

DATA DRILL

Division of Smith International, Inc.

REPORT of WELL COMPLETION

AMOCO PRODUCTION COMPANY
SHU 215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

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Sii DATADRIL

Division of Smith International, Inc.

AMOCO PRODUCTION COMPANY
SHU 215
SEC 4-T19S-R32E
LEA COUNTY, NEW MEXICO

FILE NAME: SHU215

***** RECORD OF PROPOSAL *****

RADIUS OF CURVATURE METHOD
PROPOSAL COMPUTED BY THE DATADRIL C.A.D.S. SYSTEM
VERTICAL SECTION PLANE: N 3.31 E

MEASURED DEPTH (FT)	COURSE LENGTH (FT)	INCL. ANGLE (DEG)	D R I F T DIRECTION (DEG)	TRUE VERTICAL DEPTH	T O T A L RECT COORDINATES (FT) (FT)		VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
0.00	0.00	0.00	N 3.31 E	0.00	0.00 N	0.00 E	0.00	0.00
START OF BUILD #1								
2200.00	2200.00	0.00	N 3.31 E	2200.00	0.00 N	0.00 E	0.00	0.00
2300.00	100.00	1.50	N 3.31 E	2299.99	1.31 N	.08 E	1.31	1.50
2400.00	100.00	3.00	N 3.31 E	2399.91	5.23 N	.30 E	5.23	1.50
2500.00	100.00	4.50	N 3.31 E	2499.69	11.73 N	.68 E	11.77	1.50
2600.00	100.00	6.00	N 3.31 E	2599.27	20.89 N	1.21 E	20.92	1.50
2700.00	100.00	7.50	N 3.31 E	2698.57	32.62 N	1.89 E	32.68	1.50
2800.00	100.00	9.00	N 3.31 E	2797.54	46.95 N	2.71 E	47.03	1.50
2900.00	100.00	10.50	N 3.31 E	2896.09	63.85 N	3.69 E	63.96	1.50
3000.00	100.00	12.00	N 3.31 E	2994.16	83.33 N	4.82 E	83.47	1.50
3100.00	100.00	13.50	N 3.31 E	3091.70	105.35 N	6.09 E	105.54	1.50
END OF BUILD #1...START OF HOLD SECTION								
3109.10	9.10	13.64	N 3.31 E	3100.55	107.50 N	6.21 E	107.68	1.54
TARGET LOCATION: 4300 TVD								
4343.35	1234.25	13.64	N 3.31 E	4300.00	398.00 N	23.00 E	398.66	0.00

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3 DEC 1986 @ 9:55

AMOCO PRODUCTION COMPANY
SHU 215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

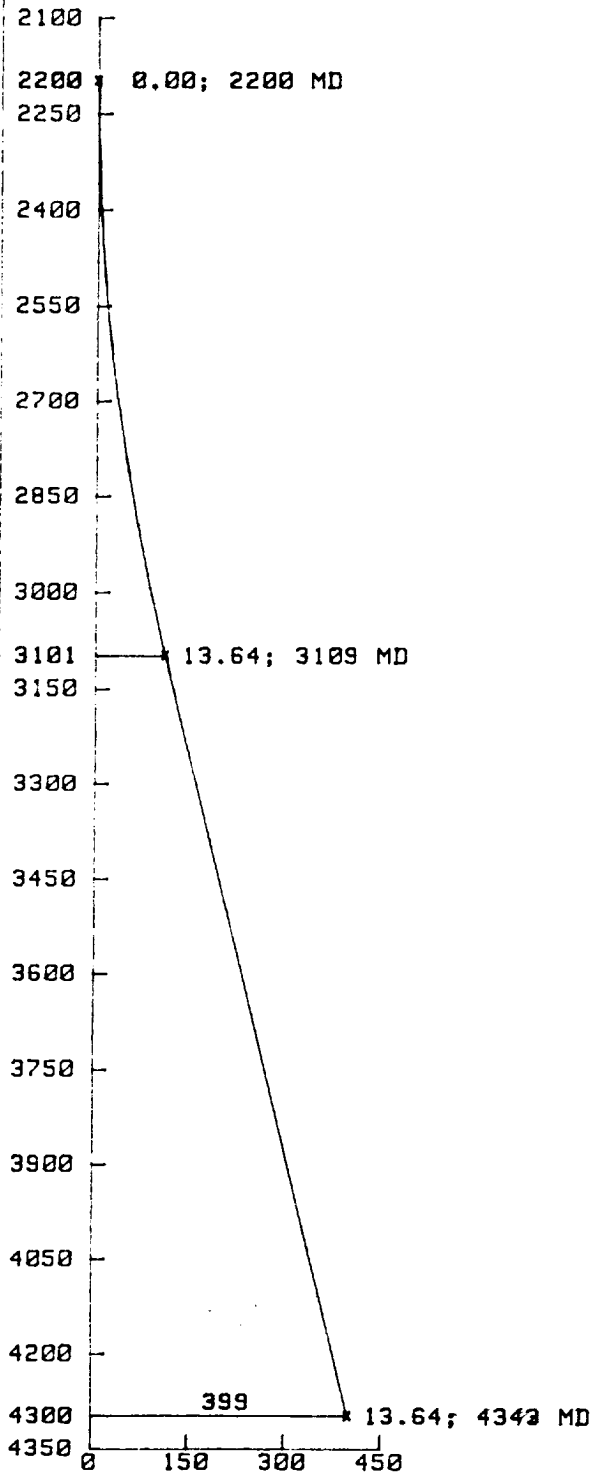


DATA DRILL

Division of Smith International, Inc.

