

ok ②

GIANT

**GIANT EXPLORATION AND
PRODUCTION COMPANY**

P.O. Box 2810
Farmington, New Mexico
87499

505
326-3325

RECEIVED
APR 03 1991
OIL CON. DIV.
DIST. 3

April 1, 1991

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

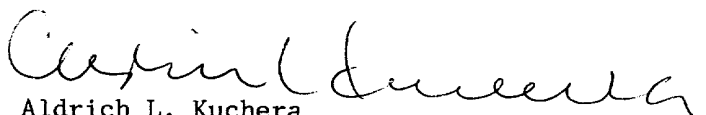
Subject: Debra Geiger Well No. 1
Surface Location: 105' FSL, 125' FEL
Sec. 32, T25N, R11W
San Juan County, New Mexico
Bottom Hole Location: 620' FNL, 470' FWL
Sec. 4, T24N, R11W
San Juan County, New Mexico

Gentlemen:

Enclosed for submission is the Deviation Survey and the notarized acknowledgment by Scientific Drilling International of Midland, Texas, for the Debra Geiger Well No. 1. The surface location of this well is located in Section 32, Township 25 North, Range 11 West of San Juan County, New Mexico, with a bottom hole location of 620' FNL and 470' FWL in Section 4, Township 24 North, Range 11 West of San Juan County, New Mexico, on Lease No. NM 36356.

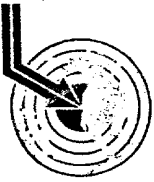
If you have any questions concerning this data, please do not hesitate to contact this office.

Very truly yours,


Aldrich L. Kuchera
President

EJB/das

Enclosure



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

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APR 03 1991

**OIL CON. DIV
DIST. 3**

SURVEY CERTIFICATION

COMPANY Giant Exploration & Producing WELL NAME & NO. Gieger #1
DATE of CERTIFICATION 3/12/91 LOCATION San Juan County, New Mexico
TYPE of SURVEY Magnetic Multishot FROM 360' TO 4375'
JOB NUMBER 32M0291033 WORK ORDER NUMBER 30099

A.P.I. WELL NO. _____

THE ABOVE SURVEY WAS PERFORMED BY ME ON 2/5/91 19_____
THE RESULTS OBTAINED FROM ACTUAL FIELD DATA CONFORM TO ESTABLISHED
STANDARDS AND ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

[Signature]
SURVEYOR

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

SURVEY CONFIRMATION BY: [Signature]
SCIENTIFIC DRILLING INTERNATIONAL
REPRESENTATIVE

SINGLE ACKNOWLEDGMENT

THE STATE OF TEXAS,

COUNTY OF MIDLAND

BEFORE ME, the undersigned, a Notary Public,

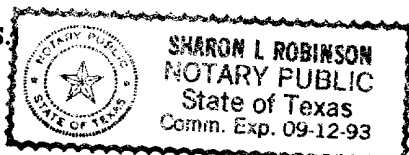
SHARON L. ROBINSON

, in and for said County, Texas, on this day personally appeared
RICK EATON FOR SCIENTIFIC DRILLING INTERNATIONAL

known to me to be the person whose name IS subscribed to the foregoing instrument, and acknowledged
to me that HE he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, This 12 day of MARCH, A. D. 1991

(L. S.)



[Signature]
SHARON L. ROBINSON

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1963 JUN 11

OIL CONT. DIV.
DIST. 3

Scientific Drilling Int'l
SURVEY CALCULATION REPORT
ver - 1.27A

Company: Giant Expl. & Prod. Probe #: 2118
Location: San Juan County, N.M. Section Plane: S 61.32 E
Field: Well no: Gieger #1
Declination: 12.00E Vertical Section Origin:
Operator: Scientific Drilling North: 0.00 East: 0.00
Time: 2-5-91
Filename: 661MS1 Depth Units -> FEET

Comments:

Data Source (D.S.) types : (Manually entered data starts with '*')

CS - CHAMP Singleshot MS - Magnetic SS TD - Total Depth
CM - CHAMP Multishot MM - Magnetic MS TI - Tiein Point
CC - CHAMP Compensated MW - M.W.D.
GS - Gyro Singleshot PR - Projection
GM - Gyro Multishot ST - Steering Tool

