

CUSTOMER : AMOCO PRODUCTION COMPANY

ELL # : SHU COOP #2

LOCATION : LEA COUNTY, NEW MEXICO

DATE : 8-19-83, 9-01-83

DD TYPE : MMS

DR # : MS-1245, MS-1253

DRVEYOR : ALAN HARBERT

DEPTH : 0'-1471', 1471'-4423'

ECL. : 10 DEGREES EAST

LEV. : 0'

ILE # : WT-CSS

METHOD : RADIUS OF CURVATURE

SECTION : N35.55W

Larry Massey

DIG REPRESENTATIVE

FINAL STATION DATA!

MEASURED	INCL.	HOLE	COURSE	VERTICAL	TRUE	RECTANGULAR	C L O S U R E	DUG-LEG
DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH	SECTION	COORDINATES	DISTANCE	DIRECTION
FEET	DEGS.	DEGS.	FEET	FEET	N/S	feet E/W	FEET	DEGS.
								DC/100FT

23.00 N 19.00 W 4300.53 746.10 646.34 N 379.79 W 249.16 at N 30.37 W 0.00

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

MEASURED DEPTH FEET	INCL. ANGLE DEGS.	HOLE DIRECTION DEGS.	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	N/S feet	E/W feet	RECTANGULAR COORDINATES	C L O S U R E	DIRECTION	DISTANCE FEET	SEVERITY DEGS.	DUG-LEG
0.00	0.00	N 00.00 E	0.00	0.00	0.00	0.00	0.00	0.00at N 00.00 E					0.00
49.00	.75	S 42.00 W	49.00	49.00	-.07	.24 S	.21 W	.32at S 42.00 W					1.53
111.00	1.00	S 41.00 W	62.00	110.99	-.28	.95 S	.84 W	1.27at S 41.62 W					.40
173.00	1.00	S 30.00 W	62.00	172.98	-.63	1.83 S	1.47 W	2.34at S 38.80 W					.31
234.00	1.25	S 38.00 W	61.00	233.97	-1.05	2.82 S	2.14 W	3.54at S 37.18 W					.48
296.00	1.00	S 30.00 W	62.00	295.96	-1.48	3.83 S	2.82 W	4.75at S 36.36 W					.48
358.00	1.00	S 48.00 W	62.00	357.95	-1.76	4.66 S	3.50 W	5.83at S 36.85 W					.50
420.00	1.00	S 36.00 W	62.00	419.94	-2.00	5.47 S	4.22 W	6.91at S 37.65 W					.34
482.00	1.00	S 80.00 W	62.00	481.93	-1.86	5.76 S	5.14 W	7.87at S 40.79 W					1.41
544.00	1.00	S 42.00 W	62.00	543.92	-1.66	6.40 S	6.10 W	8.84at S 43.59 W					1.26
605.00	1.00	S 30.00 W	61.00	604.91	-2.00	7.26 S	6.72 W	9.90at S 42.78 W					.34
667.00	1.50	S 43.00 W	62.00	666.90	-2.42	8.35 S	7.52 W	11.24at S 42.02 W					.92
729.00	1.50	S 45.00 W	62.00	728.87	-2.71	9.52 S	8.65 W	12.86at S 42.27 W					.08
791.00	1.50	S 40.00 W	62.00	790.85	-3.05	10.71 S	9.75 W	14.48at S 42.30 W					.21
853.00	1.00	S 22.00 W	62.00	852.84	-3.58	11.87 S	10.44 W	15.81at S 41.34 W					1.02
915.00	1.00	S 39.00 W	62.00	914.83	-4.02	12.80 S	10.99 W	16.87at S 40.65 W					.48
976.00	1.00	S 38.00 W	61.00	975.82	-4.31	13.63 S	11.65 W	17.93at S 40.52 W					.03
1038.00	2.00	S 62.00 W	62.00	1037.80	-4.44	14.66 S	12.89 W	19.52at S 41.30 W					1.87
1100.00	1.75	S 42.00 W	62.00	1099.76	-4.53	15.91 S	14.48 W	21.51at S 42.30 W					1.12
1162.00	1.00	S 20.00 W	62.00	1161.75	-5.11	17.17 S	15.24 W	22.96at S 41.58 W					1.46
1224.00	1.00	S 20.00 W	62.00	1223.74	-5.73	18.19 S	15.61 W	23.97at S 40.62 W					0.00
1286.00	.75	S 32.00 W	62.00	1285.73	-6.18	19.04 S	16.92 W	24.88at S 40.08 W					.50
1347.00	1.00	S 32.00 W	61.00	1346.72	-6.53	19.83 S	16.52 W	25.81at S 39.78 W					.41
1409.00	.50	S 58.00 W	62.00	1408.72	-6.66	20.40 S	17.08 W	26.61at S 39.94 W					.96
1471.00	.25	N 86.00 W	62.00	1470.72	-6.52	20.50 S	17.47 W	26.93at S 40.44 W					.54