VERTICAL PLAN

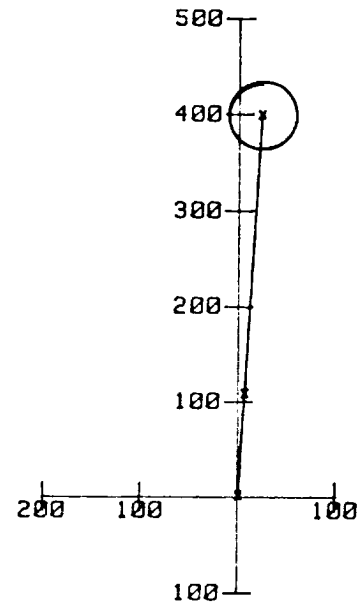
SCALE: 150 FEET/DIVISION



VERTICAL SECTION PLANE: N 3.31 E

HORIZONTAL PLAN

SCALE: 100 FEET/DIVISION



Sii DATADRIL
Division of Smith International, Inc.

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215
SEC 4-719S-R38E
LEA COUNTY, NEW MEXICO

File Name: SHU215KOP

***** RECORD OF SURVEY *****

Calculated by Sii DATADRIL's C.A.D.D.S. System

Radius of Curvature Method
All Angles are Decimal
Vertical Section Plane: N 3.31 E

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE (FT)	DIRECTION (DEG)	GOOGLES SEVERITY (DEG/100')
2197.00	1.25	N 14.00 W	0.00	2196.67	4.93 E	30.71 W	-6.65	31.10	S 30.68 W	0.00
2259.00	3.00	N 8.00 W	62.00	2258.62	2.67 E	31.15 W	-4.47	31.26	S 85.09 W	2.64
2321.00	4.50	N 4.00 W	62.00	2320.49	1.36 N	31.57 W	-1.47	31.60	N 87.54 W	2.45
2384.00	5.00	N 1.00 W	63.00	2383.27	6.57 N	31.90 W	4.72	32.47	N 78.33 W	.89
2447.00	6.00	N 0.00 E	63.00	2445.98	12.61 N	31.95 W	10.75	34.26	N 68.41 W	1.59
2509.00	6.75	N 1.00 W	62.00	2507.60	19.49 N	31.91 W	17.62	37.09	N 56.59 W	1.22
2572.00	7.50	N 0.00 W	63.00	2570.11	27.30 N	31.98 W	25.41	42.05	N 49.51 W	1.21
2633.00	8.50	N 1.00 E	61.00	2630.52	35.79 N	31.91 W	33.29	47.95	N 41.71 W	1.66
2697.00	9.00	N 2.00 E	64.00	2693.77	45.53 N	31.65 W	43.62	55.45	N 34.81 W	.82
2758.00	9.25	N 2.00 E	61.00	2754.00	55.19 N	31.31 W	53.29	63.46	N 29.57 W	.41
2821.00	10.00	N 2.00 E	63.00	2818.11	65.72 N	30.95 W	63.82	72.64	N 25.21 W	1.19
2882.00	10.50	N 2.00 E	61.00	2876.14	76.57 N	30.57 W	74.68	82.44	N 21.76 W	.82
2944.00	11.25	N 2.00 E	62.00	2937.03	88.26 N	30.16 W	86.37	93.27	N 18.97 W	1.21
3007.00	12.00	N 3.00 E	63.00	2998.73	100.94 N	29.81 W	99.06	105.19	N 16.35 W	1.23
3070.00	12.50	N 2.00 E	63.00	3060.30	114.30 N	29.02 W	112.43	117.92	N 14.25 W	.86
3133.00	12.75	N 1.00 E	63.00	3121.78	128.06 N	28.66 W	126.19	131.23	N 12.62 W	.53
3195.00	13.25	N 1.00 E	62.00	3182.19	142.01 N	28.42 W	140.13	144.62	N 11.32 W	.81
3214.00	13.50	N 0.00 E	19.00	3200.67	146.40 N	28.38 W	144.52	149.13	N 10.97 W	1.79
3276.00	14.00	N 3.00 E	62.00	3260.89	161.13 N	27.99 W	159.24	163.54	N 9.86 W	1.40
3338.00	14.25	N 1.00 E	62.00	3321.02	176.25 N	27.47 W	174.37	178.38	N 8.86 W	.88
3400.00	14.25	N 4.00 E	62.00	3381.11	191.50 N	26.80 W	189.63	193.36	N 7.97 W	1.19

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Sii DATADRIL
Division of Smith International, Inc.