Calculation Method - Minimum Curvature

**** RECORD OF SURVEY ****

Measured Depth	Inc (deg)	Azimuth (deg)	TVD	T O T A L Rec Coordinates		Vertical Section	Dogleg Severity	D.S.
360.0	0.00	N 0.00W	360.0	0.0N	0.0E	0.0	0.00	*TI
476.0	0.40	N 18.43E	476.0	0.4N	0.1E	-0.1	0.34	CM
566.0	0.42	N 77.88E	566.0	0.7N	0.5E	0.1	0.45	CM
657.0	0.14	N 51.88E	657.0	0.9N	1.0E	0.4	0.32	CM
747.0	0.24	S 33.60E	747.0	0.8N	1.2E	0.6	0.33	CM
838.0	0.19	N 69.65W	838.0	0.7N	1.1E	0.7	0.45	CM
928.0	0.15	S 30.31E	928.0	0.6N	1.0E	0.6	0.36	CM
1018.0	0.21	S 78.96E	1018.0	0.5N	1.3E	0.9	0.18	CM
1109.0	0.50	S 43.01W	1109.0	0.2N	1.2E	0.9	0.70	CM
1199.0	0.53	S 72.28W	1199.0	0.2S	0.5E	0.6	0.29	CM
1289.0	0.57	S 41.95W	1289.0	0.7S	0.2W	0.2	0.32	CM
1380.0	0.34	S 72.39W	1380.0	1.1S	0.8W	-0.1	0.36	CM
1470.0	0.52	S 56.49W	1470.0	1.4S	1.4W	-0.5	0.24	CM
1561.0	0.41	S 17.64W	1561.0	2.0S	1.8W	-0.6	0.36	CM
1651.0	0.26	S 19.32W	1651.0	2.5S	2.0W	-0.5	0.17	CM
1741.0	0.53	S 24.49W	1741.0	3.0S	2.2W	-0.5	0.30	CM
1832.0	0.35	S 72.83W	1832.0	3.5S	2.7W	-0.6	0.44	CM
1922.0	0.57	S 54.87W	1922.0	3.9S	3.3W	-1.0	0.29	CM
2013.0	0.21	S 37.74W	2013.0	4.2S	3.8W	-1.3	0.41	CM
2103.0	0.29	N 85.53W	2103.0	4.4S	4.1W	-1.5	0.27	CM
2193.0	0.33	S 42.57E	2193.0	4.5S	4.1W	-1.5	0.63	CM
2284.0	4.05	S 24.69E	2283.9	7.6S	2.6W	1.4	4.11	CM
2374.0	6.96	S 16.05E	2373.5	15.8S	0.2E	7.8	3.36	CM
2464.0	9.00	S 18.74E	2462.6	27.7S	4.0E	16.8	2.30	CM
2555.0	10.15	S 18.93E	2552.3	42.0S	8.9E	28.0	1.27	CM
2645.0	11.22	S 18.47E	2640.8	57.8S	14.2E	40.2	1.19	CM
2736.0	12.75	S 18.31E	2729.8	75.7S	20.2E	54.1	1.68	CM
2826.0	14.24	S 18.69E	2817.3	95.7S	26.9E	69.5	1.66	CM
2916.0	16.08	S 18.96E	2904.1	117.9S	34.5E	86.8	2.04	CM
3009.0	17.77	S 17.09E	2993.1	143.7S	42.8E	106.5	1.91	CM

Scientific Drilling Int'l
 Company: Giant Expl. & Prod.
 Declination: 12.00E
 Filename: 661MS1

Section Plane: S 61.32 E
 Time: 2-5-91
 Depth Units -> FEET

Calculation Method - Minimum Curvature

**** RECORD OF SURVEY ****

Measured Depth	Inc (deg)	Azimuth (deg)	TVD	T O T A L		Vertical Section	Dogleg Severity	D.S.
				Rec Coordinates				
3102.0	19.46	S 16.79E	3081.2	172.1S	51.5E	127.7	1.82	CM
3194.0	20.13	S 15.12E	3167.8	202.1S	60.0E	149.6	0.95	CM
3287.0	21.02	S 15.55E	3254.9	233.6S	68.7E	172.3	0.97	CM
3379.0	21.34	S 14.62E	3340.7	265.7S	77.3E	195.3	0.51	CM
3472.0	22.10	S 14.71E	3427.1	299.0S	86.0E	218.9	0.81	CM
3565.0	22.61	S 19.89E	3513.1	332.7S	96.5E	244.4	2.19	CM
3657.0	22.42	S 26.33E	3598.1	365.1S	110.4E	272.0	2.69	CM
3750.0	23.19	S 34.84E	3683.8	396.0S	128.7E	302.9	3.64	CM
3843.0	22.82	S 42.24E	3769.4	424.4S	151.3E	336.4	3.14	CM
3935.0	22.80	S 48.60E	3854.3	449.4S	176.6E	370.6	2.68	CM
4028.0	22.31	S 56.08E	3940.2	471.2S	204.8E	405.8	3.13	CM
4120.0	21.68	S 62.33E	4025.5	488.8S	234.4E	440.2	2.64	CM
4213.0	22.41	S 65.92E	4111.7	504.0S	265.8E	475.0	1.65	CM
4306.0	23.70	S 64.70E	4197.3	519.2S	298.8E	511.4	1.48	CM
4375.0	23.49	S 64.43E	4260.5	531.1S	323.8E	538.9	0.34	CM

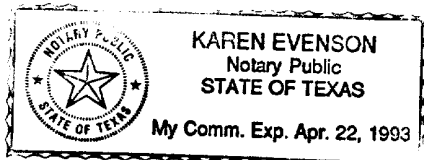
CLOSURE: Distance - 622.01
 Direction - S31.37E

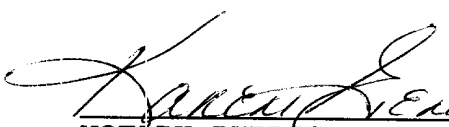

RICKY NEAGLE

THE STATE OF TEXAS §
 §
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority on this day personally appeared RICKY NEAGLE, who acknowledged to me that he executed the above and foregoing instrument for the purposes and consideration therein expressed.