MEASURED	INCL.	HOLE	COURSE	VERTICAL	VERTICAL	TRUE	RECTANGULAR	CLOSURE	DIRECTION	SEVERITY
DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH	SECTION	FEET	N/S	FEET	DEGS.	DOG-LEG
FEET	DEGS.	DEGS.	FEET	FEET	FEET	FEET	FEET	FEET	DEGS.	DOG/100FT
1533.00	25	N 68.00 W	62.00	1532.71	-6.32		20.43 S	17.73 W	27.06at S 40.95 W	.13
1595.00	25	S 39.00 W	62.00	1594.71	-6.22		20.50 S	17.98 W	27.27at S 41.25 W	.40
1657.00	50	S 34.00 W	62.00	1656.71	-6.35		20.82 S	18.22 W	27.67at S 41.18 W	.41
1719.00	50	S 60.00 W	62.00	1718.71	-6.42		21.19 S	18.61 W	28.20at S 41.29 W	.36
1781.00	1.25	N 50.00 W	62.00	1780.70	-5.84		21.11 S	19.50 W	28.74at S 42.72 W	1.90
1843.00	4.50	N 45.00 W	62.00	1842.62	-2.80		19.01 S	21.79 W	28.92at S 48.89 W	5.25
1904.00	6.00	N 41.00 W	61.00	1903.36	2.73		14.93 S	25.60 W	29.63at S 59.74 W	2.53
1966.00	6.50	N 40.00 W	62.00	1964.99	9.46		9.80 S	29.98 W	31.54at S 71.89 W	.83
2028.00	7.50	N 37.00 W	62.00	2026.53	17.60		3.89 S	34.68 W	34.90at S 83.60 W	1.72
2090.00	8.25	N 37.00 W	62.00	2087.94	25.49		2.90 N	39.79 W	39.90at N 85.83 W	1.21
2152.00	9.75	N 37.00 W	62.00	2149.18	35.19		10.64 N	45.63 W	46.86at N 76.87 W	2.42
2214.00	11.25	N 35.00 W	62.00	2210.14	46.49		19.78 N	52.27 W	55.89at N 69.26 W	2.49
2275.00	12.00	N 35.00 W	61.00	2269.69	58.78		29.85 N	59.32 W	66.41at N 63.28 W	1.23
2337.00	13.00	N 33.00 W	62.00	2330.42	72.19		40.98 N	66.83 W	78.39at N 58.48 W	1.76
2399.00	14.25	N 34.00 W	62.00	2390.67	86.79		53.16 N	74.89 W	91.83at N 54.63 W	2.05
2461.00	15.75	N 33.00 W	62.00	2450.55	102.82		66.54 N	83.74 W	106.96at N 51.53 W	2.46
2523.00	17.00	N 33.00 W	62.00	2510.04	120.28		81.19 N	93.26 W	123.65at N 48.95 W	2.02
2585.00	18.75	N 32.00 W	62.00	2569.04	139.29		97.24 N	103.49 W	142.01at N 46.78 W	2.97
2647.00	19.50	N 31.00 W	62.00	2627.62	159.55		114.56 N	114.10 W	161.69at N 44.88 W	1.32
2708.00	20.50	N 32.00 W	61.00	2684.94	180.36		132.35 N	125.00 W	182.05at N 43.36 W	1.73
2770.00	20.75	N 31.00 W	62.00	2742.97	202.14		150.97 N	136.41 W	203.47at N 42.09 W	.70
2832.00	20.75	N 30.00 W	62.00	2800.95	224.03		169.90 N	147.56 W	225.03at N 40.97 W	.57
2894.00	21.00	N 30.00 W	62.00	2858.88	246.01		189.03 N	158.61 W	246.76at N 39.99 W	.40
2956.00	21.25	N 30.00 W	62.00	2916.71	268.25		208.38 N	169.78 W	268.79at N 39.17 W	.40
3018.00	21.00	N 30.00 W	62.00	2974.54	290.49		227.73 N	180.95 W	290.87at N 38.46 W	.40