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215

SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	C L O S U R E DISTANCE (FT)	DIRECTION (DEG)	DEGREES SEVERITY (DEG/100')
3462.00	14.75	N 5.00 E	62.00	3441.14	206.97 N 25.53 W	205.15	208.55	N 7.05 W	.90
3524.00	14.50	N 3.00 E	62.00	3501.13	222.59 N 24.49 W	220.80	223.93	N 6.28 W	.91
3586.00	15.00	N 2.00 E	62.00	3561.08	236.36 N 23.30 W	236.58	239.54	N 5.70 W	.90
3648.00	15.25	N 6.00 E	62.00	3620.94	254.49 N 22.67 W	252.76	255.50	N 5.09 W	1.73
3710.00	15.50	N 4.00 E	62.00	3680.72	270.87 N 21.24 W	269.19	271.70	N 4.48 W	.95
3772.00	15.50	N 4.00 E	62.00	3740.46	287.39 N 20.09 W	285.76	288.10	N 4.00 W	0.00
3834.00	14.00	N 8.00 E	62.00	3800.42	303.09 N 18.44 W	301.52	303.65	N 5.48 W	2.92
3896.00	13.00	N 10.00 E	62.00	3860.70	317.38 N 16.17 W	315.92	317.80	N 2.92 W	1.78
3958.00	11.50	N 12.00 E	62.00	3921.29	330.30 N 15.66 W	328.96	330.58	N 2.37 W	2.51
4020.00	11.75	N 8.00 E	62.00	3982.62	342.60 N 11.49 W	341.36	342.79	N 1.92 W	1.36
4082.00	11.50	N 7.00 E	62.00	4042.75	354.96 N 9.66 W	353.32	355.12	N 1.59 W	.52
4144.00	11.00	N 5.00 E	62.00	4103.56	367.01 N 8.60 W	365.90	367.11	N 1.34 W	1.02
4206.00	11.00	N 7.00 E	62.00	4164.42	378.76 N 7.36 W	377.72	378.95	N 1.11 W	.62
4268.00	11.00	N 7.00 E	62.00	4225.28	390.52 N 5.92 W	389.53	390.56	N .97 W	0.00
4343.00	11.00	N 7.00 E	75.00	4293.90	404.72 N 4.18 W	403.81	404.74	N .59 W	0.00

BOTTOM HOLE CLOSURE: 404.74 Feet at N .59 Degrees W

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

11 DEC 1986 @ 15:18

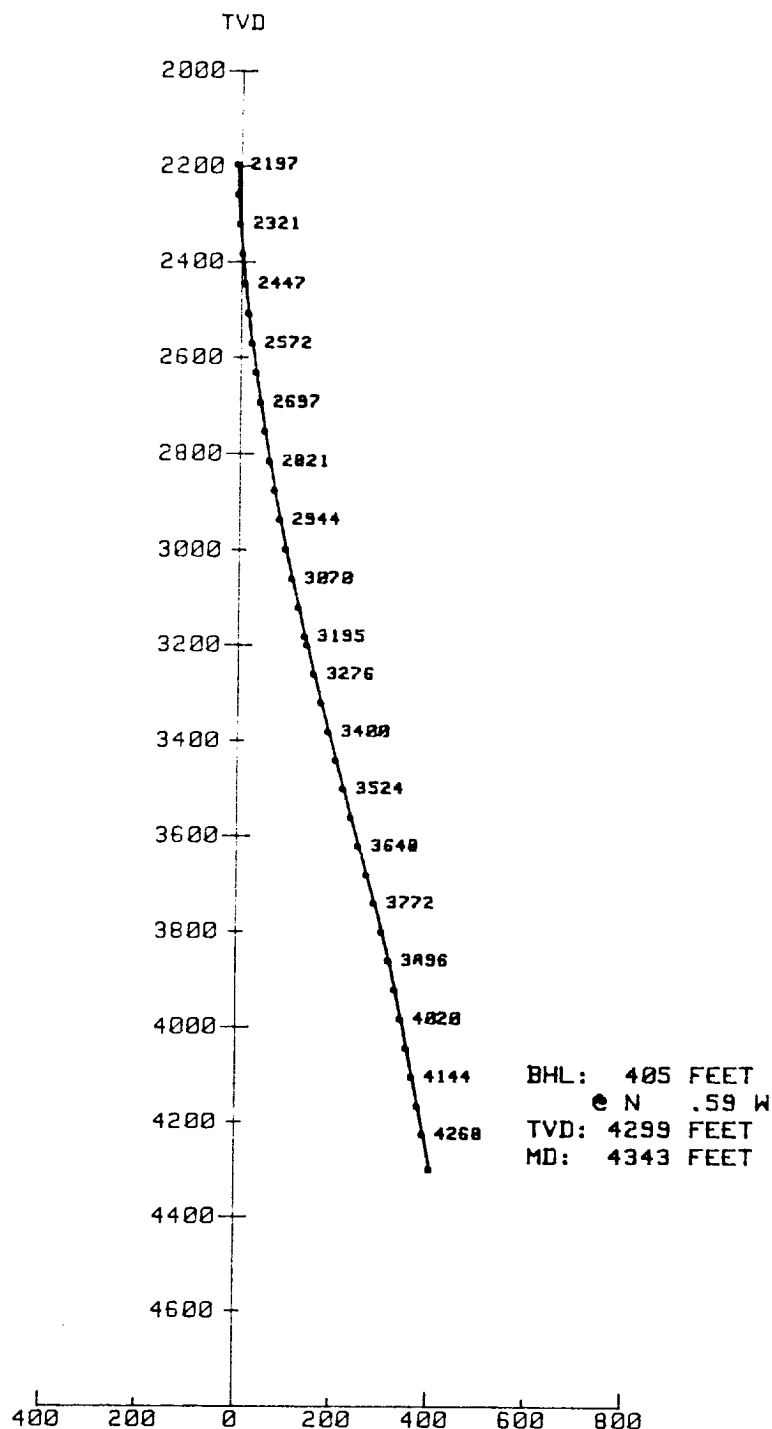


DATA DRILL

Division of Smith International, Inc.

