

Johnson  
33-33-88

**REPORT  
of  
SUB-SURFACE  
SURVEY**



**OREGON NATURAL GAS DEV.  
JOHNSON 33-33**

JOB NO. B 3107-B108

DATE 12/04/81

**DIRECTIONAL DRILLING, INC.**

BAKERSFIELD

Phone: 324-3574

# DIRECTIONAL DRILLING, INC.

SHEET NO. 2 OF 3

JOB NO. B3107  
B3108

COMPANY OREGON NATURAL GAS DEVELOPMENT ADDRESS \_\_\_\_\_

WELL JOHNSON 33-33 FIELD HOWARD JOHNSON COUNTY CLATSOP STATE OREGON

MEASURED DEPTH	TERMINAL DRIFT ANGLE	TERMINAL DIRECTION OF DEVIATION	VERTICAL DEPTH	TOTAL COORDINATES				CLOSURE
				NORTH	SOUTH	EAST	WEST	
4424	18°	S 81 W	4282.10		316.34		799.36	
4488	17°15'	S 76 W	4343.10		320.20		818.35	
4614	17°15'	S 77 W	4463.43		324.92		854.68	
4741	17	S 79 W	4584.80		336.70		891.26	
4834	17°45'	S 84 W	4673.56		340.80		918.73	
4906	15°	S 82 W	4742.64		343.28		938.88	
4937	13°30'	S 79 W	4772.68		344.53		946.40	
4968	12°15'	S 78 W	4802.90		345.91		953.17	
4999	12°30'	S 74 W	4833.18		347.52		959.62	
5032	10°45'	S 69 W	4866.49		349.69		966.11	
5140	9'	S 47 W	4971.90		359.42		981.68	
5202	9°45'	S 50 W	5033.07		366.11		989.24	
5327	10°15'	S 51 W	5156.17		379.91		1005.99	
5481	10°45'	S 46 W	5307.59		398.51		1027.01	
5576	12°45'	S 47 W	5400.60		411.83		1041.04	
5671	15°15'	S 50 W	5492.78		427.06		1058.25	
5796	18°15'	S 53 W	5612.48		449.48		1086.45	
5826	19°	S 53 W	5640.91		455.25		1094.10	
5932	19°45'	S 55 W	5740.90		475.93		1122.55	
6089	19°	S 56 W	5089.01		505.42		1165.47	
6277	18°	S 57 W	6067.30		538.35		1215.22	
6401	17°45'	S 61 W	6185.31		557.95		1247.84	
6524	18°	S 59 W	6302.37		576.82		1280.54	
6708	18°30'	S 59 W	6477.12		606.50		1329.93	
6896	18°45'	S 64 E	6655.27		635.15		1382.70	
7031	18°	S 63 W	6802.37		665.95		1426.42	
7207	17°30'	S 63 W	6950.94		678.55		1468.80	
7459	17°30'	S 65 W	7191.20		711.76		1536.91	
7646	17°	S 65 W	7369.87		735.20		1587.16	
8092	16°30'	S 67 W	7796.93		787.46		1704.59	
8485	16°15'	S 69 W	8174.01		828.98		1807.32	
8946	14°	S 71 W	8619.06		870.13		1920.35	