MEASURED	INCL.	HOLE	COURSE	VERTICAL	TRUE	VERTICAL	SECTION	N/S	feet	E/W	FEET	DIRECTION	CL	DOG-LEG
DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH	FEET	FEET	FEET	DEGS.	DEGS.	DEGS.	DEGS.	DEGS.	DEGS.	DEGS.
FEET	DEGS.	DEGS.	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET	FEET
3079.00	21.25	N 30.00 W	61.00	3031.44	312.38	246.77	191.94	N	312.63at	N 37.87 W				.41
3141.00	21.00	N 30.00 W	62.00	3089.28	334.62	266.13	203.12	N	334.78at	N 37.35 W				.40
3203.00	20.75	N 30.00 W	62.00	3147.21	356.61	285.26	214.16	N	356.70at	N 36.89 W				.40
3265.00	20.50	N 29.00 W	62.00	3205.23	378.32	304.27	224.92	N	378.37at	N 36.47 W				.70
3327.00	21.00	N 27.00 W	62.00	3263.21	400.10	323.66	235.23	N	400.11at	N 36.00 W				1.40
3389.00	19.75	N 28.00 W	62.00	3321.33	421.47	342.81	245.20	N	421.47at	N 35.57 W				2.09
3450.00	19.75	N 27.00 W	61.00	3378.74	441.80	361.09	254.71	N	441.89at	N 35.19 W				.55
3512.00	19.75	N 27.00 W	62.00	3437.10	462.60	379.76	264.23	N	462.63at	N 34.82 W				0.00
3574.00	19.00	N 26.00 W	62.00	3495.50	482.91	398.15	273.40	N	482.99at	N 34.47 W				1.32
3636.00	18.75	N 26.00 W	62.00	3554.25	502.69	415.19	282.20	N	502.84at	N 34.13 W				.40
3698.00	18.25	N 25.00 W	62.00	3613.05	522.06	433.95	290.66	N	522.30at	N 33.81 W				.96
3760.00	18.75	N 25.00 W	62.00	3671.84	541.40	451.78	298.98	N	541.75at	N 33.49 W				.81
3821.00	18.25	N 24.00 W	61.00	3729.69	560.40	469.39	307.01	N	560.87at	N 33.18 W				.97
3883.00	18.00	N 24.00 W	62.00	3788.61	579.29	487.01	314.85	N	579.92at	N 32.88 W				.40
3945.00	18.00	N 24.00 W	62.00	3847.58	598.06	504.51	322.64	N	598.86at	N 32.59 W				0.00
4007.00	18.00	N 24.00 W	62.00	3906.54	616.84	522.02	330.44	N	617.01at	N 32.33 W				0.00
4069.00	19.00	N 23.00 W	62.00	3965.51	635.57	539.50	330.88	N	636.75at	N 32.06 W				.50
4131.00	19.00	N 23.00 W	62.00	4024.49	654.27	557.22	345.56	N	655.67at	N 31.80 W				0.00
4192.00	19.50	N 21.00 W	61.00	4082.41	672.84	574.93	352.72	N	674.50at	N 31.52 W				1.31
4254.00	19.00	N 21.00 W	62.00	4141.12	692.13	593.54	359.86	N	694.11at	N 31.22 W				.81
4316.00	19.00	N 20.00 W	62.00	4199.74	711.63	612.44	366.93	N	713.95at	N 30.92 W				.53
4378.00	19.75	N 19.00 W	62.00	4258.23	731.39	631.83	373.79	N	734.12at	N 30.60 W				1.32
4400.00	20.00	N 19.00 W	22.00	4278.92	738.56	638.90	376.23	N	741.45at	N 30.49 W				1.14
4423.00	20.00	N 19.00 W	23.00	4300.53	746.10	646.34	378.79	N	749.16at	N 30.37 W				0.00

CLOSURE DISTANCE = 749.16 FEET.
CLOSURE DIRECTION = N 30.37 W

AMOCO PRODUCTION COMPANY

WELL # :
SHU COOP #2

LOCATION :
LEA COUNTY, NEW MEXICO

DATE :
8-19-83, 9-01-83

JOB TYPE :
MNS

JOB # :
MS-1245, MS-1251

SURVEYOR :
ALAN HARRERT

DEPTHS :
0'-1471', 1471'-4429'

DECL. :
10 DEGREES EAST

ELEV. :
0'