VERTICAL PLOT

SCALE: 400 FEET/INCH



VERTICAL SECTION

SECTION PLANE: N 3.31 E

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AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

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DATADRIL

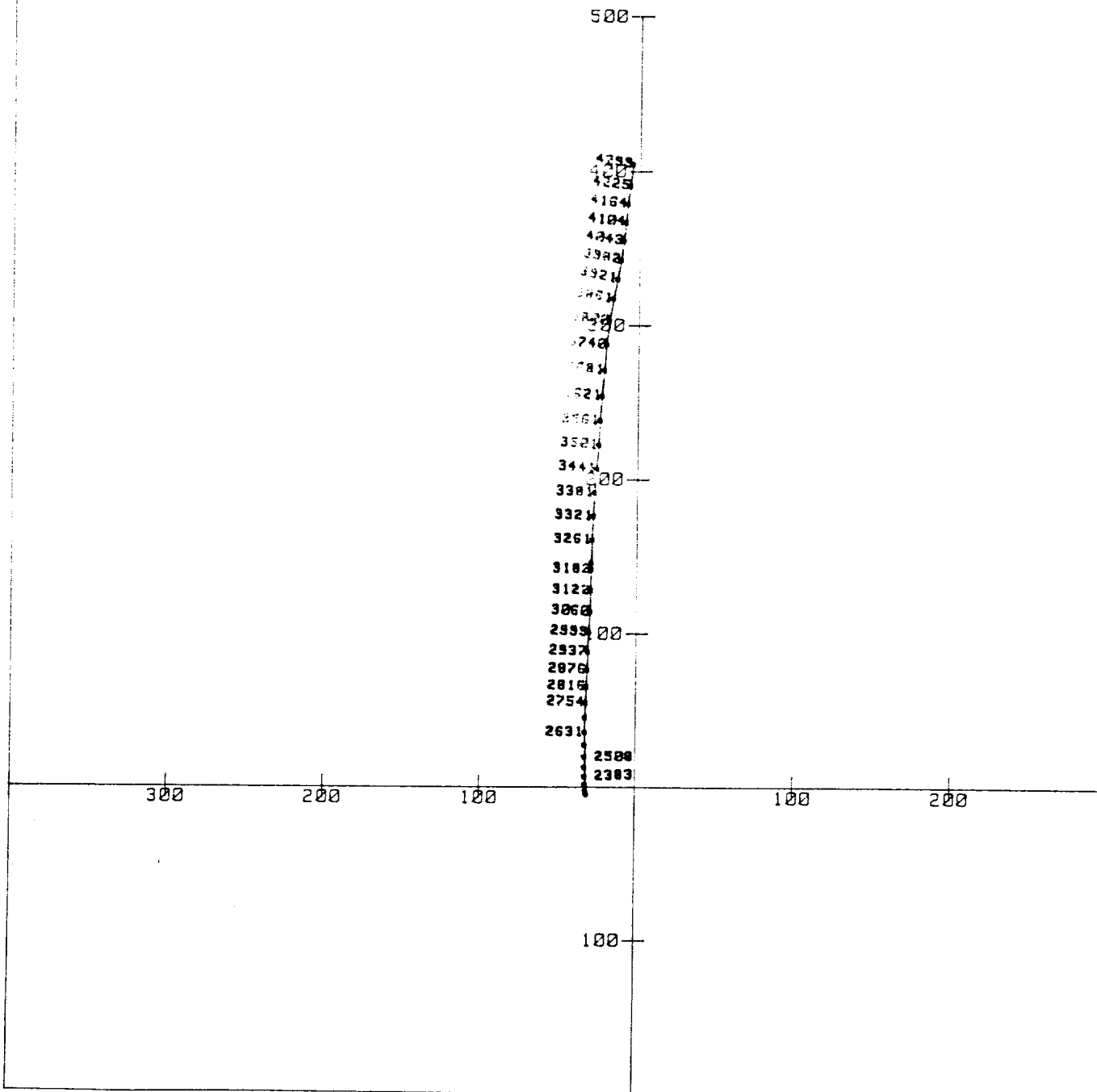
Division of Smith International, Inc.

HORIZONTAL PLOT



SCALE: 100 FEET/INCH

BHL: 405 FEET
@ N .59 W
TVD: 4299 FEET
MD: 4343 FEET



Sii DATADRIL
Division of Smith International, Inc.

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

File Name: SHU215MMS

***** RECORD OF SURVEY *****

Calculated by Sii DATADRIL's C.A.D.S.S. System

Radius of Curvature Method
All Angles are Decimal
Vertical Section Plane: N 3.31 E

