11
11670.00	98.30	146.50	11547.96	177.13S	7.73	246.67	780118.65	711578.89
11688.00	98.00	148.60	11545.41	192.17S	11.67	264.08	780128.34	711563.94
11710.00	97.30	150.30	11542.48	210.94S	8.29	285.52	780139.59	711545.26
11719.00	96.60	151.30	11541.39	218.74S	13.50	294.35	780144.01	711537.50
11735.00	95.50	152.80	11539.70	232.80S	11.58	310.11	780151.59	711523.51
11750.00	94.70	153.80	11538.37	246.14S	8.52	324.96	780158.42	711510.22
11780.00	93.60	156.30	11536.20	273.27S	9.08	354.77	780171.27	711483.21
11795.00	93.90	158.10	11535.22	287.07S	12.14	369.72	780177.19	711469.46
11809.00	93.90	159.40	11534.26	300.09S	9.26	383.69	780182.37	711456.49
11825.00	94.40	161.60	11533.11	315.13S	14.07	399.64	780187.82	711441.49
11840.00	94.40	163.30	11531.96	329.39S	11.30	414.58	780192.46	711427.27
11855.00	95.30	164.60	11530.69	343.75S	10.52	429.49	780196.71	711412.95
11872.00	95.70	165.90	11529.06	360.11S	7.97	446.33	780201.16	711396.62
11882.00	95.90	166.80	11528.05	369.78S	9.17	456.22	780203.59	711386.97

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.
Vertical section is from wellhead on azimuth 159.82 degrees.

Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 7
Your ref :
Last revised : 26-Aug-97

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	G R I D Easting	C O O R D S Northing
11900.00	96.40	168.30	11526.12	387.26S	8.74	473.95	780207.60	711369.53
11915.00	97.00	169.90	11524.37	401.89S	11.32	488.65	780210.55	711354.93
11932.00	97.30	170.90	11522.25	418.52S	6.10	505.24	780213.50	711338.32
11960.00	96.30	171.80	11518.94	446.00S	4.79	532.48	780217.92	711310.87
11965.00	96.30	171.80	11518.39	450.92S	0.00	537.34	780218.67	711305.96
11995.00	96.10	173.80	11515.15	480.51S	6.66	566.40	780222.67	711276.41
12025.00	96.30	174.00	11511.91	510.16S	0.94	595.33	780226.09	711246.78
12055.00	97.30	174.10	11508.36	539.79S	3.35	624.20	780229.44	711217.18
12086.00	97.00	173.80	11504.50	570.38S	1.36	654.03	780232.95	711186.62
12117.00	96.80	173.30	11500.77	600.96S	1.73	683.93	780236.67	711156.07
12148.00	96.30	172.80	11497.24	631.53S	2.27	713.91	780240.66	711125.53
12181.00	95.10	172.10	11493.96	664.08S	4.20	745.95	780245.26	711093.02
12210.00	95.20	172.80	11491.36	692.72S	2.43	774.14	780249.30	711064.42
12241.00	96.10	172.90	11488.30	723.33S	2.92	804.19	780253.40	711033.85
12275.00	96.20	172.60	11484.66	756.86S	0.93	837.14	780257.96	711000.35
12306.00	96.40	172.80	11481.26	787.42S	0.91	867.18	780262.14	710969.83
12337.00	96.40	172.90	11477.80	817.99S	0.32	897.19	780266.24	710939.29
12366.00	94.70	175.30	11475.00	846.70S	10.11	925.16	780269.45	710910.61
12386.00	93.60	176.30	11473.55	866.59S	7.42	944.34	780271.09	710890.73
12420.00	93.60	179.00	11471.42	900.49S	7.93	976.64	780272.77	710856.84

All data in feet unless otherwise stated. Calculation uses minimum curvature method.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 977.77 on azimuth 157.07 degrees from wellhead.
Vertical section is from wellhead on azimuth 159.82 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ

UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
WEST LOVINGTON, LEA CO., NEW MEXICO

SURVEY LISTING Page 8
Your ref :
Last revised : 26-Aug-97

Comments in wellpath		
=====		
MD	TVD	Rectangular Coords. Comment

11370.00	11366.62	79.82S 113.53E End of Gyro run

Targets associated with this wellpath			
=====			
Target name	Geographic Location	T.V.D.	Rectangular Coordinates Revised

TD		11525.00	14369.65S 17025.94E 2-May-97

DIRECTIONAL PLAN

UMC PETROLEUM CORP.

