

CONOCO, INC.
ANDERSON RANCH UNIT WELL NO. 13-W
LEA COUNTY, NEW MEXICO BD2-126
DATE: OCTOBER 22, 1984
LATITUDE: 32.950
SLEW/SETTLE: 10/7
TOOL: EW0219
DISTRICT: WEST TEXAS
SURVEYOR: TROY ONEY
CO. REP: CARRIE DARR
HEAT SHIELD: 2" HALF FLASK

EASTMAN WHIPSTOCK, INC.
SEEKER 1 GYROSCOPIC SURVEY
SURVEY DEPTHS:

WT1084-A0059
(0'-9861')



RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

CONOCO, INC.

ANDERSON RANCH UNIT WELL NO. 13-W
LEA COUNTY, NEW MEXICO BD2-126COMPUTATION PAGE NO.
TIME DATE
09:35:06 29-APR-85

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	R E C T A N G U L A R C O O R D I N A T E S FEET	DOGLEG SEVERITY DG/100FT
0.	0 0	0 0	0.	0.00	0.00	0.00
100.	0 17	S 44 22 W	100.	100.00	0.19 S	0.30
200.	0 20	S 83 56 W	100.	200.00	0.42 S	0.22
300.	0 39	S 67 49 W	100.	299.99	0.64 S	0.34
400.	1 9	S 78 3 W	100.	399.98	1.10 S	0.53
500.	1 30	S 81 36 W	100.	499.95	1.51 S	0.35
600.	1 35	S 86 39 W	100.	599.92	1.79 S	0.16
700.	1 24	S 88 51 W	100.	699.88	1.89 S	0.19
800.	1 14	S 84 3 W	100.	799.86	2.03 S	0.20
900.	1 1	S 80 57 W	100.	899.84	2.29 S	0.22
1000.	1 1	S 79 17 W	100.	999.82	2.60 S	0.03
1100.	0 32	S 88 29 W	100.	1099.81	2.75 S	0.49
1200.	0 17	N 66 23 W	100.	1199.81	2.61 S	0.31
1300.	0 11	S 86 47 W	100.	1299.81	2.53 S	0.15
1400.	0 16	N 47 33 W	100.	1399.81	2.40 S	0.20
1500.	0 20	N 4 28 W	100.	1499.80	1.91 S	0.24
1600.	0 10	N 17 38 W	100.	1599.80	1.46 S	0.18
1700.	0 17	N 30 33 E	100.	1699.80	1.07 S	0.22
1800.	0 11	N 2 4 E	100.	1799.80	0.67 S	0.16
1900.	0 8	N 52 38 E	100.	1899.80	0.43 S	0.15
2000.	0 17	N 0 35 E	100.	1999.80	0.12 S	0.23
2100.	0 10	N 8 33 E	100.	2099.80	0.29 N	0.12
2200.	0 25	N 38 32 E	100.	2199.80	0.76 N	0.29
2300.	0 31	N 29 8 E	100.	2299.79	1.45 N	0.13
2400.	0 25	N 37 55 E	100.	2399.79	2.15 N	0.12
2500.	0 36	N 79 36 E	100.	2499.79	2.61 N	0.40
2600.	0 46	N 72 56 E	100.	2599.78	2.89 N	0.19
2700.	0 42	N 70 36 E	100.	2699.77	3.29 N	0.06
2800.	0 41	N 79 59 E	100.	2799.76	3.60 N	0.12
2900.	0 45	N 88 38 E	100.	2899.76	3.73 N	0.13