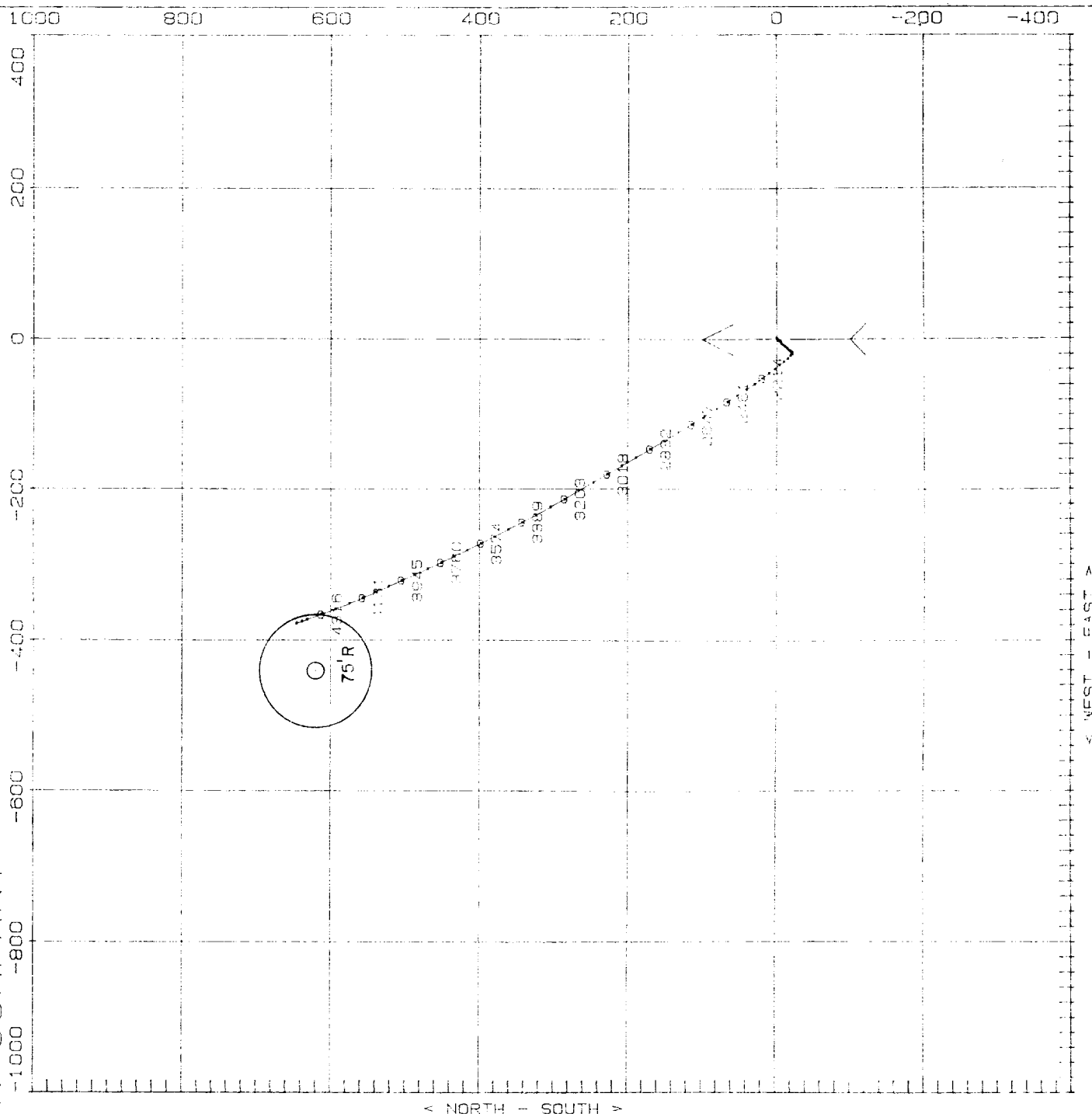
FILE # :
WT-C56

FINAL STATION DATA:

MD. 4428.00
TVD. 4300.53
N/S 646.34
E/W -378.79

CLOSURE DISTANCE
749.16 FEET
CLOSURE DIRECTION
N 30.37 W

1 IN. = 200 FT.





SURVEY CERTIFICATION

STATE TEXASCOUNTY OF MIDLAND

I, D.A. Harbert, in the employ of D.I.G., Inc., did on the days of 8-19, 1983 through 8-19, 1983 conduct or supervise the taking of a Magnetic Multiple Shot survey by the method of magnetic orientation from a depth of 0' feet to 1471' feet, with recordings of inclination being obtained at approximately intervals of 62 feet.

This survey was conducted at the request of Amoco Production Company for their SHU COOP Well No. 2, Lea County, State of New Mexico in the South Hobbs field.

The data for this survey were obtained by me according to standards and procedures as set forth by D.I.G., Inc., and is true and correct to the best of my knowledge.

A handwritten signature in dark ink, appearing to read "D.A. Harbert", written over a horizontal line.

D.A. Harbert

The data for this survey has been examined by me and conforms to the principles and procedures as set forth by D.I.G., Inc.

A handwritten signature in dark ink, appearing to read "Larry Massey", written over a horizontal line.

Larry Massey



SURVEY CERTIFICATION

STATE TEXASCOUNTY OF MIDLAND

I, D.A. Harbert, in the employ of D.I.G., Inc., did on the days of 9-01, 1983 through 9-01, 1983 conduct or supervise the taking of a Magnetic Multiple Shot survey by the method of magnetic orientation from a depth of 1471 feet to 4423 feet, with recordings of inclination being obtained at approximately intervals of 62 feet.

This survey was conducted at the request of Amoco Production Company for their SHU COOP Well No. 2, Lea County, State of New Mexico in the South Hobbs field.

The data for this survey were obtained by me according to standards and procedures as set forth by D.I.G., Inc., and is true and correct to the best of my knowledge.


