

**POOL HORIZONTAL DRILLING
SERVICES CO.**

P.O. Box 4271
Houston, Texas 77210
10375 Richmond Avenue (77042)

A subsidiary of
Pool Energy Services Co.

Tel: 713/954-3000
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December 6, 1993

Mr. David Sweeney
Hanson Operating Company Inc.
P.O. Box 1515
Roswell, NM 88202

RE: Survey Certification
Hanson Operating Company Inc.
Tuxedo Federal No. 1
Roosevelt Co., NM

Mr. David Sweeney,

This is to certify that on November 12, 1993, November 14, 1993, and November 20, 1993 magnetic multi-shot directional surveys were run by Mr. Jose Chavez, directional drilling technician employed by Pool Horizontal Drilling Services Co. on the Tuxedo Federal No. 1 (NM71794), Roosevelt Co., NM, for Hanson Operating Company Inc.

I certify that I have personal knowledge of these surveys and have reviewed same. The attached results represent a true and accurate representation of the bottom hole location in relationship to the surface location of the subject well bore.

Yours truly,

James Y. Hornor
Division Manager
Pool Horizontal Drilling Services
Operator No. 670880

**BEFORE THE
OIL CONSERVATION DIVISION**
Santa Fe, New Mexico

JYH/lak

Case No. 10856 Exhibit No. 2

Submitted by: Hanson Operating Company, Inc.

Hearing Date: January 6, 1994

HANSON OPERATING COMPANY INC.
TUXEDO FEDERAL NO. 1

RADIUS OF CURVATURE METHOD

VERTICAL SECTION OR CLOSURE DIRECTION IS 283.56 DEGREES

MEAS. DEPTH	SURVEY INCL	DIR.	DEPTH (TVD)	NORTH -SOUTH	EAST -WEST	CLOSURE DIST.	DIR.
500.00	0.64	N22W	500.00	2.58	1.63	2.79	N22W
1000.00	0.53	N58W	999.97	6.41	-4.30	7.72	N34W
1500.00	0.55	N78W	1499.95	8.13	-8.64	11.86	N47W
2000.00	0.59	S85W	1999.93	8.43	-13.57	15.98	N58W
2500.00	2.46	N50E	2499.73	17.73	-17.37	24.82	N44W
3000.00	2.75	N42E	2999.21	33.47	-1.00	33.49	N 2W
3500.00	2.00	N73E	3498.78	44.37	16.32	47.28	N20E
4000.00	3.42	S37E	3998.21	37.44	37.43	52.94	N45E
4500.00	2.64	S 4E	4497.50	13.10	46.79	48.59	N74E
4751.00	2.46	S 8E	4748.25	2.01	48.14	48.18	N88E
...THE ABOVE IS GYRO SURVEY INPUT DATA...							
4832.00	3.50	S 9E	4829.14	-2.15	48.79	48.84	S87E
4833.00	3.00	S20E	4830.14	-2.20	48.81	48.86	S87E
4834.00	3.00	S22E	4831.14	-2.25	48.83	48.88	S87E
4835.00	3.00	S25W	4832.14	-2.30	48.83	48.88	S87E
4836.00	3.75	S38W	4833.14	-2.35	48.79	48.85	S87E
4837.00	5.00	S55W	4834.13	-2.40	48.74	48.80	S87E
4838.00	6.00	S62W	4835.13	-2.45	48.66	48.72	S87E
4839.00	8.00	S74W	4836.12	-2.50	48.55	48.61	S87E
4840.00	11.00	S82W	4837.11	-2.53	48.38	48.45	S87E
4841.00	12.00	N90W	4838.09	-2.55	48.19	48.25	S87E
4842.00	13.00	N80W	4839.06	-2.53	47.97	48.04	S87E
4843.00	14.00	N72W	4840.04	-2.47	47.74	47.81	S87E
4844.00	16.00	N56W	4841.00	-2.36	47.51	47.57	S87E
4845.00	17.00	N36W	4841.96	-2.16	47.31	47.36	S87E
4846.00	18.50	N18W	4842.91	-1.89	47.17	47.21	S88E
4847.00	21.00	N 8W	4843.85	-1.56	47.09	47.12	S88E
4848.00	24.00	N 7W	4844.78	-1.19	47.04	47.06	S89E
4849.00	26.00	N10W	4845.68	-0.77	46.98	46.99	S89E
4850.00	28.00	N15W	4846.58	-0.32	46.88	46.88	S90E
4851.00	30.00	N22W	4847.45	0.14	46.73	46.73	N90E
4852.00	31.75	N29W	4848.31	0.60	46.51	46.51	N89E
4853.00	33.00	N45W	4849.15	1.02	46.19	46.20	N89E
4854.00	35.00	N42W	4849.98	1.43	45.80	45.83	N88E
4855.00	36.50	N48W	4850.79	1.84	45.39	45.43	N88E
4856.00	38.00	N55W	4851.59	2.22	44.92	44.97	N87E
4857.00	39.75	N58W	4852.37	2.57	44.39	44.47	N87E
4858.00	41.00	N62W	4853.13	2.89	43.83	43.93	N86E
4859.00	43.00	N65W	4853.87	3.19	43.23	43.35	N86E
4860.00	45.00	N68W	4854.59	3.46	42.60	42.74	N85E
4861.00	46.00	N70W	4855.29	3.72	41.93	42.10	N85E