Given under my hand and seal of office this 12th day of March, 1991.




NOTARY PUBLIC, IN AND FOR
THE STATE OF TEXAS

DRILLING MEASUREMENTS INC.
Directional Survey Data

Company: Giant-Explo.&Prod.Co.
Well: Debra-Geiger#1
Location: San-Juan, Co.N.M.
Field: Lower-Bisti-Gallup
Operator: Neagle-Lamb
Proposed Azimuth: 118.68 (S61.32E)

Date: 03/13/91
Probe: 408
Units: feet
Declination: 9.00
(West - / East +)

Minimum Curvature

DRILLING DIRECTION			CLOSURE INFORMATION						
MD	AZ	INC	D-L/100'	TVD	VS	NORTH	EAST	DISP	DISP BRG
4375.0	115.5	23.5	0.0	4260.5	512.8	-531.2	293.9	607.1	151.0
4410.0	112.0	24.8	5.5	4292.4	527.0	-537.0	307.0	618.5	150.2
4441.0	112.5	26.6	5.8	4320.4	540.4	-542.0	319.4	629.2	149.5
4472.0	113.1	28.8	7.2	4347.8	554.7	-547.6	332.7	640.8	148.7
4503.0	113.3	30.8	6.4	4374.7	570.1	-553.7	346.9	653.4	147.9
4534.0	112.5	33.5	8.8	4401.0	586.5	-560.1	362.1	666.9	147.1
4565.0	112.6	35.4	6.3	4426.5	603.9	-566.8	378.3	681.5	146.3
4594.0	111.8	37.8	8.3	4449.8	621.1	-573.3	394.3	695.8	145.5
4625.0	112.1	40.2	7.8	4473.9	640.4	-580.6	412.4	712.2	144.6
4655.0	111.6	42.3	7.3	4496.4	660.1	-588.0	430.7	728.9	143.8
4687.0	111.5	44.9	8.0	4519.6	682.0	-596.1	451.3	747.7	142.9
4718.0	111.4	47.1	7.2	4541.1	704.1	-604.3	472.0	766.8	142.0
4748.0	111.4	48.6	4.8	4561.3	726.2	-612.4	492.7	786.0	141.2
4779.0	111.2	50.5	6.1	4581.4	749.6	-620.9	514.7	806.5	140.3
4810.0	111.1	53.1	8.6	4600.6	773.7	-629.7	537.4	827.9	139.5
4840.0	111.4	55.4	7.5	4618.1	797.8	-638.6	560.1	849.4	138.7
4872.0	111.4	57.4	6.4	4635.8	824.3	-648.3	584.9	873.2	137.9
4901.0	112.2	59.1	6.4	4651.1	848.8	-657.5	607.8	895.4	137.2
4932.0	112.2	61.0	6.1	4666.5	875.5	-667.6	632.7	919.8	136.5
4963.0	111.7	63.6	8.5	4680.9	902.7	-677.9	658.1	944.8	135.8
4994.0	110.4	66.2	9.1	4694.1	930.6	-688.0	684.3	970.4	135.2
5023.0	111.1	67.9	6.3	4705.4	957.0	-697.5	709.3	994.8	134.5
5055.0	110.9	70.5	8.4	4716.7	986.7	-708.2	737.2	1022.3	133.9
5085.0	110.6	72.9	7.9	4726.1	1014.9	-718.3	763.9	1048.5	133.2
5114.0	110.6	74.7	6.1	4734.2	1042.4	-728.1	789.9	1074.3	132.7
5145.0	110.4	76.4	5.6	4742.0	1072.1	-738.6	818.0	1102.1	132.1
5172.0	111.9	78.0	7.7	4747.9	1098.2	-748.1	842.6	1126.8	131.6

[illegible]

1. The purpose of this report is to provide a summary of the results of the study conducted by the Research Committee on the Effects of the Vietnam War on the Health of Veterans. The study was conducted from 1975 to 1980 and involved a large number of veterans who served in Vietnam during the war.

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

DRILLING DIRECTION					CLOSURE INFORMATION				
MD	AZ	INC	D-L/100'	TVD	VS	NORTH	EAST	DISP	DISP BRG

BOTTOM HOLE CLOSURE 1126.8 FEET AT 131.6 (S48.40E)

