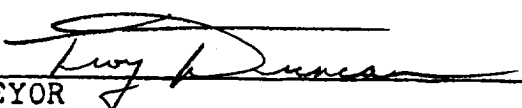


SCIENTIFIC DRILLING CONTROLS

SURVEY CERTIFICATION

COMPANY Amoco Production WELL NAME & NO. SHU #184
DATE of CERTIFICATION 3-8-85 LOCATION Lea County, New Mexico
TYPE of SURVEY Magnetic Directional FROM 0 TO 2754
JOB NUMBER 132D185003 TICKET NUMBER 100559

THE ABOVE SURVEY WAS PERFORMED BY ME ON 1-24 1985
THE RESULTS OBTAINED FROM ACTUAL FIELD DATA CONFORM TO ESTABLISHED
STANDARDS AND ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.



SURVEYOR

Troy Duncan

FILM TRANSFER RECEIPT

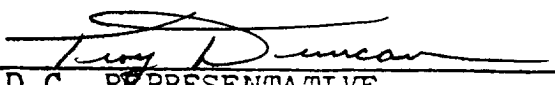
I HEREBY ACKNOWLEDGE RECEIPT OF ORIGINAL FILM OBTAINED ON THE ABOVE
SURVEY.

DATE RECEIVED 19____

COMPANY REPRESENTATIVE

SURVEY CONFIRMATION

I HAVE EXAMINED THE ABOVE SURVEY AND FOUND THE DATA AND RESULTS
ACCEPTABLE ACCORDING TO CURRENT SCIENTIFIC DRILLING CONTROLS STANDARDS.



S.D.C. REPRESENTATIVE

Troy Duncan

RECEIVED

MAR 28 1985

6120
2000 OFFICE

RECEIVED

MAR 22 1985

STATE POLICE

AMF / SCIENTIFIC DRILLING
MIDLAND, TEXAS

MAGNETIC DIRECTIONAL SURVEY
FOR

AMOCO PRODUCTION CO

JOB NUMBER:

132-D-195-003

WELL NAME:

SOUTH HODDS UNIT 184

LOCATION:

LEA COUNTY, NEW MEXICO

SURVEY DATE:

01/24/85

SURVEY ENGINEER:

TROY DUNCAN

METHOD OF CALCULATION:

THE RADIUS OF CURVATURE

VERTICAL SECTION:

CALCULATED USING PROPOSAL OF 9-20 E

COMMENTS:

* THIS SURVEY IS CORRECT TO THE BEST OF MY *
* KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA. *
* *
* *
* *
* *

Troy Duncan

* COMPANY REPRESENTATIVE *

MAR 22 1985

AMF / SCIENTIFIC DRILLING
MIDLAND, TEXAS

JOB NUMBER: 132-D-185-003

DATE: 01/24/85

INKUN SURVEY

BY

THE RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INC D M	BEAKING D M	COORDINATES LATITUDE DEPARTURE	D-LEG PER 100
136.00	136.00	.82	.89	0-45 S	32- 0 E	.76 S .47 E	.55
229.00	228.99	1.95	1.22	0-45 S	30- 0 E	1.80 S 1.10 E	.03
322.00	321.98	2.76	1.22	0-45 S	32- 0 E	2.46 S 2.07 E	.71
415.00	414.97	3.67	1.22	0-45 S	10- 0 E	3.25 S 2.89 E	.95
508.00	507.97	3.82	.81	0-15 N	20- 0 E	3.30 S 3.49 E	1.05
601.00	600.97	3.38	.61	0-30 N	47- 0 E	2.80 S 3.82 E	.32
694.00	693.96	2.86	.81	0-30 N	35- 0 E	2.19 S 4.35 E	.11
787.00	786.96	2.09	1.02	0-45 N	27- 0 E	1.32 S 4.88 E	.28
880.00	879.95	.97	1.22	0-45 N	2- 0 W	.14 S 5.14 E	.40
973.00	972.94	.03	1.02	0-30 N	25- 0 E	.85 N 5.34 E	.41
1066.00	1065.94	-.64	.81	0-30 N	25- 0 E	1.58 N 5.68 E	.00
1159.00	1158.93	-1.36	1.02	0-45 N	46- 0 E	2.41 N 6.27 E	.36
1252.00	1251.93	-1.99	1.22	0-45 N	52- 0 E	3.20 N 7.19 E	.08
1345.00	1344.92	-1.96	.81	0 15 S	65- 0 E	3.29 N 7.95 E	.73
1438.00	1437.92	-1.95	.61	0-30 N	48- 0 E	3.38 N 8.52 E	.50