4862.00	48.25	N71W	4855.97	3.97	41.24	41.43	N85E
4863.00	50.25	N73W	4856.63	4.20	40.52	40.74	N84E
4864.00	52.00	N75W	4857.25	4.41	39.77	40.02	N84E
4865.00	54.00	N75W	4857.85	4.62	39.00	39.27	N83E
4866.00	55.75	N77W	4858.43	4.82	38.21	38.51	N83E
4867.00	57.50	N77W	4858.98	5.01	37.39	37.73	N82E
4868.00	59.00	N78W	4859.51	5.19	36.56	36.93	N82E
4869.00	60.75	N78W	4860.01	5.37	35.72	36.12	N81E
4870.00	62.75	N79W	4860.48	5.55	34.85	35.29	N81E
4871.00	63.75	N78W	4860.93	5.72	33.98	34.46	N80E
4872.00	65.75	N78W	4861.36	5.91	33.09	33.62	N80E
4873.00	65.75	N78W	4861.77	6.10	32.20	32.78	N79E
4874.00	69.75	N79W	4862.15	6.29	31.30	31.92	N79E
4875.00	71.50	N78W	4862.48	6.47	30.37	31.05	N78E
4876.00	73.75	N79W	4862.78	6.66	29.44	30.18	N77E
4877.00	75.50	N79W	4863.04	6.85	28.49	29.30	N76E
4878.00	76.50	N79W	4863.29	7.03	27.54	28.42	N76E
4879.00	78.25	N78W	4863.50	7.23	26.58	27.55	N75E
4880.00	79.75	N79W	4863.69	7.42	25.62	26.67	N74E
4881.00	81.50	N79W	4863.86	7.61	24.65	25.80	N73E
4882.00	83.25	N79W	4863.99	7.80	23.68	24.93	N72E
4883.00	85.00	N79W	4864.09	7.99	22.70	24.07	N71E
4884.00	87.00	N79W	4864.16	8.18	21.72	23.21	N69E
4885.00	88.50	N79W	4864.20	8.37	20.74	22.37	N68E
4886.00	90.00	N78W	4864.22	8.57	19.76	21.54	N67E
4887.00	90.00	N78W	4864.22	8.78	18.78	20.73	N65E
4888.00	92.00	N79W	4864.20	8.98	17.80	19.94	N63E
4889.00	92.00	N79W	4864.16	9.17	16.82	19.16	N61E
4890.00	92.00	N79W	4864.13	9.36	15.84	18.40	N59E
4891.00	92.75	N79W	4864.09	9.55	14.86	17.66	N57E
4895.00	92.50	N79W	4863.90	10.31	10.94	15.03	N47E
4900.00	92.50	N79W	4863.69	11.27	6.04	12.78	N28E
4910.00	92.50	N78W	4863.25	13.26	-3.75	13.78	N16W
4920.00	92.50	N78W	4862.81	15.33	-13.53	20.45	N41W
4930.00	92.50	N78W	4862.38	17.41	-23.30	29.09	N53W
4940.00	92.50	N78W	4861.94	19.49	-33.07	38.39	N59W
4950.00	92.00	N78W	4861.55	21.57	-42.85	47.97	N63W
4960.00	92.00	N78W	4861.20	23.64	-52.62	57.69	N66W
4970.00	92.00	N79W	4860.85	25.64	-62.41	67.47	N68W
4980.00	89.00	N81W	4860.76	27.37	-72.26	77.27	N69W
4990.00	88.00	N82W	4861.02	28.85	-82.15	87.07	N71W
5000.00	90.00	N82W	4861.20	30.24	-92.05	96.89	N72W
5010.00	90.00	N82W	4861.20	31.63	-101.95	106.74	N73W
5014.00	90.50	N79W	4861.18	32.29	-105.89	110.71	N73W
5029.00	90.50	N78W	4861.05	35.28	-120.59	125.65	N74W
5049.00	86.25	N79W	4861.62	39.27	-140.18	145.57	N74W
5069.00	86.25	N78W	4862.93	43.25	-159.73	165.49	N75W
5089.00	86.00	N78W	4864.28	47.40	-179.25	185.41	N75W
5109.00	85.75	N78W	4865.72	51.54	-198.77	205.34	N75W
5129.00	85.25	N79W	4867.29	55.52	-218.30	225.25	N76W
5149.00	84.25	N79W	4869.12	59.32	-237.85	245.14	N76W

5169.00	84.25	N79W	4871.12	63.12	-257.39	265.01	N76W
5189.00	84.25	N79W	4873.12	66.91	-276.92	284.89	N76W
5192.00	85.00	N79W	4873.40	67.48	-279.85	287.87	N76W