D.A. Harbert

The data for this survey has been examined by me and conforms to the principles and procedures as set forth by D.I.G., Inc.


Larry Massey

JS-TOMERK : AMOCO PRODUCTION COMPANY

LL # 194000 NIS: 194000 COOP #2

NOTATION: LEA COUNTY, NEW MEXICO

DATE: 8-19-83, 9-01-83

TYPE : MEMO

IS	#
118	118-1245
119	119-1245
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199	199-1245
200	200-1245

IRVEYOR ; ALAN HARBERT

0°-1471', 1471'-4423'

COL. ; 10 DEGREES EAST

20

WT-CGS

METHOD: RADIUS OF CURVATURE

CT 107
Z 89
N 50
S 50
B 3

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

Larry Wasser

DTG REPRESENTATIVE

INOL STATION DATA!

[illegible][illegible]

MEASURED	INCL.	HOLE	COURSE	VERTICAL	VERTICAL	SECTION	RECTANGULAR	C L O S U R E	DISTANCE	DIRECTION	SEVERITY
DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH	FEET	FEET	COORDINATES	FEET	FEET	DEGS.	DG/100FT
FEET	DEGS.	DEGS.	FEET	FEET	FEET	FEET	N/S	E/W	FEET	DEGS.	
0.00	0.00	N 00.00 E	0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00at N 00.00 E		0.00
49.00	.75	S 42.00 W	49.00	49.00	-.07	.24 S	.21 W	.32at S 42.00 W			1.53
111.00	1.00	S 41.00 W	62.00	110.99	-.20	.95 S	.84 W	1.27at S 41.62 W			.40
173.00	1.00	S 30.00 W	62.00	172.98	-.63	1.83 S	1.47 W	2.34at S 38.80 W			.31
234.00	1.25	S 38.00 W	61.00	233.97	-1.05	2.82 S	2.14 W	3.54at S 37.18 W			.48
296.00	1.00	S 30.00 W	62.00	295.96	-1.48	3.83 S	2.82 W	4.75at S 36.36 W			.48
358.00	1.00	S 48.00 W	62.00	357.95	-1.76	4.66 S	3.50 W	5.83at S 36.85 W			.50
420.00	1.00	S 36.00 W	62.00	419.94	-2.00	5.47 S	4.22 W	6.91at S 37.65 W			.34
482.00	1.00	S 88.00 W	62.00	481.93	-1.06	5.96 S	5.14 W	7.87at S 40.79 W			1.41
544.00	1.00	S 42.00 W	62.00	543.92	-1.66	6.40 S	6.10 W	8.84at S 43.59 W			1.26
605.00	1.00	S 30.00 W	61.00	604.91	-2.00	7.26 S	6.72 W	9.90at S 42.70 W			.34
667.00	1.50	S 43.00 W	62.00	666.90	-2.42	8.35 S	7.52 W	11.24at S 42.02 W			.92
729.00	1.50	S 45.00 W	62.00	728.87	-2.71	9.52 S	8.65 W	12.86at S 42.27 W			.88
791.00	1.50	S 40.00 W	62.00	790.85	-3.05	10.71 S	9.75 W	14.48at S 42.30 W			.21
853.00	1.00	S 22.00 W	62.00	852.84	-3.58	11.87 S	10.44 W	15.81at S 41.34 W			1.02
915.00	1.00	S 39.00 W	62.00	914.83	-4.02	12.80 S	10.99 W	16.87at S 40.65 W			.48
976.00	1.00	S 38.00 W	61.00	975.82	-4.31	13.63 S	11.65 W	17.93at S 40.52 W			.03
1038.00	2.00	S 62.00 W	62.00	1037.80	-4.44	14.66 S	12.89 W	19.52at S 41.30 W			1.87
1100.00	1.75	S 42.00 W	62.00	1099.76	-4.53	15.91 S	14.48 W	21.51at S 42.30 W			1.12
1162.00	1.00	S 20.00 W	62.00	1161.75	-5.11	17.17 S	15.24 W	22.96at S 41.58 W			1.46
1224.00	1.00	S 20.00 W	62.00	1223.74	-5.73	18.19 S	15.61 W	23.97at S 40.62 W			0.00
1286.00	.75	S 32.00 W	62.00	1285.73	-6.18	19.04 S	16.02 W	24.88at S 40.08 W			.50
1347.00	1.00	S 32.00 W	61.00	1346.72	-6.53	19.83 S	16.52 W	25.81at S 39.78 W			.41
1409.00	.50	S 50.00 W	62.00	1408.72	-6.66	20.40 S	17.08 W	26.61at S 39.94 W			.96
1471.00	.25	N 86.00 W	62.00	1470.72	-6.52	20.50 S	17.47 W	26.93at S 40.44 W			.54

