

W1

sperry-sun



J. A. Fouché
President

LEASE: Loweland
WELL : No. 2
FIELD: King North

October 23, 1978

Cotton Petroleum Corporation
420 Wall Towers West
Midland, TX 79701

Gentlemen:

The enclosed film and folders contains the results of our Magnetic Multishot survey job no. MS-6180, Loweland lease, well no. 2, King North field, in Lea County, New Mexico on October 16, 1978. This survey was from 4,700 feet to a depth of 11,845 feet.

One of these folders contains the original of the computation sheets and field data sheets.

It has been a pleasure to perform this survey for you.

Very truly yours,

SPERRY-SUN, INC.

Wavey Martin
District Manager

WM/jp
enclosures

CITICORP PETROLEUM CORP.
LOWLAND WELL NO. 2
KING NORTH FIELD
LEA COUNTY, NEW MEXICO
MAGNETIC MULTISHOT

DATE OF SURVEY OCTOBER 16, 1972
VERTICAL SECTION DIRECTION
10 DEG. EAST CORRECTION APPLIED
45-6190

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SPERRY-SUN, INC.

RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	SUS SEA TVD	COURSE INCLINATION DEG MIN	COURSE DIRECTION DEG	ASSUME VERTICAL TO 4700 FT.	DOC-LEG SEV DEG/100	RECTANGULAR NORTH/SOUTH	TOTAL COORDINATES EAST/WEST	VERTICAL SECTION
4700	4700.00	4700.00	0 0	S	0 E	0.	0.	0.	0.
4800	4800.00	4800.00	0 0	S	0 E	0.	0.	0.	0.
4900	4900.00	4900.00	0 0	S	0 E	0.	0.	0.	0.
5000	5000.00	5000.00	0 0	S	0 E	0.	0.	0.	0.
5100	5100.00	5100.00	0 30	S	15 W	0.50	0.42 S	0.11 W	0.42
5200	5199.99	5199.99	0 30	S	7 W	0.07	1.23 S	0.23 W	1.23
5300	5299.99	5299.99	0 30	S	6 E	0.11	2.14 S	0.29 W	2.14
5400	5399.99	5399.99	0 30	S	2 E	0.03	3.01 S	0.23 W	3.01
5500	5499.98	5499.98	0 30	S	24 E	0.19	3.55 S	0.03 W	3.55
5600	5599.98	5599.98	0 45	S	21 E	0.25	4.86 S	0.38 E	4.86
5700	5699.96	5699.96	1 15	S	30 E	0.52	6.41 S	1.16 E	6.41
5800	5799.94	5799.94	1 15	S	29 E	0.02	8.31 S	2.23 E	8.31
5900	5899.92	5899.92	1 0	S	30 E	0.25	10.02 S	3.20 E	10.02
6000	5999.90	5999.90	1 0	S	33 E	0.05	11.51 S	4.11 E	11.51
6100	6099.89	6099.89	1 0	S	36 E	0.05	12.95 S	5.10 E	12.95
6200	6199.87	6199.87	1 0	S	35 E	0.01	14.37 S	6.11 E	14.37
6300	6299.86	6299.86	0 45	S	22 E	0.32	15.69 S	6.36 E	15.69
6400	6399.85	6399.85	1 0	S	42 E	0.39	16.94 S	7.69 E	16.94
6500	6499.83	6499.83	1 30	S	32 E	0.54	18.70 S	8.06 E	18.69
6600	6599.79	6599.79	1 30	S	46 E	0.37	20.72 S	10.60 E	20.71
6700	6699.77	6699.77	1 0	S	53 E	0.52	22.16 S	12.24 E	22.14
6800	6799.75	6799.75	1 0	S	64 E	0.19	23.06 S	13.72 E	23.05
6900	6899.74	6899.74	1 0	S	64 E	0.	23.53 S	15.29 E	23.51
7000	6999.73	6999.73	0 30	S	56 E	0.51	24.46 S	16.43 E	24.44
7100	7099.72	7099.72	1 0	S	52 E	0.50	25.24 S	17.43 E	25.22
7200	7199.70	7199.70	1 0	S	39 E	0.23	26.45 S	18.72 E	26.43
7300	7299.69	7299.69	0 45	S	45 E	0.23	27.57 S	19.75 E	27.55
7400	7399.68	7399.68	0 45	S	54 E	0.04	28.39 S	20.77 E	28.37
7500	7499.67	7499.67	1 0	S	32 E	0.41	29.52 S	21.76 E	29.49
7600	7599.66	7599.66	1 0	S	27 E	0.00	31.05 S	22.60 E	31.05

OTTON PETROLEUM CORP.
 ORELAND WELL NO. 2
 IN NORTH FIELD
 EA COUNTY, NEW MEXICO
 AGNETIC MULTISHOT

DATE OF SURVEY OCTOBER 16, 1970
 VERTICAL SECTION CORRECTION
 10 DEG. EAST CORRECTION APPLIED
 15-6180

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SPEERY-SUB, INC.