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE DIRECTION (FT) (DEG)		DOUBLES SEVERITY (DEG/100')
0.00	0.00	N 0.00 E	0.00	0.00	0.00 N	0.00 E	0.00	0.00 N 0.00 E	0.00	
79.00	.50	N 6.00 W	79.00	79.00	.34 N	.64 W	.34	.34 N 6.00 W	.63	
107.00	.50	N 35.00 W	28.00	107.00	.57 N	.12 W	.56	.58 N 12.17 W	.92	
162.00	.50	N 20.00 W	55.00	162.00	.99 N	.35 W	.97	1.05 N 19.31 W	.25	
223.00	.25	N 82.00 W	61.00	223.99	1.23 N	.64 W	1.19	1.37 N 27.58 W	.72	
259.00	.50	S 74.00 W	57.00	279.99	1.20 N	1.01 W	1.14	1.57 N 40.05 W	.51	
338.00	.50	S 75.00 W	59.00	337.99	1.07 N	1.50 W	.98	1.94 N 54.52 W	.02	
399.00	.75	S 73.00 W	61.00	398.99	.89 N	2.14 W	.76	2.32 N 67.52 W	.41	
460.00	.75	N 84.00 W	61.00	459.98	.81 N	2.93 W	.64	3.64 N 74.55 W	.49	
521.00	1.00	S 87.00 W	61.00	520.97	.83 N	3.86 W	.61	3.95 N 77.81 W	.47	
582.00	1.00	N 77.00 W	61.00	581.97	.93 N	4.92 W	.64	5.00 N 79.33 W	.48	
642.00	1.00	S 71.00 W	60.00	641.96	.87 N	5.95 W	.53	6.01 N 81.65 W	.92	
703.00	1.25	S 66.00 W	61.00	702.94	.43 N	7.06 W	.02	7.08 N 86.49 W	.48	
764.00	1.00	S 74.00 W	61.00	763.93	.02 N	8.19 W	-.45	8.19 N 89.33 W	.48	
825.00	1.00	S 84.00 W	61.00	824.92	.18 S	9.23 W	-.71	9.23 S 88.89 W	.29	
886.00	1.00	N 87.00 W	61.00	885.91	.21 S	10.29 W	-.80	10.30 S 89.65 W	.26	
947.00	.75	S 68.00 W	61.00	946.91	.36 S	11.21 W	-1.01	11.21 S 89.16 W	.74	
1008.00	1.00	N 79.00 W	61.00	1007.90	.45 S	12.12 W	-1.15	12.13 S 87.69 W	.90	
1069.00	1.00	S 89.00 W	61.00	1068.89	.35 S	13.18 W	-1.11	13.18 S 88.46 W	.34	
1130.00	1.00	N 76.00 W	61.00	1129.88	.23 S	14.23 W	-1.06	14.23 S 89.06 W	.43	
1190.00	.75	N 90.00 W	60.00	1189.87	.12 S	15.14 W	-1.00	15.14 S 89.53 W	.55	

Sii DATADRIL
Division of Smith International, Inc.

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215

SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE DIRECTION (FT) (DEG)		DOUBLE SEVERITY (DEG/100')
1251.00	.75	S 81.00 W	61.00	1250.67	.19 S	15.94 W	-1.11	15.94	S 89.73 W	.19
1312.00	.50	S 19.00 W	61.00	1311.87	.59 S	16.42 W	-1.54	16.43	S 97.93 W	1.11
1373.00	.50	S 71.00 W	61.00	1372.66	.96 S	16.73 W	-1.92	16.81	S 86.74 W	.72
1436.00	.50	S 4.00 W	63.00	1435.36	1.37 S	17.10 W	-2.35	17.15	S 85.43 W	.88
1513.00	1.00	S 19.00 W	77.00	1512.65	2.35 S	17.30 W	-3.35	17.46	S 82.25 W	.87
1575.00	1.00	S 66.00 W	62.00	1574.84	7.13 S	18.01 W	-4.16	19.28	S 80.15 W	1.29
1637.00	1.25	S 62.00 W	62.00	1636.83	1.66 S	19.10 W	-4.76	19.45	S 79.15 W	.92
1699.00	1.75	S 55.00 W	62.00	1698.61	4.51 S	20.49 W	-5.68	20.98	S 77.59 W	.86
1761.00	1.25	S 54.00 W	62.00	1760.79	5.45 S	21.81 W	-6.70	22.48	S 75.96 W	.31
1824.00	1.50	S 68.00 W	63.00	1823.77	6.15 S	23.13 W	-7.51	23.94	S 75.01 W	.66
1886.00	1.25	S 70.00 W	62.00	1885.75	6.72 S	24.52 W	-8.12	25.42	S 74.68 W	.41
1947.00	1.50	S 81.00 W	61.00	1946.74	7.08 S	25.93 W	-8.67	26.68	S 74.72 W	.59
2010.00	1.75	S 86.00 W	63.00	2009.71	7.28 S	27.71 W	-9.87	28.65	S 75.27 W	.94
2072.00	1.00	N 55.00 W	62.00	2071.67	6.59 S	28.11 W	-8.56	29.92	S 76.68 W	1.37
2134.00	1.25	N 45.00 W	62.00	2133.68	6.11 S	30.04 W	-7.84	30.66	S 78.50 W	.51
2197.00	1.25	N 14.00 W	63.00	2196.67	4.93 S	30.71 W	-6.70	31.11	S 80.88 W	1.06
2259.00	3.00	N 8.00 W	62.00	2258.62	2.68 S	31.15 W	-4.47	31.27	S 85.09 W	2.94
2321.00	4.50	N 4.00 W	62.00	2320.49	1.36 N	31.37 W	-4.47	31.60	N 87.54 W	2.45
2384.00	5.00	N 1.00 W	63.00	2383.27	6.57 N	31.80 W	4.72	32.47	N 78.33 W	.69
2447.00	6.00	N 0.00 E	63.00	2445.93	12.61 N	31.25 W	10.75	34.26	N 68.41 W	1.56
2509.00	6.75	N 1.00 W	62.00	2507.59	19.49 N	31.71 W	17.61	37.40	N 59.59 W	1.22
2572.00	7.50	N 0.00 W	63.00	2570.11	27.30 N	31.98 W	25.41	42.05	N 49.51 W	1.21
2633.00	8.50	N 1.00 E	61.00	2630.51	35.79 N	31.91 W	33.89	47.95	N 41.72 W	1.66
2697.00	9.00	N 2.00 E	64.00	2693.77	45.52 N	31.65 W	43.62	55.45	N 34.81 W	.82
2758.00	9.25	N 2.00 E	61.00	2754.00	55.19 N	31.32 W	53.29	63.46	N 29.57 W	.41
2821.00	10.00	N 2.00 E	63.00	2816.11	65.72 N	30.95 W	63.82	72.64	N 25.22 W	1.19
2882.00	10.50	N 2.00 E	61.00	2876.13	76.57 N	30.57 W	74.67	82.44	N 21.76 W	.92
2944.00	11.25	N 2.00 E	62.00	2937.02	88.26 N	30.16 W	86.37	93.27	N 18.87 W	1.21
3007.00	12.00	N 3.00 E	63.00	2998.73	100.94 N	29.61 W	99.06	105.19	N 16.35 W	1.23
3070.00	12.50	N 2.00 E	63.00	3060.29	114.29 N	29.03 W	112.43	117.92	N 14.25 W	.86
3133.00	12.75	N 1.00 E	63.00	3121.77	128.06 N	28.66 W	125.19	131.23	N 12.62 W	.53
3195.00	13.25	N 1.00 E	62.00	3182.18	142.00 N	28.42 W	140.13	144.62	N 11.32 W	.81
3214.00	13.50	N 0.00 E	19.00	3200.67	146.40 N	28.38 W	144.52	149.12	N 10.97 W	1.79

