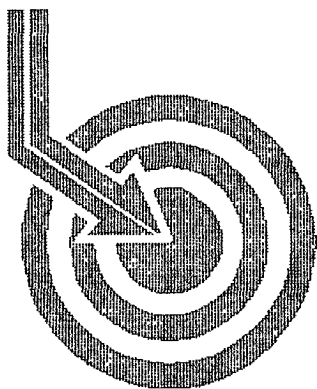




Scientific Drilling

RECEIVED

MAY 08 2009

HOBBSDCD

SUR: B-1-18s-34e, 634/ N & 1632/E
BHL: B-01-18s-34e, 17/N & 1986/E
API #30-025-38786

CHEVRON

Field: Vacuum Grayburg San Andres
Site: Lea County, NM
Well: Vacuum Grayburg San Andres Unit #439WI
Wellpath: DH - Job #32D0309086
Survey: 03/08/09-03/13/09

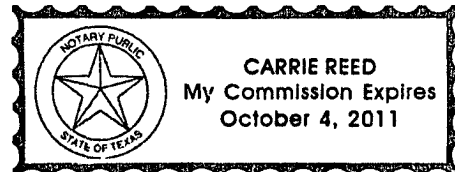
This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*R. Wharton*..... Company Representative

Notorized this date 18th of March, 2009.

Carrie Reed
Notary Signature
County of Midland
State of Texas

KZ





Scientific Drilling International Survey Report

Company: CHEVRON	Date: 03/14/2009	Time: 21:11:45	Page: 1
Field: Vacuum Grayburg San Andres	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE: 0.0	
Well: Vacuum Grayburg San Andres Uni	Section (VS) Reference:	Well: (0.00N,0.00E,330.15Azi)	
Wellpath: VH - Job #32K0309089	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: 03/09/09	Start Date: 03/09/2009
KSRG 0'-2668'	
Company: Scientific Drilling Internatio	Engineer: Madrid/Rowe/Williams
Tool: Steering Tool;Eye II Steering Tool	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	359.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.31	316.05	100.00	0.26	0.19	-0.19	0.31	0.27	316.05
200.00	0.30	274.74	200.00	0.67	0.41	-0.64	0.22	0.76	302.87
300.00	0.25	244.79	300.00	0.84	0.34	-1.09	0.15	1.15	287.25
400.00	0.23	236.86	400.00	0.85	0.14	-1.46	0.04	1.47	275.37
500.00	0.18	255.54	500.00	0.88	-0.01	-1.78	0.08	1.78	269.62
600.00	0.68	153.03	599.99	0.32	-0.58	-1.66	0.74	1.76	250.78
700.00	1.56	161.68	699.97	-1.60	-2.40	-0.97	0.89	2.59	201.92
800.00	2.74	177.14	799.90	-5.07	-6.08	-0.42	1.30	6.09	183.94
900.00	3.51	191.92	899.75	-9.48	-11.46	-0.93	1.11	11.50	184.65
1000.00	3.88	203.09	999.55	-13.80	-17.57	-2.89	0.81	17.81	189.34
1100.00	3.91	207.08	1099.32	-17.70	-23.72	-5.77	0.27	24.41	193.67
1200.00	3.26	215.83	1199.12	-20.73	-29.06	-8.99	0.85	30.42	197.18
1300.00	2.59	217.72	1298.99	-22.76	-33.15	-12.03	0.68	35.27	199.95
1400.00	2.51	223.71	1398.89	-24.25	-36.52	-14.93	0.28	39.46	202.23
1500.00	1.97	226.22	1498.81	-25.28	-39.29	-17.68	0.55	43.09	204.23
1600.00	1.48	237.80	1598.77	-25.75	-41.17	-20.02	0.60	45.78	205.93
1700.00	1.42	248.12	1698.74	-25.63	-42.32	-22.26	0.27	47.82	207.74
1800.00	1.27	246.16	1798.71	-25.34	-43.23	-24.42	0.16	49.65	209.46
1900.00	0.90	245.19	1898.69	-25.15	-44.01	-26.15	0.37	51.19	210.72
2000.00	0.77	254.78	1998.68	-24.92	-44.51	-27.51	0.19	52.33	211.72
2100.00	0.36	323.39	2098.68	-24.43	-44.44	-28.35	0.72	52.71	212.53
2200.00	0.36	28.07	2198.68	-23.96	-43.91	-28.39	0.39	52.29	212.88
2300.00	0.61	29.86	2298.67	-23.52	-43.17	-27.97	0.25	51.44	212.94
2400.00	0.89	31.04	2398.66	-22.87	-42.04	-27.31	0.28	50.13	213.00
2500.00	1.27	44.23	2498.65	-22.19	-40.58	-26.13	0.45	48.27	212.78
2600.00	1.78	53.86	2598.61	-21.72	-38.87	-24.11	0.57	45.74	211.80
2668.00	2.04	51.85	2666.57	-21.43	-37.50	-22.30	0.39	43.63	210.74



