

CYROSCOPIC DIRECTIONAL SURVEY FOR

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

SCIENTIFIC DRILLING INTERNATIONAL
MIDLAND, TEXAS

DATE: 12/03/88

JOB NUMBER: 132G1288109

INRUN SURVEY

BY

THE RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INC D M	BEARING D M	COORDINATES LATITUDE DEPARTURE	D-LEG PER 100
100.00	100.00	-.38	.41	0-28	S 22- 0 W	.38 S .15 W	.47
200.00	200.00	-1.22	.86	0-31	S 1- 0 E	1.22 S .31 W	.20
300.00	299.99	-2.32	1.11	0-45	S 13- 0 W	2.32 S .42 W	.28
400.00	399.98	-3.74	1.51	0-59	S 25- 0 W	3.74 S .91 W	.29
500.00	499.96	-5.35	1.76	1- 2	S 24- 0 W	5.34 S 1.65 W	.05
600.00	599.95	-7.05	1.80	1- 2	S 13- 0 W	7.05 S 2.22 W	.20
700.00	699.93	-8.65	1.76	1- 1	S 35- 0 W	8.65 S 2.93 W	.39
800.00	799.92	-9.83	1.51	0-43	S 43- 0 W	9.83 S 3.88 W	.32
900.00	899.91	-10.40	1.00	0-26	S 67- 0 W	10.40 S 4.70 W	.37
1000.00	999.91	-10.62	.49	0- 8	S 61- 0 W	10.62 S 5.14 W	.30
1100.00	1099.91	-10.94	.41	0-20	S 7- 0 W	10.94 S 5.36 W	.28
1200.00	1199.91	-11.42	.63	0-23	S 67- 0 W	11.42 S 5.72 W	.36
1300.00	1299.91	-11.78	.44	0- 7	S 19- 0 E	11.78 S 5.98 W	.39
1400.00	1399.91	-12.44	.67	0-39	S 16- 0 W	12.44 S 5.87 W	.56
1500.00	1499.90	-13.33	.98	0-28	S 33- 0 W	13.33 S 6.27 W	.25

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1600.00	1599.90	-13.87	.61	0-14	S 53- 0 E	13.87 S 6.17 W	.51
1700.00	1699.90	-14.31	.49	0-20	S 11- 0 W	14.31 S 6.01 W	.31
1800.00	1799.90	-14.36	.34	0- 3	N 17- 0 E	14.36 S 5.79 W	.38
1900.00	1899.90	-14.24	.35	0-21	S 43- 0 W	14.23 S 6.01 W	.40
2000.00	1999.89	-14.64	.48	0-12	S 68- 0 E	14.63 S 5.92 W	.46
2100.00	2099.89	-14.95	.51	0-23	N 73- 0 W	14.95 S 6.03 W	.58
2200.00	2199.89	-15.06	.52	0-13	S 48- 0 W	15.06 S 6.52 W	.33
2300.00	2299.89	-15.34	.46	0-19	N 69- 0 E	15.34 S 6.35 W	.52
2400.00	2399.89	-14.84	.70	0-29	N 15- 0 E	14.84 S 5.90 W	.39
2500.00	2499.89	-14.17	.68	0-18	N 5- 0 E	14.17 S 5.78 W	.19
2600.00	2599.88	-13.64	.68	0-29	N 65- 0 E	13.64 S 5.41 W	.42
2700.00	2699.88	-13.09	1.12	0-48	N 56- 0 E	13.08 S 4.44 W	.33
2800.00	2799.87	-12.11	1.33	0-43	N 28- 0 E	12.11 S 3.56 W	.38
2900.00	2899.86	-11.34	1.12	0-34	N 63- 0 E	11.33 S 2.77 W	.41
3000.00	2999.85	-10.70	1.43	1- 4	N 64- 0 E	10.70 S 1.49 W	.50

