

sperry-sun



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SEP -5 1978

O. C. C.
ARTESIA, OFFICE

LEASE : Empire Abo
WELL : No. I-273
FIELD : Empire Abo

J. A. Fouché
President

June 2, 1978

Atlantic Richfield Company
Post Office Box 1710
Hobbs, NM 88240

Gentlemen:

The enclosed film and folders contains the results of our Magnetic Multishot survey job no. MS-6066, Empire Abo lease, well no. I-273, Empire Abo field, in Eddy County, New Mexico on May 31, 1978. This survey was from 550 feet to a depth of 4,458 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

ATLANTIC RICHFIELD CO
 EMPIRE ABO WELL NO. 1-273
 EMPIRE ABO FIELD
 EDDY COUNTY, NEW MEXICO
 MAGNETIC MULTISHOT

DATE OF SURVEY MAY 31, 1978
 VERTICAL SECTION DIRECTION
 11 DEG. EAST CORRECTION
 CLOSURE
 APPLIED
 MS-6066

PAGE 1

SPEERY-SUN INC RECORD OF SURVEY									
MEASURED DEPTH	TRUE VERTICAL DEPTH	SUB SEA TVD	COURSE		DOO-LEG SEV DEG/100	TOTAL		VERTICAL SECTION	
			INCLINATION DEG MIN	DIRECTION DEG		RECTANGULAR NORTH/SOUTH	COORDINATES EAST/WEST		
550	550.00	550.00	0 45	N 28 E	1.50	0.	0.	0.	
600	600.00	600.00	1 0	N 4 E	0.44	0.29	0.15	0.24	
700	699.99	699.99	1 0	N 33 W	0.63	1.74	0.52	1.56	
800	799.97	799.97	1 15	N 25 W	0.29	3.34	0.11	3.22	
900	899.95	899.95	1 45	N 18 W	0.53	5.06	0.83	5.11	
1000	999.92	999.92	1 45	N 31 W	0.40	7.50	1.76	7.70	
1100	1099.87	1099.87	2 0	N 25 W	0.32	10.26	3.02	10.69	
1200	1199.82	1199.82	2 15	N 28 W	0.27	13.15	4.54	13.85	
1300	1299.75	1299.75	2 0	N 15 W	0.54	16.47	6.20	17.47	
1400	1399.68	1399.68	2 0	N 18 W	0.10	19.89	7.58	21.12	
1500	1499.62	1499.62	2 0	N 30 W	0.42	23.23	8.57	24.60	
1600	1599.56	1599.56	2 15	N 21 W	0.42	26.40	9.98	26.02	
1700	1699.49	1699.49	2 45	N 31 W	0.66	29.75	11.55	31.64	
1800	1799.40	1799.40	2 30	N 22 W	0.46	33.63	13.49	35.88	
1900	1899.29	1899.29	2 15	N 19 W	0.28	37.71	15.55	40.33	
2000	1999.21	1999.21	2 30	N 13 W	0.24	41.59	17.00	44.44	
2100	2099.12	2099.12	2 30	N 12 W	0.45	45.37	18.67	48.51	
2200	2199.03	2199.03	2 30	N 9 W	0.61	49.41	20.22	52.80	
2300	2298.93	2298.93	2 30	N 2 W	0.	53.65	21.27	57.16	
2400	2398.85	2398.85	2 15	N 13 W	0.38	57.71	22.04	61.29	
2500	2498.77	2498.77	2 15	N 12 W	0.24	61.57	22.72	65.21	
2600	2598.70	2598.70	2 0	N 9 W	0.25	65.19	23.52	68.91	
2700	2698.65	2698.65	1 30	N 2 W	0.51	68.19	24.09	71.96	
2800	2798.62	2798.62	1 15	N 13 W	0.30	70.57	24.33	74.33	
2900	2898.60	2898.60	1 15	N 18 W	0.24	72.73	24.62	76.49	
3000	2998.58	2998.58	1 15	N 24 E	0.11	74.83	25.20	78.67	
3100	3098.56	3098.56	1 0	N 19 E	0.84	76.66	25.18	80.45	
3200	3198.54	3198.54	1 15	N 12 E	0.27	78.49	24.47	82.06	
3300	3298.52	3298.52	0 45	N 2 W	0.51	80.16	23.98	83.56	
3400	3398.52	3398.52	0 30	N 2 W	0.29	81.24	23.86	84.58	

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SPEERY-SUN INC

RECORD OF SURVEY

MEASURED DEPTH	TRUE VERTICAL DEPTH	SUB SEA TVD	COURSE INCLINATION DEG MIN	COURSE DIRECTION DEG	DOG-LEG SEV DEG/100	TOTAL		VERTICAL SECTION
						RECTANGULAR NORTH/SOUTH	COORDINATES EAST/WEST	
3500	3498.51	3498.51	0 45	N 10 E	0.28	82.32 N	23.76 W	85.61
3600	3598.51	3598.51	0 30	N 25 E	0.30	83.36 N	23.46 W	86.55
3700	3698.50	3698.50	0 45	N 8 W	0.43	84.40 N	23.37 W	87.54
3800	3798.49	3798.49	0 45	N 36 E	0.56	85.58 N	23.08 W	88.61
3900	3898.48	3898.48	1 0	N 18 E	0.37	86.94 N	22.42 W	89.78
4000	3998.47	3998.47	1 0	N 18 E	0.	88.60 N	21.88 W	91.26
4100	4098.45	4098.45	1 0	N 17 W	0.60	90.26 N	21.87 W	92.87
4200	4198.44	4198.44	1 0	N 25 W	0.14	91.89 N	22.49 W	94.60
4300	4298.42	4298.42	1 0	N 34 W	0.16	93.40 N	23.35 W	96.28
4400	4398.41	4398.41	1 0	N 5 E	0.67	95.00 N	23.76 W	97.92
4458	4456.40	4456.40	1 15	N 21 E	0.69	96.09 N	23.49 W	98.92

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

HORIZONTAL DISPLACEMENT = 68.92 FEET AT NORTH 13 DEG. 44 MIN. WEST (TRUE)