# DIRECTIONAL DRILLING, INC.

SHEET NO. 1 OF 3

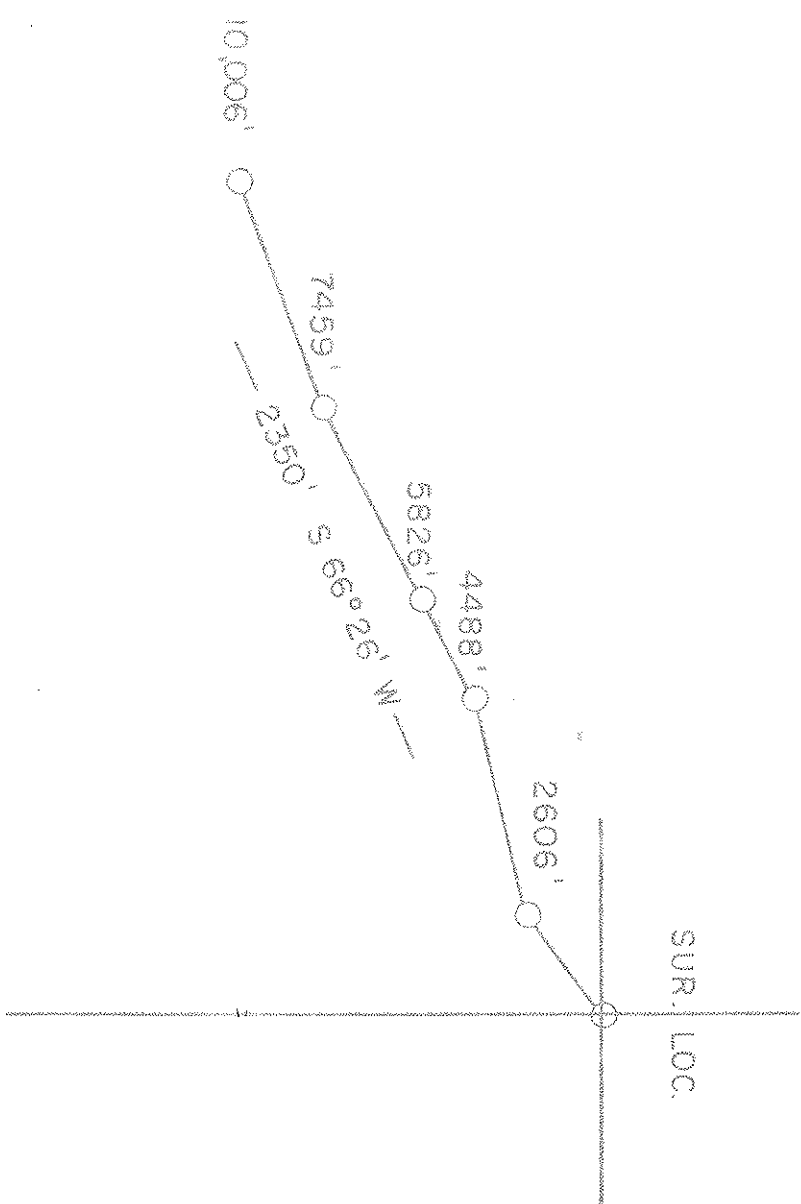
JOB NO. B3107  
B3108

COMPANY OREGON NATURAL GAS DEVELOPMENT ADDRESS

WELL ROBINSON 33-33 FIELD HOWARD JOHNSON COUNTY CLATSOP STATE OREGON

MEASURED DEPTH	TERMINAL DRIFT ANGLE	TERMINAL DIRECTION OF DEVIATION	VERTICAL DEPTH	TOTAL COORDINATES				CLOSURE
				NORTH	SOUTH	EAST	WEST	
1022	ASSUMED	VERTICAL	1022.00					
1161	1°45'	S 06 E	1160.98		2.11	.22		
1539	1°45'	S 10 E	1538.81		13.54	1.83		
1584	4°	S 37 W	1583.77		15.74	1.30		
1647	7°45'	S 44 W	1646.42		20.64		2.89	
1710	10°45'	S 50 W	1708.60		27.53		10.29	
1742	12°	S 53 W	1739.94		31.56		15.34	
1805	16°	S 54 W	1801.01		40.79		27.81	
1908	18°	S 59 W	1899.37		57.64		53.28	
2033	19°30'	S 61 W	2017.56		77.98		88.52	
2135	19°15'	S 61 W	2113.79		94.40		118.11	
2295	19°15'	S 61 W	2264.84		119.97		164.25	
2449	19°15'	S 62 W	2410.23		144.20		208.87	
2606	19°	S 62 W	2558.56		168.35		254.29	
2766	18°30'	S 60 W	2710.07		193.28		299.27	
2922	18°15'	S 61 W	2858.12		217.56		342.07	
3113	17°15'	S 63 W	3040.03		244.83		393.48	
3299	15°45'	S 65 W	3217.90		268.67		442.36	
3508	16°45'	S 73 W	3418.03		290.26		498.59	
3601	17°	S 79 W	3507.03		296.79		524.79	
3727	18°45'	S 84 W	3626.95		302.50		563.04	
3789	20°15'	S 84 W	3685.39		304.67		583.62	
3914	21°	S 86 W	3802.38		308.51		627.58	
4041	21°30'	S 88 W	3920.74		310.91		673.45	
4117	17°45'	S 89 W	3992.33		311.58		698.97	
4151	16°45'	N 88 W	4023.80		311.47		711.84	
4181	17°30'	N 83 W	4051.59		310.58		723.11	
4212	18°45'	N 84 W	4081.03		309.49		732.69	
4289	18°	S 84 W	4134.17		309.39		756.96	
4321	18°45'	S 81 W	4184.49		310.81		766.96	
4354	19°15'	S 82 W	4215.69		312.40		777.59	
4388	18°15'	S 78 W	4247.89		314.39		788.35	





M.D. 10,006'  
 V.D. 9650.56'  
 SOUTH 939.00'  
 WEST 2154.18'