SCIENTIFIC DRILLING INTERNATIONAL
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INRUN SURVEY

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THE RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INC D M	BEARING D M	COORDINATES LATITUDE DEPARTURE	D-LEG PER 100
3100.00	3099.84	-9.72	1.75	0-56	N 47- 0 E	9.71 S .06 W	.32
3200.00	3199.83	-8.88	1.28	0-32	N 52- 0 E	8.88 S .91 E	.40
3300.00	3299.82	-8.45	1.24	0-53	N 86- 0 E	8.44 S 2.05 E	.53
3400.00	3399.81	-7.91	1.49	0-49	N 51- 0 E	7.91 S 3.41 E	.52
3500.00	3499.80	-7.54	1.02	0-21	N 85- 0 E	7.53 S 4.34 E	.56
3600.00	3599.80	-7.72	.84	0-37	S 59- 0 E	7.72 S 5.15 E	.39
3700.00	3699.79	-8.04	1.22	0-47	N 90- 0 E	8.04 S 6.31 E	.41
3800.00	3799.79	-8.04	1.05	0-25	N 89- 0 E	8.03 S 7.36 E	.37
3900.00	3899.78	-8.44	1.00	0-44	S 40- 0 E	8.43 S 8.24 E	.57
4000.00	3999.77	-9.30	1.45	0-56	S 67- 0 E	9.29 S 9.40 E	.43
4100.00	4099.76	-9.55	1.22	0-28	S 89- 0 E	9.54 S 10.59 E	.53
4200.00	4199.76	-9.84	.89	0-33	S 52- 0 E	9.83 S 11.41 E	.33
4300.00	4299.75	-10.07	1.21	0-50	N 75- 0 E	10.07 S 12.55 E	.67
4400.00	4399.74	-9.65	1.34	0-42	N 68- 0 E	9.64 S 13.82 E	.16
4500.00	4499.73	-9.08	1.66	1-12	N 72- 0 E	9.08 S 15.38 E	.50

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MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INC D M	BEARING D M	COORDINATES LATITUDE DEPARTURE	D-LEG PER 100
4600.00	4599.71	-8.26	2.11	1-14	N 62- 0 E	8.25 S 17.32 E	.21
4625.00	4624.70	-8.00	.54	1-15	N 61- 0 E	7.99 S 17.79 E	.11
4772.00	4771.67	-6.60	2.88	1- 0	N 61- 0 E	6.60 S 20.32 E	.17
5074.00	5073.61	-3.73	5.92	1-15	N 61- 0 E	3.72 S 25.50 E	.08
5481.00	5480.52	.58	8.88	1-15	N 61- 0 E	.58 N 33.26 E	.00
5859.00	5858.44	4.17	7.41	1- 0	N 61- 0 E	4.18 N 39.75 E	.07
6270.00	6269.41	6.78	5.38	0-30	N 61- 0 E	5.79 N 44.46 E	.12
6300.00	6299.41	6.91	.26	0-30	N 61- 0 E	6.91 N 44.69 E	.00

THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF

6300.00 FEET EQUALS 45.22 FEET AT N 81-12 E.



SCIENTIFIC DRILLING INTERNATIONAL

2024 Trade Dr., Midland, TX 79703
P.O. Box 9699 915/563-1339

SURVEY CERTIFICATION

COMPANY Exxon Company U.S.A. WELL NAME & NO. New Mexico "K" State #35
DATE of CERTIFICATION 12/03/88 LOCATION Lea County, New Mexico
TYPE of SURVEY Surface Readout Gyro FROM 00' TO 4625'
JOB NUMBER 132G1288109 WORK ORDER NUMBER 23613

THE ABOVE SURVEY WAS PERFORMED BY ME ON December 08, 1988
THE RESULTS OBTAINED FROM ACTUAL FIELD DATA CONFORM TO ESTABLISHED
STANDARDS AND ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

Dan Jell
SURVEYOR

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

SURVEY CONFIRMATION BY:

Long Rod
SCIENTIFIC DRILLING INTERNATIONAL
REPRESENTATIVE