MEASURED	INCL.	HOLE	COURSE	VERTICAL	TRUE	VERTICAL	SECTION	N/S	feet	E/W	FEET	DIRECTION	C L O S U R E	DOG-LEG
DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH		DEPTH	FEET							SEVERITY
FEET	DEGS.	DEGS.	FEET	FEET		FEET								DOG/100FT
1533.00	.25	N 68.00 W	62.00	1532.71		-6.32		20.43	S	17.73	W	27.06at	S 40.95 W	.13
1595.00	.25	S 39.00 W	62.00	1594.71		-6.22		20.50	S	17.98	W	27.27at	S 41.25 W	.48
1657.00	.50	S 34.00 W	62.00	1656.71		-6.35		20.82	S	18.22	W	27.67at	S 41.18 W	.41
1719.00	.50	S 60.00 W	62.00	1718.71		-6.42		21.19	S	18.61	W	28.20at	S 41.29 W	.36
1781.00	1.25	N 50.00 W	62.00	1780.70		-5.84		21.11	S	19.50	W	28.74at	S 42.72 W	1.90
1843.00	4.50	N 45.00 W	62.00	1842.62		-2.80		19.01	S	21.79	W	20.92at	S 40.09 W	5.25
1904.00	6.00	N 41.00 W	61.00	1903.36		2.73		14.93	S	25.60	W	29.63at	S 59.74 W	2.53
1966.00	6.50	N 40.00 W	62.00	1964.99		9.46		9.80	S	29.98	W	31.54at	S 71.89 W	.83
2028.00	6.50	N 37.00 W	62.00	2026.53		17.00		3.89	S	34.68	W	34.90at	S 83.60 W	1.72
2090.00	8.25	N 37.00 W	62.00	2087.94		25.49		2.90	N	39.79	W	39.90at	N 85.83 W	1.21
2152.00	9.75	N 37.00 W	62.00	2149.18		35.19		10.64	N	45.63	W	46.86at	N 76.87 W	2.42
2214.00	11.25	N 35.00 W	62.00	2210.14		46.49		19.78	N	52.27	W	55.89at	N 69.26 W	2.49
2275.00	12.00	N 35.00 W	61.00	2269.89		58.78		29.85	N	59.32	W	66.41at	N 63.28 W	1.23
2337.00	13.00	N 33.00 W	62.00	2330.42		72.19		40.98	N	66.83	W	78.39at	N 58.48 W	1.76
2399.00	14.25	N 34.00 W	62.00	2390.67		86.79		53.16	N	74.89	W	91.83at	N 54.63 W	2.05
2461.00	15.75	N 33.00 W	62.00	2450.55		102.82		66.54	N	83.74	W	106.96at	N 51.53 W	2.46
2523.00	17.00	N 33.00 W	62.00	2510.04		120.28		61.19	N	93.26	W	123.65at	N 40.95 W	2.02
2585.00	18.75	N 32.00 W	62.00	2569.04		139.29		97.24	N	103.49	W	142.01at	N 46.78 W	2.87
2647.00	19.50	N 31.00 W	62.00	2627.62		159.55		114.56	N	114.10	W	161.69at	N 44.88 W	1.32
2708.00	20.50	N 32.00 W	61.00	2684.94		180.36		132.35	N	125.00	W	182.05at	N 43.36 W	1.73
2770.00	20.75	N 31.00 W	62.00	2742.97		202.14		150.97	N	136.41	W	203.47at	N 42.09 W	.70
2832.00	20.75	N 30.00 W	62.00	2800.95		224.03		169.90	N	147.56	W	225.03at	N 40.97 W	.57
2894.00	21.00	N 30.00 W	62.00	2858.88		246.01		189.03	N	158.61	W	246.76at	N 39.99 W	.48
2956.00	21.25	N 30.00 W	62.00	2916.71		268.25		208.38	N	169.78	W	268.79at	N 39.17 W	.40
3018.00	21.00	N 30.00 W	62.00	2974.54		290.49		227.73	N	180.95	W	290.87at	N 38.46 W	.40