Structure : TOWNSEND STATE NO. 1

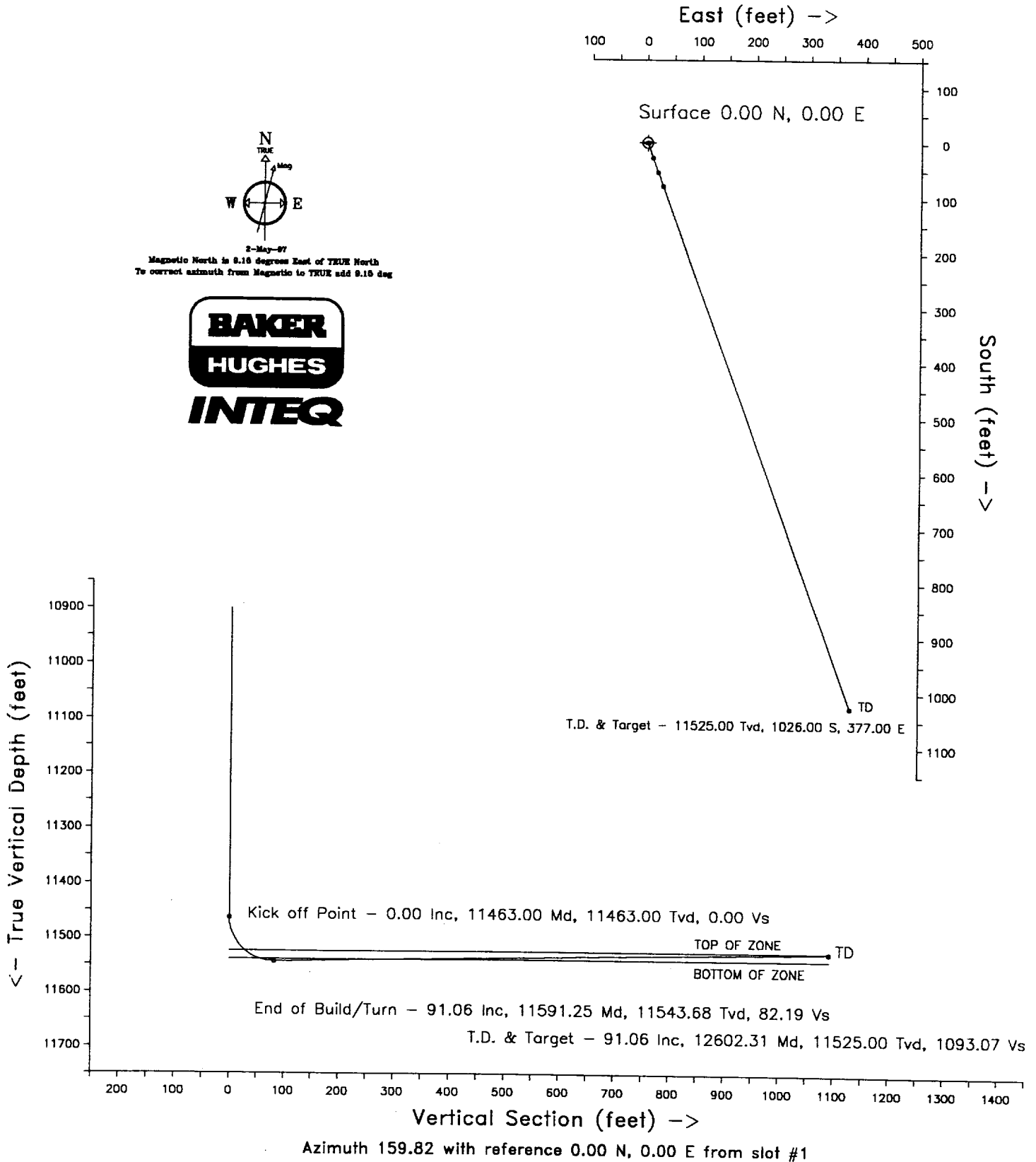
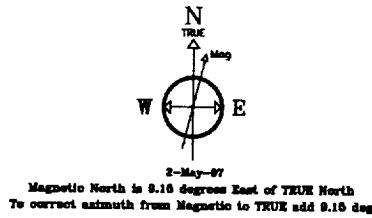
Slot : slot #1

Field : TOWNSEND

Location : LEA CO., NEW MEXICO

WELL PROFILE DATA

Point	MD	Inc	Gr	TVD	North	East	V. East	Dep/100
To on	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP	11463.00	0.00	0.00	11463.00	0.00	0.00	0.00	0.00
End of Build/Turn	11591.25	91.06	159.82	11543.68	-77.15	28.35	82.19	71.00
T.D. & Target TD	12602.31	91.06	159.82	11525.00	-1026.00	377.00	1093.07	0.00



UMC PETROLEUM CORP.
TOWNSEND STATE NO. 1, slot #1
TOWNSEND, LEA CO., NEW MEXICO

PROPOSAL LISTING Page 1
Your ref : BUR= 71 DEG/100' / VS
Last revised : 2-May-97

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
11463.00	0.00	0.00	11463.00	0.00 N	0.00	0.00
11500.00	26.27	159.82	11498.72	7.82 S	71.00	8.33
11533.71	50.20	159.82	11525.00	27.26 S	71.00	29.04
11565.23	72.59	159.82	11540.00	53.08 S	71.00	56.55
11591.25	91.06	159.82	11543.68	77.15 S	71.00	82.19
12000.00	91.06	159.82	11536.13	460.75 S	0.00	490.87
12500.00	91.06	159.82	11526.89	929.99 S	0.00	990.78
12602.31	91.06	159.82	11525.00	1026.00 S	0.00	1093.07
						TD

TOP OF PAY
BOTTOM OF PAY

All data is in feet unless otherwise stated.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 1093.07 on azimuth 159.82 degrees from wellhead.
Vertical section is from wellhead on azimuth 159.82 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