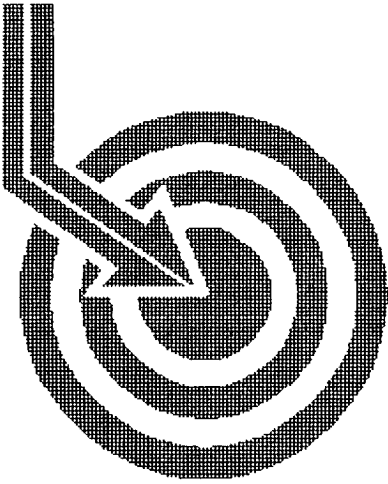




Scientific Drilling

BOPCO

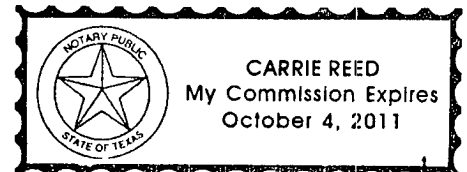
Field: Quahada Ridge
Site: Eddy County, NM
Well: James Ranch Unit #108H
Wellpath: VH - Job #32K1209563
Survey: 12/15/09

This survey is correct to the best of my knowledge and is supported by actual field data.

Richard
Company Representative

Notarized this date 18th of February, 2010.

Carrie Reed
Notary Signature
County of Midland
State of Texas



MRBH



Scientific Drilling International

Survey Report

Company: BOPCO	Date: 12/16/2009	Time: 11:51:52	Page: 1
Field: Quahada Ridge	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: James Ranch Unit #108H	Section (VS) Reference:	Well (0.00N,0.00E,272.37Azi)	
Wellpath: VH - Job #32K1209563	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 12/15/09	Start Date: 12/15/2009
Company: Scientific Drilling Internatio	Engineer: Guebara/Rowe/Williams
Tool: KSRG;Keeper Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	359.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.16	290.77	100.00	0.13	0.05	-0.13	0.16	0.14	290.77
200.00	0.20	261.94	200.00	0.44	0.07	-0.43	0.10	0.44	279.75
300.00	0.09	247.18	300.00	0.68	0.02	-0.68	0.12	0.68	271.66
400.00	0.15	305.12	400.00	0.86	0.06	-0.86	0.13	0.86	274.29
500.00	0.19	263.34	500.00	1.13	0.12	-1.13	0.13	1.14	276.09
600.00	0.11	342.58	600.00	1.33	0.19	-1.32	0.20	1.34	278.29
700.00	0.15	283.79	700.00	1.49	0.32	-1.48	0.13	1.51	282.04
800.00	0.10	331.79	800.00	1.66	0.42	-1.65	0.11	1.70	284.42
900.00	0.10	316.10	900.00	1.77	0.56	-1.75	0.03	1.84	287.85
1000.00	0.10	47.35	1000.00	1.77	0.69	-1.75	0.14	1.88	291.44
1100.00	0.05	246.85	1100.00	1.75	0.73	-1.72	0.15	1.87	292.90
1200.00	0.07	164.65	1200.00	1.77	0.65	-1.75	0.08	1.86	290.46
1300.00	0.02	130.92	1300.00	1.74	0.58	-1.72	0.05	1.81	288.70
1400.00	0.11	152.84	1400.00	1.68	0.48	-1.66	0.09	1.73	286.27
1500.00	0.08	258.62	1500.00	1.70	0.39	-1.68	0.15	1.73	282.88
1600.00	0.11	210.48	1600.00	1.81	0.29	-1.80	0.08	1.82	279.10
1700.00	0.12	138.87	1700.00	1.78	0.13	-1.78	0.13	1.79	274.08
1800.00	0.06	186.59	1800.00	1.72	0.00	-1.72	0.09	1.72	269.87
1900.00	0.16	207.92	1900.00	1.78	-0.18	-1.79	0.11	1.80	264.28
2000.00	0.16	178.11	2000.00	1.83	-0.44	-1.85	0.08	1.90	256.56
2100.00	0.10	245.93	2100.00	1.90	-0.62	-1.93	0.15	2.02	252.22
2200.00	0.14	213.06	2200.00	2.04	-0.76	-2.07	0.08	2.21	249.97
2300.00	0.17	220.38	2300.00	2.19	-0.97	-2.23	0.04	2.44	246.52
2400.00	0.23	229.31	2399.99	2.43	-1.21	-2.48	0.07	2.76	243.93
2500.00	0.39	235.03	2499.99	2.85	-1.54	-2.91	0.16	3.30	242.14
2600.00	0.60	207.67	2599.99	3.34	-2.20	-3.44	0.31	4.08	237.38
2700.00	0.74	215.54	2699.98	3.92	-3.19	-4.05	0.17	5.16	231.82
2800.00	1.07	201.51	2799.97	4.58	-4.58	-4.77	0.40	6.62	226.16
2900.00	1.26	202.12	2899.95	5.26	-6.47	-5.53	0.19	8.51	220.51
3000.00	0.35	205.17	2999.94	5.75	-7.76	-6.07	0.91	9.86	218.03
3100.00	0.68	30.97	3099.94	5.58	-7.53	-5.90	1.03	9.57	218.06
3200.00	0.42	58.83	3199.93	4.99	-6.83	-5.28	0.37	8.63	217.68
3300.00	0.30	133.41	3299.93	4.49	-6.82	-4.77	0.45	8.33	214.98
3400.00	0.48	170.61	3399.93	4.21	-7.42	-4.52	0.30	8.68	211.33
3500.00	0.67	188.33	3499.92	4.18	-8.41	-4.53	0.26	9.55	208.32
3600.00	0.74	183.21	3599.92	4.25	-9.63	-4.65	0.09	10.70	205.78
3700.00	0.38	210.69	3699.91	4.42	-10.56	-4.86	0.44	11.63	204.70
3800.00	0.53	210.22	3799.91	4.79	-11.25	-5.26	0.15	12.42	205.07
3900.00	0.56	210.84	3899.90	5.24	-12.07	-5.74	0.03	13.36	205.46
4000.00	0.50	212.82	3999.90	5.69	-12.85	-6.23	0.06	14.28	205.86
4100.00	0.53	211.32	4099.90	6.14	-13.61	-6.71	0.03	15.18	206.23
4200.00	0.40	230.71	4199.89	6.62	-14.23	-7.22	0.20	15.96	206.90
4300.00	0.34	245.46	4299.89	7.15	-14.57	-7.76	0.11	16.51	208.03
4400.00	0.42	247.73	4399.89	7.75	-14.84	-8.37	0.08	17.03	209.42
4500.00	0.45	235.50	4499.88	8.39	-15.20	-9.03	0.10	17.68	210.72
4600.00	0.44	261.16	4599.88	9.08	-15.48	-9.73	0.20	18.29	212.16
4700.00	0.55	252.81	4699.88	9.91	-15.68	-10.57	0.13	18.91	213.99
4800.00	1.05	301.87	4799.87	11.16	-15.34	-11.81	0.81	19.36	217.59