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U.S. DEPT. OF JUSTICE

AMF / SCIENTIFIC DRILLING
MIDLAND, TEXAS

JOB NUMBER: 132-D-185-003

DATE: 01/24/85

INRUN SURVEY

BY

THE RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INC D M	BEARING		COORDINATES		D-LEG PER 100
					D	M	LATITUDE	DEPARTURE	
1469.00	1468.92	-2.12	.27	0-30	N	36-0	E	8.70	.34
1490.00	1489.92	-2.26	.23	0-45	N	45-0	E	8.85	1.28
1545.00	1544.91	-2.81	.84	1-0	N	35-0	E	9.39	.53
1638.00	1637.90	-3.89	1.62	1-0	N	43-0	E	10.41	.15
1731.00	1730.84	-2.41	3.04	2-45	S	28-0	W	12.11	4.01
1824.00	1823.36	5.15	9.11	8-30	S	21-0	W	8.34	6.22
1917.00	1915.08	19.11	15.35	10-30	S	9-0	W	4.37	3.02
2010.00	2006.41	35.90	17.55	11-15	S	6-0	W	2.08	1.01
2103.00	2097.46	54.25	18.94	12-15	S	4-0	W	.43	1.16
2196.00	2188.16	74.18	20.52	13-15	S	5-0	W	1.18	1.10
2289.00	2278.54	95.49	21.91	14-0	S	3-0	W	2.71	.95
2382.00	2368.73	117.91	22.69	14-15	S	4-0	E	2.51	1.86
2475.00	2458.72	141.29	23.48	15-0	S	4-0	E	.87	.81
2568.00	2548.22	166.35	25.24	16-30	S	1-0	E	.23	1.83
2661.00	2637.33	192.71	26.61	16-45	S	2-0	E	.93	.41

RECEIVED

MAR 22 1985

104-10100
FBI - NEW YORK

ANF / SCIENTIFIC DRILLING
MIDLAND, TEXAS

JOB NUMBER: 132-D-185-003

DATE: 01/24/85

INRUN SURVEY

BY

THE RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INC D M	BEARING D N	COORDINATES		D-LEG PER 100
						LATITUDE	DEPARTURE	
2754.00	2726.50	218.80	26.41	16-15	S 1- 0 W	221.55 S	1.16 E	1.06
2847.00	2815.85	244.13	25.83	16- 0	S 3- 0 W	247.36 S	.26 E	.65
2940.00	2905.24	269.22	25.63	16- 0	S 2- 0 W	272.97 S	.86 W	.30
2970.00	2934.06	277.40	8.33	16-15	S 1- 0 W	281.30 S	1.08 W	1.25
3031.00	2992.28	295.40	18.22	18-30	S 2- 0 E	299.51 S	.92 W	3.97
3125.00	3079.54	329.92	34.81	25- 0	S 2- 0 E	334.30 S	.29 E	6.91
3218.00	3163.99	368.77	38.94	24-30	S 11- 0 E	372.95 S	4.70 E	4.08
3312.00	3249.87	406.99	38.23	23-30	S 11- 0 E	410.48 S	11.79 E	1.06
3405.00	3335.31	443.69	36.71	23- 0	S 11- 0 E	446.52 S	19.00 E	.54
3498.00	3421.23	479.27	35.59	22- 0	S 10- 0 E	481.51 S	25.48 E	1.15
3587.00	3504.32	511.16	31.89	20- 0	S 10- 0 E	512.92 S	31.02 E	2.25
3682.00	3593.87	542.86	31.71	19- 0	S 11- 0 E	544.10 S	36.80 E	1.11
3774.00	3680.72	573.16	30.33	19-30	S 13- 0 E	573.77 S	43.11 E	.90
3868.00	3769.47	604.07	30.99	19- 0	S 14- 0 E	603.90 S	50.34 E	.64
3960.00	3855.19	637.33	33.34	23-30	S 12- 0 E	636.38 S	57.84 E	4.95