MEASURED DEPTH	TRUE VERTICAL DEPTH	SUB SEA TVD	COURSE INCLINATION DEG MIN	RECORD OF SURVEY		DOC-LEG SEV DEG/100	TOTAL		VERTICAL SECTION
				COURSE DIRECTION DEG	COURSE DIRECTION DEG		RECTANGULAR NORTH/SOUTH	COORDINATES EAST/WEST	
7700	7699.64	7699.64	1 0	S	23 E	0.07	32.61 S	23.36 E	22.99
7800	7799.63	7799.63	1 0	S	24 E	0.01	34.21 S	24.05 E	34.10
7900	7899.61	7899.61	1 0	S	16 E	0.14	35.85 S	24.65 E	39.7
8000	7999.60	7999.60	1 0	S	17 E	0.01	37.52 S	25.15 E	37.50
8100	8099.58	8099.58	1 0	S	20 E	0.05	39.18 S	25.70 E	39.15
8200	8199.57	8199.57	1 0	S	8 E	0.21	40.86 S	26.12 E	40.33
8300	8299.55	8299.55	1 15	S	17 E	0.31	42.77 S	26.56 E	42.74
8400	8399.53	8399.53	0 30	S	35 E	0.79	44.17 S	27.13 E	44.14
8500	8499.52	8499.52	1 15	S	9 E	0.33	45.60 S	27.55 E	45.52
8600	8599.50	8599.50	1 15	S	12 E	0.07	47.75 S	27.95 E	47.72
8700	8699.47	8699.47	1 15	S	11 E	0.02	49.89 S	28.38 E	49.86
8800	8799.45	8799.45	1 30	S	11 E	0.25	52.24 S	28.84 E	52.21
8900	8899.41	8899.41	1 30	S	0 E	0.29	54.84 S	29.00 E	54.81
9000	8999.38	8999.38	1 30	S	3 E	0.08	57.45 S	29.16 E	57.42
9100	9099.34	9099.34	1 45	S	0 E	0.26	60.29 S	29.23 E	60.25
9200	9199.30	9199.30	1 30	S	1 W	0.25	63.12 S	29.20 E	63.10
9300	9299.26	9299.26	1 30	S	1 W	0.	65.74 S	29.15 E	65.71
9400	9399.23	9399.23	1 30	S	6 W	0.13	68.34 S	28.95 E	68.31
9500	9499.19	9499.19	1 30	S	7 W	0.02	70.94 S	28.61 E	70.91
9600	9599.15	9599.15	1 45	S	5 W	0.26	73.76 S	28.32 E	73.73
9700	9699.11	9699.11	1 30	S	1 E	0.30	76.59 S	28.21 E	76.56
9800	9799.08	9799.08	1 30	S	5 E	0.10	79.20 S	28.34 E	79.17
9900	9899.02	9899.02	2 15	S	3 E	0.75	82.47 S	28.56 E	82.44
10000	9998.95	9998.95	1 45	S	6 E	0.51	85.94 S	28.82 E	85.91
10100	10098.90	10098.90	2 15	S	7 E	0.50	89.41 S	29.22 E	89.38
10200	10198.83	10198.83	2 0	S	11 E	0.29	93.07 S	29.80 E	93.04
10300	10298.76	10298.76	2 15	S	17 E	0.33	96.66 S	30.70 E	96.63
10400	10398.68	10398.68	2 30	S	20 E	0.28	100.56 S	32.02 E	100.53
							103.57 S	33.33 E	103.55

UNION PETROLEUM CORP.
 OUELAND WELL NO. 2
 IN NORTH FIELD
 SA COUNTY, NEW MEXICO
 MAGNETIC MULTISHOT

DATE OF SURVEY OCTOBER 16, 1970
 VERTICAL SECTION DIRECTION CLUTCH
 10 DEG. EAST CORRECTION APPLIED
 03-0100

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SPERRY-SUN, INC.

MEASURED DEPTH	TRUE VERTICAL DEPTH	SUB SEA TVD	COURSE		RECORD OF SURVEY		DOG-LEG SEV DEG/100	TOTAL		VERTICAL SECTION
			INCLINATION DEG MIN	DIRECTION	DIRECTION DEG	RECTANGULAR NORTH/SOUTH		COORDINATES EAST/WEST		
10700	10698.42	10698.42	2 15	S	3	W	0.35	112.94 S	33.44 E	112.31
10800	10798.34	10798.34	2 15	S	6	W	0.12	116.76 S	33.13 E	116.72
10900	10898.27	10898.27	2 15	S	12	W	0.24	120.53 S	32.52 E	120.59
11000	10998.20	10998.20	2 0	S	7	W	0.31	124.28 S	31.90 E	124.25
11100	11098.14	11098.14	2 0	S	19	W	0.42	127.66 S	31.12 E	127.63
11200	11198.07	11198.07	2 15	S	23	W	0.29	131.12 S	29.78 E	131.09
11300	11297.97	11297.97	2 45	S	25	W	0.51	135.10 S	28.00 E	135.07
11400	11397.86	11397.86	2 45	S	29	W	0.10	139.37 S	25.82 E	139.34
11500	11497.64	11497.64	4 45	S	36	W	2.05	144.82 S	22.23 E	144.80
11600	11597.06	11597.06	7 30	S	29	W	2.84	153.88 S	16.63 E	153.86
11700	11696.18	11696.18	7 45	S	30	W	0.22	165.43 S	10.09 E	165.42
11800	11795.26	11795.26	7 45	S	33	W	0.40	176.92 S	3.05 E	176.92
11845	11839.83	11839.83	7 15	S	34	W	1.15	181.82 S	0.19 W	181.82

** THE CALCULATIONS ARE BASED ON THE MINIMUM RADIUS OF CURVATURE METHOD **

HORIZONTAL DISPLACEMENT = 181.82 FEET AT SOUTH 0 DEG. 4 MIN. WEST (TRUE)

RECEIVED

JAN 11 1979

OIL CONSERVATION COMM.
FCHS, N. H.