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3000.	0 41	N 63 8 E	100.	2999.75	4.03 N 11.48 W	0.33
3100.	0 36	N 55 11 E	100.	3099.74	4.62 N 10.50 W	0.13
3200.	0 24	N 80 51 E	100.	3199.74	4.95 N 9.69 W	0.30
3300.	0 13	S 82 40 E	100.	3299.74	4.95 N 9.14 W	0.20
3400.	0 16	S 75 1 E	100.	3399.73	4.87 N 8.72 W	0.06
3500.	0 8	S 51 57 E	100.	3499.73	4.71 N 8.39 W	0.15
3600.	0 1	S 87 13 W	100.	3599.73	4.60 N 8.43 W	0.16
3700.	0 7	N 80 36 W	100.	3699.73	4.61 N 8.55 W	0.10
3800.	0 8	S 76 10 W	100.	3799.73	4.60 N 8.76 W	0.06
3900.	0 9	N 86 51 W	100.	3899.73	4.58 N 9.03 W	0.05
4000.	0 16	N 66 40 W	100.	3999.73	4.66 N 9.39 W	0.14
4100.	0 12	N 24 5 W	100.	4099.73	4.96 N 9.69 W	0.18
4200.	0 9	N 80 36 W	100.	4199.73	5.15 N 9.94 W	0.18
4300.	0 20	N 55 34 W	100.	4299.73	5.31 N 10.33 W	0.21
4400.	0 11	N 18 29 E	100.	4399.73	5.72 N 10.47 W	0.34
4500.	0 25	N 37 10 W	100.	4499.73	6.23 N 10.56 W	0.35
4600.	0 26	N 13 32 E	100.	4599.72	6.94 N 10.71 W	0.37
4700.	0 26	N 22 37 W	100.	4699.72	7.70 N 10.77 W	0.27
4800.	0 26	N 25 46 E	100.	4799.72	8.44 N 10.75 W	0.36
4900.	0 11	N 63 39 E	100.	4899.72	8.83 N 10.37 W	0.31
5000.	0 20	N 70 37 E	100.	4999.72	9.01 N 9.94 W	0.15
5100.	0 25	S 88 39 E	100.	5099.71	9.11 N 9.29 W	0.16
5200.	0 17	S 59 25 E	100.	5199.71	8.94 N 8.71 W	0.22
5300.	0 19	S 80 53 E	100.	5299.71	8.77 N 8.22 W	0.12
5400.	0 25	N 75 15 E	100.	5399.71	8.80 N 7.57 W	0.18
5500.	0 26	N 71 52 E	100.	5499.71	9.01 N 6.84 W	0.04
5600.	0 23	N 12 27 E	100.	5599.70	9.52 N 6.38 W	0.42
5700.	0 35	N 22 1 E	100.	5699.70	10.33 N 6.13 W	0.22
5800.	0 23	N 30 33 E	100.	5799.70	11.10 N 5.75 W	0.21
5900.	0 33	N 3 34 E	100.	5899.69	11.89 N 5.51 W	0.27

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6000.	0 25	N 31 48 E	100.	5999.69	12.69 N	5.25 W 0.27
6100.	0 33	N 6 48 E	100.	6099.69	13.49 N	4.97 W 0.25
6200.	0 32	N 45 55 E	100.	6199.68	14.32 N	4.56 W 0.37
6300.	0 25	N 27 20 E	100.	6299.68	15.00 N	4.06 W 0.19
6400.	0 41	N 54 33 E	100.	6399.67	15.72 N	3.43 W 0.37
6500.	0 34	N 42 35 E	100.	6499.67	16.46 N	2.60 W 0.17
6600.	0 48	N 59 42 E	100.	6599.66	17.22 N	1.65 W 0.31
6700.	0 45	N 68 31 E	100.	6699.65	17.82 N	0.41 W 0.13
6800.	0 40	N 67 3 E	100.	6799.64	18.30 N	0.76 E 0.08
6900.	0 36	N 68 27 E	100.	6899.63	18.72 N	1.79 E 0.08
7000.	0 46	N 68 54 E	100.	6999.63	19.16 N	2.91 E 0.16
7100.	0 46	N 71 28 E	100.	7099.62	19.61 N	4.19 E 0.04
7200.	0 40	N 64 51 E	100.	7199.61	20.09 N	5.37 E 0.13
7300.	0 38	N 67 58 E	100.	7299.60	20.54 N	6.41 E 0.06
7400.	0 35	N 66 25 E	100.	7399.60	20.96 N	7.41 E 0.05
7500.	0 33	N 85 45 E	100.	7499.59	21.20 N	8.38 E 0.20
7600.	0 32	N 87 31 E	100.	7599.59	21.26 N	9.33 E 0.03
7700.	0 36	S 77 9 E	100.	7699.58	21.17 N	10.33 E 0.16
7800.	0 40	S 67 52 E	100.	7799.58	20.84 N	11.38 E 0.13
7900.	0 41	S 61 56 E	100.	7899.57	20.32 N	12.49 E 0.07
8000.	0 45	S 58 4 E	100.	7999.56	19.69 N	13.57 E 0.07
8100.	0 44	S 51 53 E	100.	8099.55	18.96 N	14.62 E 0.08
8200.	0 47	S 46 1 E	100.	8199.54	18.08 N	15.63 E 0.10
8300.	0 54	S 44 44 E	100.	8299.53	17.04 N	16.68 E 0.12
8400.	1 8	S 50 28 E	100.	8399.52	15.83 N	18.01 E 0.26
8500.	1 24	S 57 35 E	100.	8499.49	14.52 N	19.81 E 0.31
8600.	1 30	S 52 26 E	100.	8599.46	13.06 N	21.90 E 0.17
8700.	1 45	S 51 50 E	100.	8699.42	11.31 N	24.15 E 0.24
8800.	1 30	S 43 37 E	100.	8799.38	9.40 N	26.25 E 0.34
8900.	1 32	S 46 47 E	100.	8899.34	7.54 N	28.13 E 0.09

