

STATE OF LOUISIANA
OFFICE OF CONSERVATION

RECEIVED

JUN 08 1989

REPORT OF PROOF OF APPARENT DEVIATION

CR. CON. DIV
DIST. 3

Page 1

SERIAL NO.

OPERATOR Union Texas Petroleum DISTRICT Farmington
FIELD Pump Canyon - MV PARISH San Juan
WELL NAME & NO Nordhaus 4A SEC 12 T 31N R 3W

Degrees Deviation	Deviation Factor	DEGREES DEVIATION	DEPTH FROM SURFACE	LENGTH OF INTERVAL	DEVIATION FACTOR	DEVIATION OF INTERVAL	CUMULATIVE APPARENT DEVIATION	REMARKS
1/2°	.00436	123'	123'	.00873	1.07	1.07		
1/4°	.00873	243'	120'	.02182	2.61	3.68		
1/2°	.01309	383'	140'	.02618	3.67	7.35		
2 3/4°	.01745	611'	229'	.04798	10.94	18.29		
4°	.02182	704'	93'	.06976	6.49	24.78		
3°	.02618	734'	30'	.05234	1.57	26.35		
2 1/2°	.03054	764'	30'	.04362	1.31	27.66		
3 3/4°	.03490	795'	31'	.06540	2.03	29.69		
4°	.03926	861'	66'	.06976	4.60	34.29		
3 1/2°	.04362	923'	62'	.06105	3.79	38.08		
3 1/2°	.04798	1017'	94'	.06105	5.74	43.82		
2 3/4°	.05234	1142'	125'	.04798	6.00	49.82		
2 3/4°	.05669	1236'	94'	.04798	4.51	54.33		
3 1/4°	.06105	1361'	125'	.05669	7.09	61.42		
2 1/2°	.06540	1482'	121'	.04362	5.28	66.70		
2 1/2°	.06976	1608'	125'	.04362	5.45	72.15		
1 3/4°	.07411	1766'	158'	.03054	4.83	76.98		

Certified as Being True & Correct by

Paul H. Bullock

Title Self Drilling Foreman Date 10-29-92

Setty P. Stunt Notary Public

Commission Expires

9-20-92

THREE (3) SIGNED COPIES

STATE OF LOUISIANA
OFFICE OF CONSERVATION

JUL 03 1989

CON. DIV

REPORT OF PROOF OF APPARENT DEVIATION

Page #2 of 3

SERIAL NO. _____

OPERATOR Union Texas Petroleum DISTRICT Farmington
 FIELD Pump Canyon - MV PARISH San Juan
 WELL NAME & NO. Nordhaus #4A SEC. 12 T 31N R 7W

Degrees Deviation	Deviation Factor	DEGREES DEVIATION	DEPTH FROM SURFACE	LENGTH OF INTERVAL	DEVIATION FACTOR	DEVIATION OF INTERVAL	CUMULATIVE APPARENT DEVIATION	REMARKS
1/4	.00436	2°	1984'	218'	.03490	7.61	84.59	
1/4	.00873							
1/4	.01309	2°	2295'	311'	.03490	10.85	95.44	
1	.01745							
1 1/4	.02182	1 1/2°	2791'	496'	.02618	12.99	108.43	
1 1/4	.02618							
1 1/4	.03054	1 3/4°	3288'	497'	.03054	15.18	123.61	
2	.03490							
2 1/4	.03926	1 1/2°	3670'	382'	.02618	10.00	133.61	
2 1/4	.04362							
2 1/4	.04798	1 1/2°	4020'	350'	.02618	9.16	142.77	
3	.05234							
3 1/4	.05669	1 1/2°	4364'	344'	.02618	9.01	151.78	
3 1/4	.06105							
3 1/4	.06540	1 1/2°	4863'	499'	.02618	13.06	164.84	
4	.06976							
4 1/4	.07411	1°	5366'	503'	.01745	8.78	173.62	
4 1/4	.07846							
4 1/4	.08281	3/4°	6023	657	.01309	8.60	182.22	
5	.08716							
5 1/4	.09150							
5 1/4	.09585							
5 1/4	.10019							
6	.10453							
6 1/4	.10887							
6 1/4	.11320							
6 1/4	.11754							
7	.12187							
7 1/4	.12620							
7 1/4	.13053							
7 1/4	.13485							
8	.13917							
8 1/4	.14349							
8 1/4	.14781							
8 1/4	.15212							
9	.15643							
9 1/4	.16074							
9 1/4	.16505							
9 1/4	.16935							
10	.17365							

Certified as Being True & Correct by

Nal H. BullockTitle SA Drilling Foreman Date 10-29-88Betty Jo Lina

Notary Public

Commission Expires

9-20-92