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MAR 22 1985

U.S. DEPT. OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION

AMF / SCIENTIFIC DRILLING
MIDLAND, TEXAS

JOB NUMBER: 132-D-105-003

DATE: 01/24/85

INKUN SURVEY

BY

THE RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VLRT. SECT.	COURSE DEV.	INC D M	BEARING D N	COORDINATES LATITUDE DEPARTURE	D-LEG PER 100
4052.00	3938.56	676.17	38.88	26-30	S 12-0 E	674.41 S 65.92 E	3.26
4145.00	4021.43	718.33	42.22	27-30	S 13-0 E	715.63 S 75.06 E	1.18
4239.00	4104.42	762.39	44.13	28-30	S 12-0 E	758.71 S 84.61 E	1.18
4333.00	4186.43	808.27	45.93	30-0	S 12-0 E	803.63 S 94.16 E	1.60
4428.00	4267.86	857.14	48.93	32-0	S 12-0 E	851.49 S 104.33 E	2.11
4465.00	4299.24	876.73	19.61	32-0	S 12-0 E	870.67 S 108.41 E	.00

THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF

4465.00 FEET EQUALS 877.39 FEET AT S 7- 6 E.

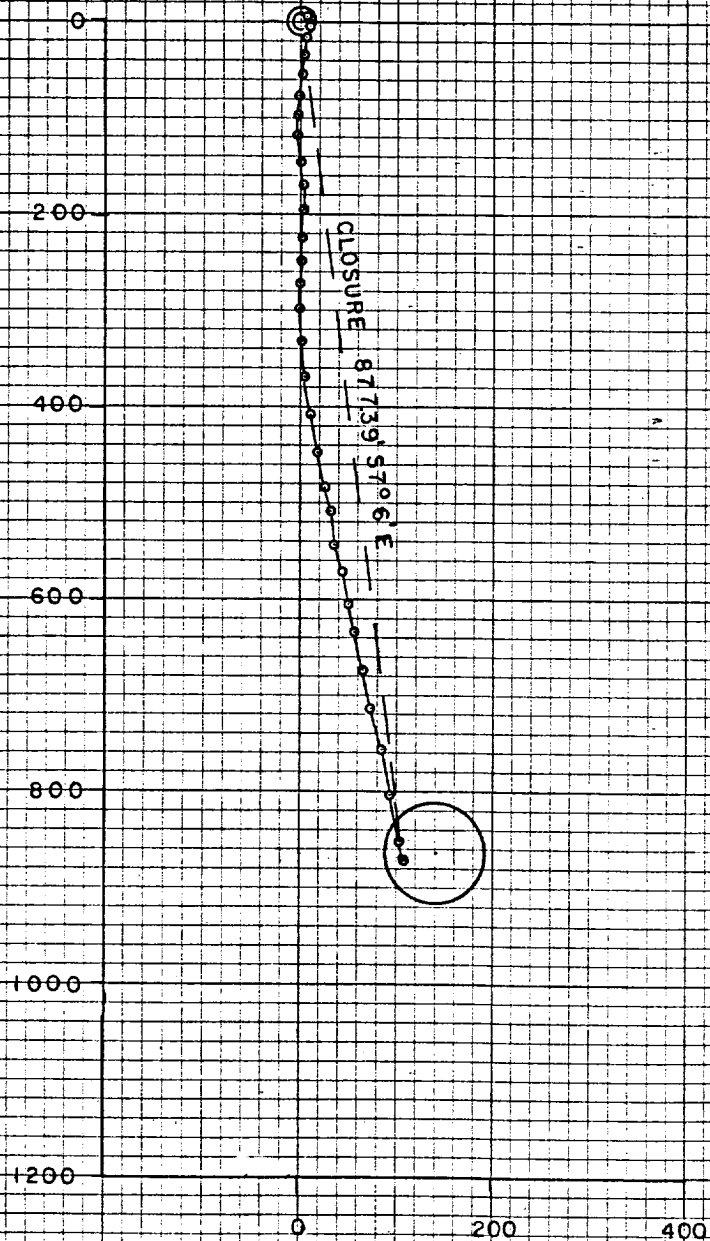
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MAR 22 1985

U.S. DEPT. OF JUSTICE

AMOCO PRODUCTION CO.
SOUTH HOBBS UNIT No 184
LEA CO. NEW MEXICO

SURFACE LOCATION



PLAN VIEW
1" = 200'

RECEIVED

MAR 22 1985

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FEDERAL BUREAU OF INVESTIGATION