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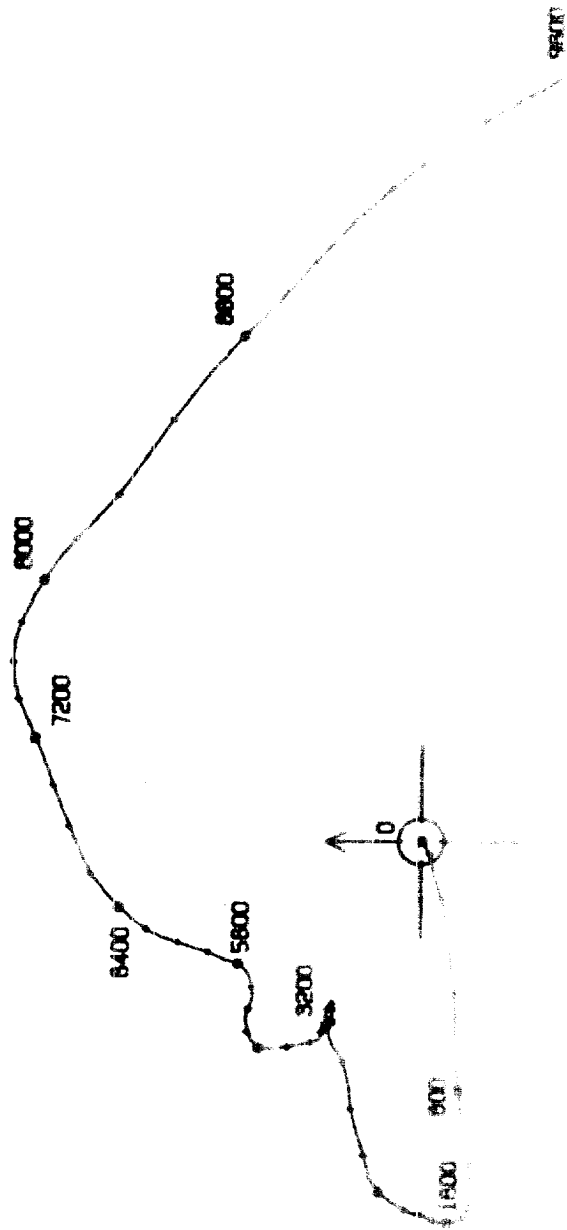
MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	R E C T A N G U L A R C O O R D I N A T E S FEET	DOGLEG SEVERITY DG/100FT
9000.	1 33	S 49 24 E	100.	8999.30	5.73 N 30.15 E	0.08
9100.	1 33	S 43 34 E	100.	9099.27	3.86 N 32.11 E	0.16
9200.	1 36	S 38 11 E	100.	9199.23	1.77 N 33.92 E	0.16
9300.	1 52	S 38 33 E	100.	9299.18	0.61 S 35.81 E	0.28
9400.	1 28	S 29 5 E	100.	9399.14	3.04 S 37.44 E	0.49
9500.	1 29	S 31 21 E	100.	9499.11	5.29 S 38.75 E	0.06
9600.	1 39	S 28 57 E	100.	9599.07	7.66 S 40.13 E	0.17
9700.	1 33	S 22 8 E	100.	9699.03	10.19 S 41.33 E	0.21
9800.	1 24	S 17 9 E	100.	9799.00	12.61 S 42.20 E	0.20
9861.	1 15	S 21 31 E	61.	9859.98	13.95 S 42.67 E	0.28

FINAL CLOSURE - DIRECTION: S 71 DEGS 54 MINS E
DISTANCE: 44.89 FEET

CONOCO, INC.
ANDERSON RANCH UNIT WELL NO. 13-W
LEA COUNTY, NEW MEXICO BD2-125

EASTMAN WILKINSON, INC.

HORIZONTAL PROJECTION
SCALE 1 IN. = 10 FEET
DEPTH INDICATOR: MD



INR STATION
DEPTH 986 MD
SOUTH 15° 30' E
CLOSURE 14.00



P.O. Box 6341/Midland, Texas 79711-0341/(915) 563-0511

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Troy Oney, in the employ of Eastman Whipstock, Inc., did on the days of 10-22, 19 84 thru 10-22, 1984 conduct or supervise the taking of a Seeker 1 Gyroscopic survey by the method of magnetic orientation from a depth of 0 feet to 9861 feet, with recordings of inclination and direction being obtained at approximate intervals of 100 feet.

This survey was conducted at the request of Conoco, Inc. for their Anderson Ranch Unit Well No. 13-W Lea County, State of New Mexico, in the _____ field.

This data for this survey and the calculation were obtained and performed by me according to standards and procedures as set forth by Eastman Whipstock, Inc. and is true and correct to the best of my knowledge.

Troy Oney
Directional Supervisor/Surveyor

The data for this survey has been examined by me and confirms to principles and procedures set forth by Eastman Whipstock, Inc.

[Signature]

Before me, the undersigned authority, on this day personally appeared Troy Oney, known to me to be the person whose name is subscribed to this instrument, who after being by me duly sworn on oath, states that he has knowledge of all the facts stated above and that this information is a true statement of facts therein recited.

Subscribed and sworn to before me on this 29TH day of APRIL, 1985

Roy L. Steinke
Notary Public in and for the
County of Midland, Texas



ROY L. STEINKE
Notary Public, State of Texas
My Commission Expires July 9, 1985