MEASURED DEPTH FEET	INCL. ANGLE DEGS.	HOLE DIRECTION DEGS.	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	N/S	feet E/W	CORDINATES DISTANCE FEET	C L O S U R E DIRECTION DEGS.	D O G - L E G SEVERITY OG/100FT
3079.00	21.25	N 30.00 W	61.00	3031.44	312.38	246.77 N	191.94 W	312.63at N 37.87 W		.41
3141.00	21.00	N 30.00 W	62.00	3089.28	334.62	266.13 N	203.12 W	334.78at N 37.35 W		.40
3203.00	20.75	N 30.00 W	62.00	3147.21	356.61	285.26 N	214.16 W	356.70at N 36.89 W		.40
3265.00	20.50	N 29.00 W	62.00	3205.23	378.32	304.27 N	224.92 W	378.37at N 36.47 W		.70
3327.00	21.00	N 27.00 W	62.00	3263.21	400.10	323.66 N	235.23 W	400.11at N 36.00 W		1.40
3389.00	19.75	N 28.00 W	62.00	3321.33	421.47	342.81 N	245.20 W	421.42at N 35.57 W		2.09
3450.00	19.75	N 27.00 W	61.00	3378.74	441.80	361.09 N	254.71 W	441.89at N 35.19 W		.55
3512.00	19.75	N 27.00 W	62.00	3437.10	462.60	379.76 N	264.23 W	462.63at N 34.02 W		0.00
3574.00	19.00	N 25.00 W	62.00	3495.50	482.91	398.16 N	273.40 W	482.99at N 34.47 W		1.32
3636.00	18.75	N 26.00 W	62.00	3554.25	502.69	416.19 N	282.20 W	502.84at N 34.13 W		.40
3698.00	18.25	N 25.00 W	62.00	3613.05	522.06	433.95 N	290.66 W	522.30at N 33.81 W		.96
3760.00	18.75	N 25.00 W	62.00	3671.84	541.40	451.78 N	298.98 W	541.75at N 33.49 W		.81
3821.00	18.25	N 24.00 W	61.00	3729.69	560.40	469.39 N	307.01 W	560.87at N 33.18 W		.97
3883.00	18.00	N 24.00 W	62.00	3788.61	579.29	487.01 N	314.85 W	579.92at N 32.88 W		.40
3945.00	18.00	N 24.00 W	62.00	3847.58	598.06	504.51 N	322.64 W	598.86at N 32.59 W		0.00
4007.00	18.00	N 24.00 W	62.00	3906.54	616.84	522.02 N	330.44 W	617.81at N 32.33 W		0.00
4069.00	18.00	N 23.00 W	62.00	3965.51	635.57	539.58 N	338.00 W	636.75at N 32.06 W		.50
4131.00	18.00	N 23.00 W	62.00	4024.48	654.27	557.22 N	345.56 W	655.67at N 31.80 W		0.00
4192.00	18.50	N 21.00 W	61.00	4082.41	672.84	574.93 N	352.72 W	674.50at N 31.52 W		1.31
4254.00	19.00	N 21.00 W	62.00	4141.12	692.13	593.54 N	359.86 W	694.11at N 31.22 W		.81
4316.00	19.00	N 20.00 W	62.00	4199.74	711.63	612.44 N	366.93 W	713.95at N 30.92 W		.53
4378.00	19.75	N 19.00 W	62.00	4258.23	731.39	631.83 N	373.79 W	734.12at N 30.60 W		1.32
4400.00	20.00	N 19.00 W	22.00	4276.92	738.56	638.90 N	376.23 W	741.45at N 30.49 W		1.14
4423.00	20.00	N 19.00 W	23.00	4300.53	746.10	646.34 N	378.79 W	749.16at N 30.37 W		0.00

CLOSURE DISTANCE = 749.16 FEET.
CLOSURE DIRECTION = N 30.37 W

AMOCO PRODUCTION COMPANY

WELL # :
SHU COOP #2

LOCATION :
LEA COUNTY, NEW MEXICO

DATE :
8-19-83, 9-01-83

JOB TYPE :
MMS

JOB # :
MS-1245, MS-1251

SURVEYOR :
ALAN HARBERT

DEPTHS :
0'-1471', 1471'-4423'

DECL. :
10 DEGREES EAST

ELEV. :
0'