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Sii DATADRIL

Division of Smith International, Inc.

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215

SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)		VERTICAL SECTION (FT)	C L O S U R E DISTANCE DIRECTION (FT) (DEG)		DEGREES SEVERITY (DEG/100')
3278.00	14.00	N 7.00 E	62.00	3280.59	161.13 N	28.00 W	159.24	163.54 N	9.65 W	1.40
3338.00	14.25	N 1.00 E	62.00	3321.01	176.25 N	27.47 W	174.37	178.38 N	8.86 W	.88
3400.00	14.25	N 4.00 E	62.00	3361.11	191.49 N	26.80 W	189.63	193.36 N	7.97 W	1.19
3462.00	14.75	N 5.00 E	62.00	3441.13	206.97 N	25.55 W	205.15	208.55 N	7.05 W	.90
3524.00	14.50	N 3.00 E	62.00	3501.12	222.59 N	24.49 W	220.80	223.93 N	6.23 W	.91
3586.00	15.00	N 2.00 E	62.00	3561.08	238.36 N	23.81 W	236.53	239.54 N	5.70 W	.90
3648.00	15.25	N 6.00 E	62.00	3620.93	254.49 N	22.68 W	252.76	255.50 N	5.09 W	1.73
3710.00	15.50	N 4.00 E	62.00	3680.71	270.86 N	21.24 W	269.19	271.70 N	4.48 W	.95
3772.00	15.50	N 4.00 E	62.00	3740.46	287.39 N	20.69 W	285.75	288.09 N	4.00 W	0.00
3834.00	14.00	N 8.00 E	62.00	3800.41	303.09 N	19.44 W	301.52	303.65 N	3.48 W	2.92
3896.00	12.00	N 10.00 E	62.00	3860.70	317.38 N	16.17 W	315.62	317.79 N	2.92 W	1.73
3958.00	11.50	N 12.00 E	62.00	3921.29	330.30 N	13.66 W	328.96	330.59 N	2.37 W	2.51
4020.00	11.75	N 8.00 E	62.00	3982.01	342.60 N	11.50 W	341.36	342.79 N	1.62 W	1.36
4082.00	11.50	N 7.00 E	62.00	4043.74	354.98 N	9.87 W	353.62	355.12 N	1.59 W	.52
4144.00	11.00	N 5.00 E	62.00	4103.55	367.01 N	6.60 W	365.90	367.11 N	1.34 W	1.02
4206.00	11.00	N 7.00 E	62.00	4164.41	378.79 N	7.36 W	377.72	378.65 N	1.11 W	.62
4268.00	11.00	N 7.00 E	62.00	4225.27	390.52 N	5.92 W	389.52	390.59 N	.87 W	0.00
4330.00	11.00	N 7.00 E	75.00	4299.89	404.72 N	4.16 W	403.61	404.74 N	.59 W	0.00