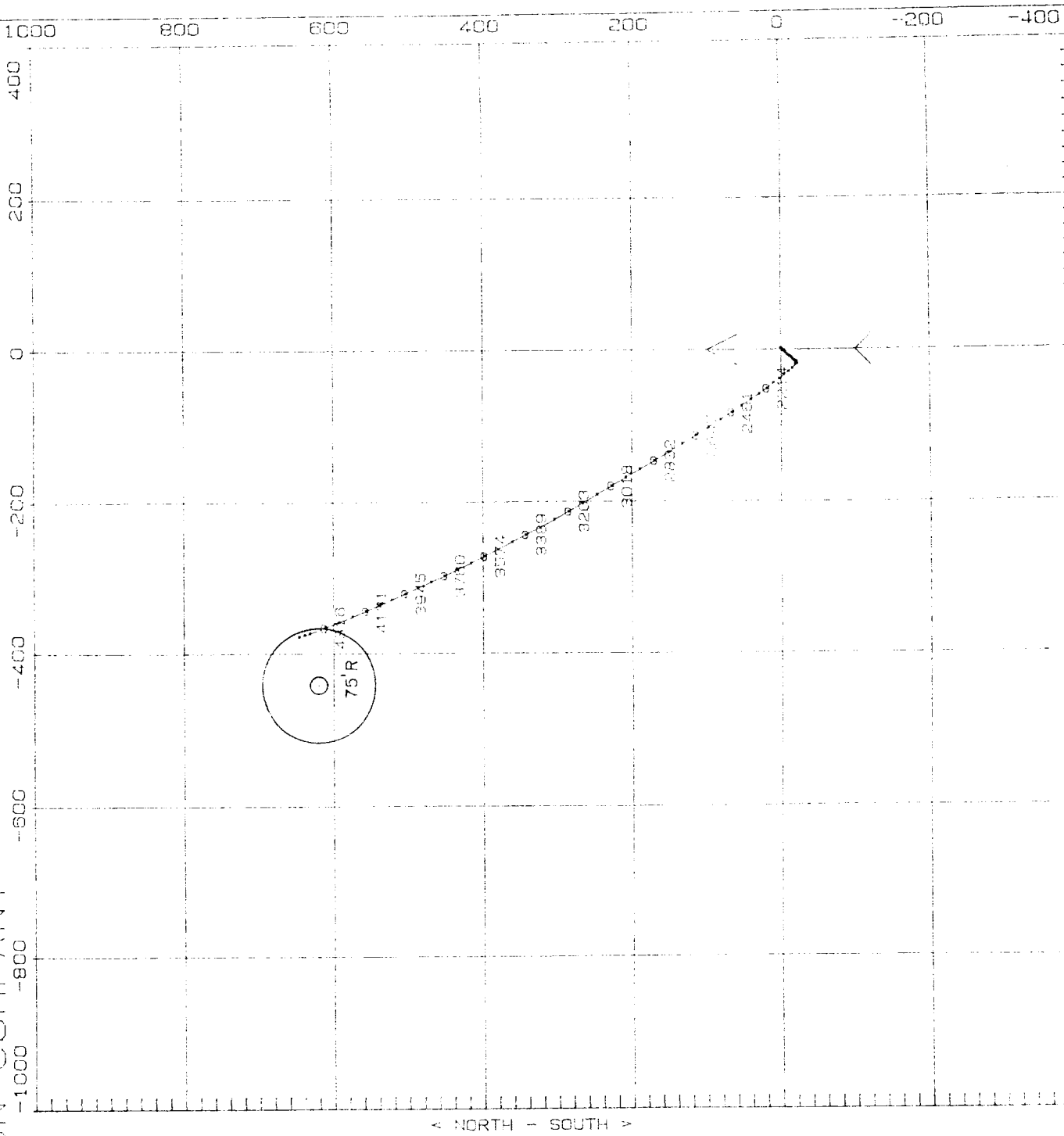
FILE # :
WT-C55

FINAL STATION DATA:

MD. 4423.00
TVD. 4300.53
N/S 646.34
E/W -378.79

CLOSURE DISTANCE
749.16 FEET
CLOSURE DIRECTION
N 30.37 W

1 IN. = 200 FT.



NORTH
SOUTH



SURVEY CERTIFICATION

STATE TEXASCOUNTY OF MIDLAND

I, D.A. Harbert, in the employ of D.I.G., Inc., did on the days of 8-19, 1983 through 8-19, 1983 conduct or supervise the taking of a Magnetic Multiple Shot survey by the method of magnetic orientation from a depth of 0' feet to 1471' feet, with recordings of inclination being obtained at approximately intervals of 62 feet.

This survey was conducted at the request of Amoco Production Company for their SHU COOP Well No. 2, Lea County, State of New Mexico in the South Hobbs field.

The data for this survey were obtained by me according to standards and procedures as set forth by D.I.G., Inc., and is true and correct to the best of my knowledge.

A handwritten signature in dark ink, appearing to read "D.A. Harbert", is written over a horizontal line.

D.A. Harbert

The data for this survey has been examined by me and conforms to the principles and procedures as set forth by D.I.G., Inc.

A handwritten signature in dark ink, appearing to read "Larry Massey", is written over a horizontal line.

Larry Massey



SURVEY CERTIFICATION

STATE TEXASCOUNTY OF MIDLAND

I, D.A. Harbert, in the employ of D.I.G., Inc., did on the days of 9-01, 1983 through 9-01, 1983, conduct or supervise the taking of a Magnetic Multiple Shot survey by the method of magnetic orientation from a depth of 1471 feet to 4423 feet, with recordings of inclination being obtained at approximately intervals of 62 feet.

This survey was conducted at the request of Amoco Production Company for their SHU COOP Well No. 2, Lea County, State of New Mexico in the South Hobbs field.

The data for this survey were obtained by me according to standards and procedures as set forth by D.I.G., Inc., and is true and correct to the best of my knowledge.

A handwritten signature in cursive script, appearing to read "D.A. Harbert".
D.A. Harbert

The data for this survey has been examined by me and conforms to the principles and procedures as set forth by D.I.G., Inc.

A handwritten signature in cursive script, appearing to read "Larry Massey".
Larry Massey