BOTTOM HOLE CLOSURE: 404.74 Feet at N .59 Degrees W

AMOCO PRODUCTION COMPANY
 SOUTH HOBBS UNIT #215
 SEC 4-T19S-R38E
 LEA COUNTY, NEW MEXICO

11 DEC 1986 @ 15:28

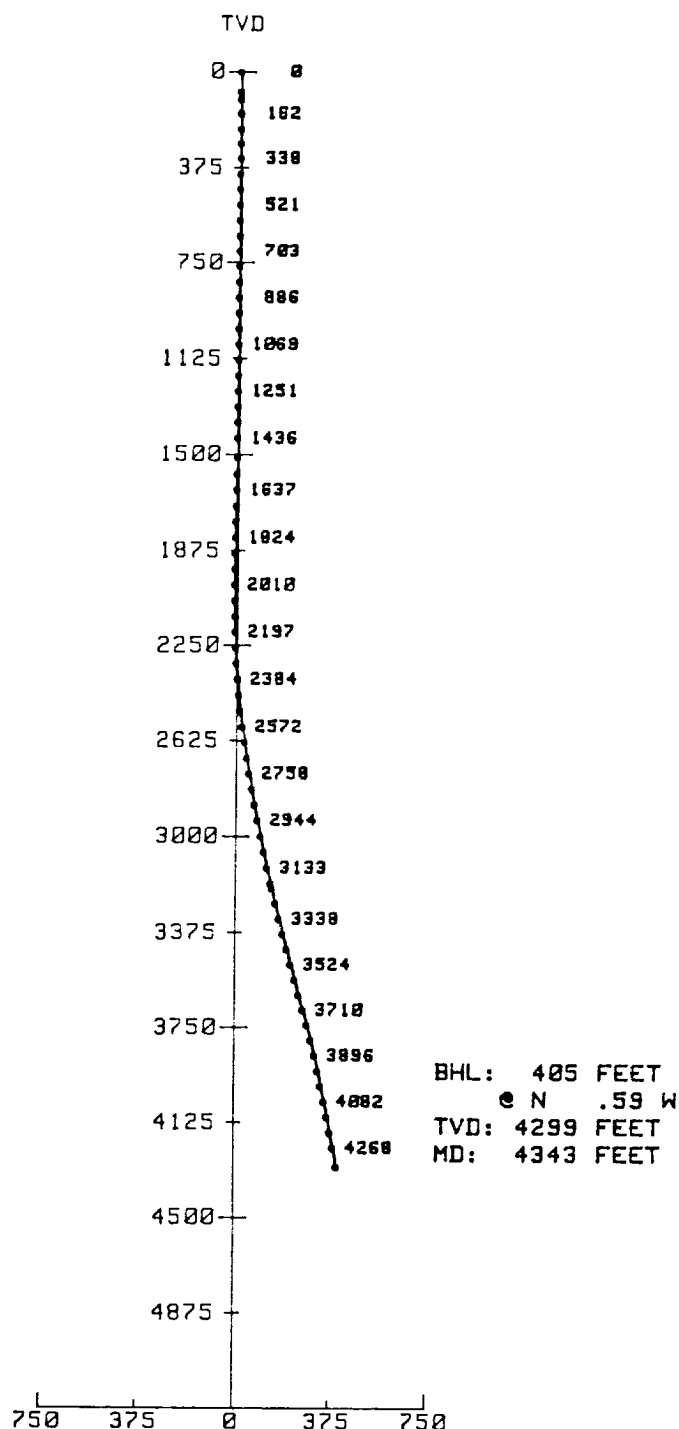


DATADRIL

Division of Smith International, Inc.

VERTICAL PLOT

SCALE: 750 FEET/INCH



VERTICAL SECTION
 SECTION PLANE: N 3.31 E

RECEIVED

DEC 17 1985

SEC
HUMANITARIAN OFFICE

AMOCO PRODUCTION COMPANY
SOUTH HOBBS UNIT #215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO

11 DEC 1986 @ 15:24



DATADRIL

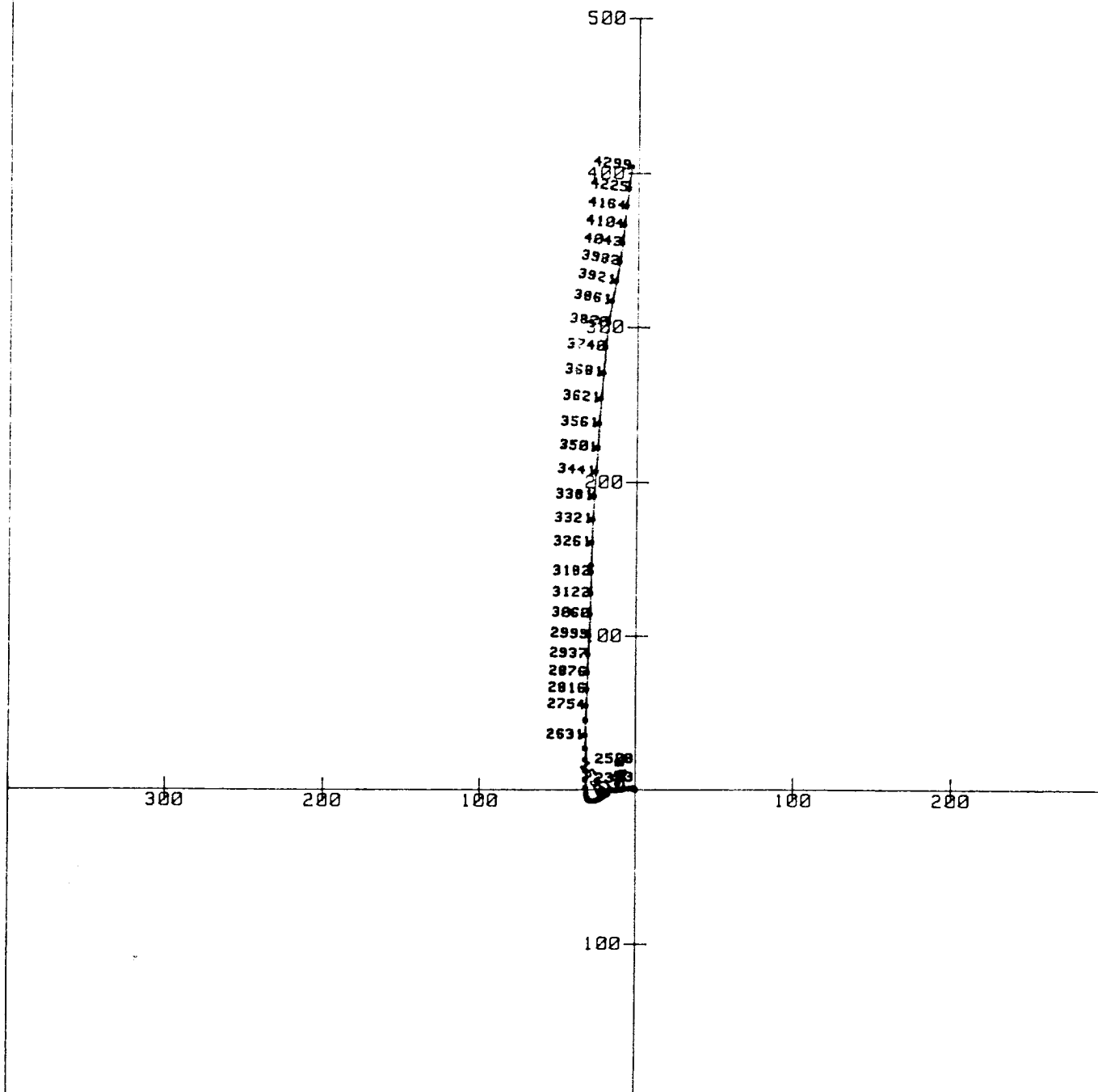
Division of Smith International, Inc.

HORIZONTAL PLOT



SCALE: 100 FEET/INCH

BHL: 405 FEET
@ N .59 W
TVD: 4299 FEET
MD: 4343 FEET



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**OCD
HOBBS OFFICE**

11 DEC 1986 @ 15:05

AMOCO PRODUCTION COMPANY
SHU 215
SEC 4-T19S-R38E
LEA COUNTY, NEW MEXICO



DATADRIL

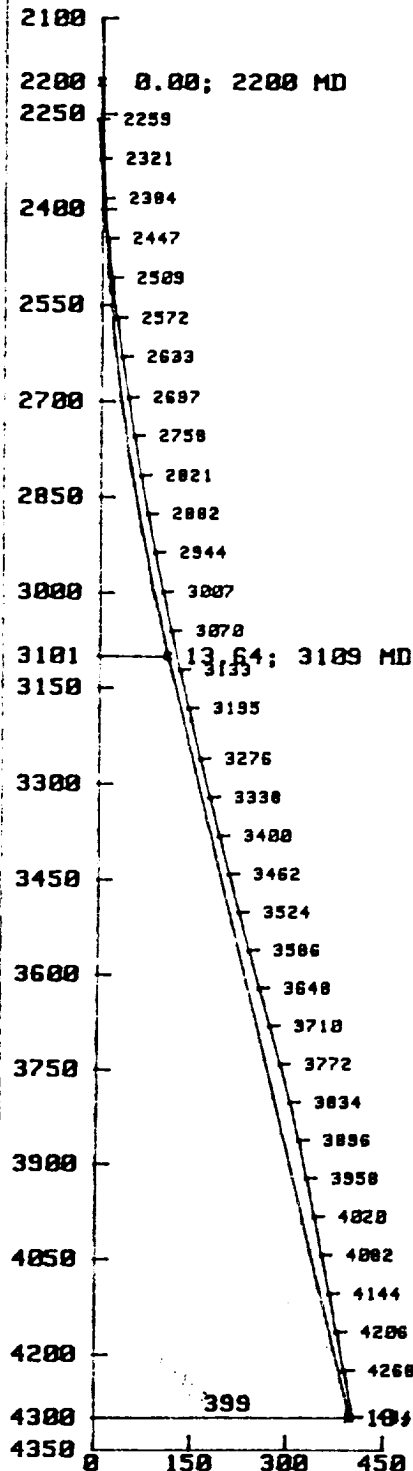
Division of Smith International, Inc.

VERTICAL PLANE

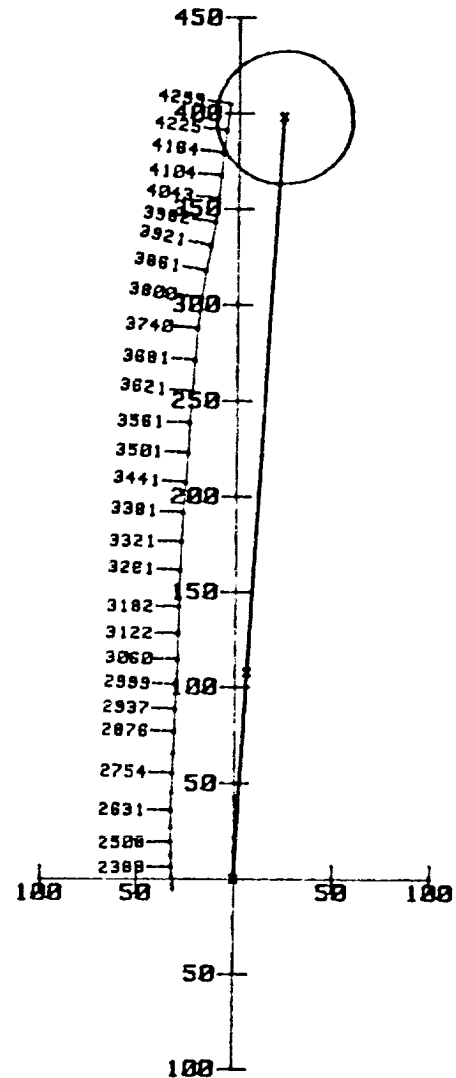
SCALE: 150 FEET/DIVISION

HORIZONTAL PLANE

SCALE: 50 FEET/DIVISION



PRESENT LOCATION:
TVD: 4298.90 FT
MD: 4343.80 FT
VS: 403.81 FT



VERTICAL SECTION PLANE: N 3.31 E

RECEIVED

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SEC
HOURS OFFICE