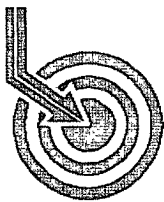
Scientific Drilling International Survey Report

Company: CHEVRON	Date: 03/14/2009	Time: 21:58:37	Page: 1
Field: Vacuum Grayburg San Andres	Co-ordinate(NE) Reference:	Site: Lea County, NM, Grid North	
Site: Lea County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Vacuum Grayburg San Andres Uni	Section (VS) Reference:	Well (0.00N,0.00E,330.15Azi)	
Wellpath: DH - Job #32D0309086	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 03/08/09-03/13/09	Start Date: 03/08/2009
MWD 2781'-5062'	
Company: Scientific Drilling Internatio	Engineer: Melendez/Hernandez/Becker
Tool: MWD;MWD	Tied-to: From: Definitive Path

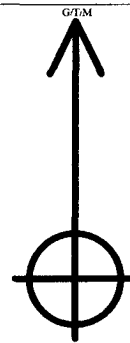
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
2668.00	2.04	51.85	2666.57	-21.43	-37.50	-22.30	0.00	43.63	210.74
2781.00	3.26	356.78	2779.47	-18.26	-33.05	-20.90	2.37	39.11	212.31
2876.00	8.20	336.35	2873.97	-9.11	-24.14	-23.77	5.55	33.88	224.56
2970.00	12.69	333.79	2966.39	7.87	-8.73	-31.03	4.80	32.23	254.28
3065.00	17.39	330.69	3058.11	32.49	13.02	-42.59	5.02	44.54	287.00
3161.00	21.96	332.09	3148.48	64.80	41.41	-58.02	4.79	71.28	305.51
3256.00	21.94	332.70	3236.60	100.28	72.88	-74.48	0.24	104.20	314.38
3350.00	24.31	333.17	3323.04	137.15	105.75	-91.27	2.53	139.69	319.20
3445.00	28.15	334.23	3408.24	179.04	143.40	-109.84	4.07	180.63	322.55
3541.00	31.55	334.15	3491.49	226.70	186.40	-130.65	3.54	227.63	324.97
3636.00	31.61	333.80	3572.42	276.34	231.11	-152.47	0.20	276.88	326.59
3731.00	30.23	332.58	3653.92	325.08	274.68	-174.48	1.60	325.41	327.58
3826.00	32.79	331.03	3734.91	374.71	318.42	-197.96	2.83	374.94	328.13
3921.00	31.70	330.66	3815.25	425.39	362.69	-222.65	1.17	425.57	328.45
4016.00	27.83	330.61	3897.70	472.54	403.78	-245.77	4.07	472.70	328.67
4111.00	24.26	331.66	3983.04	514.24	440.29	-265.92	3.79	514.37	328.87
4207.00	21.24	334.05	4071.57	551.31	473.30	-282.90	3.29	551.40	329.13
4301.00	17.20	332.10	4160.31	582.20	500.90	-296.86	4.35	582.26	329.35
4396.00	13.60	334.37	4251.88	607.39	523.39	-308.27	3.84	607.43	329.50
4491.00	9.95	332.37	4344.87	626.73	540.74	-316.91	3.87	626.76	329.63
4587.00	9.48	329.27	4439.49	642.93	554.88	-324.79	0.73	642.95	329.66
4682.00	7.87	328.15	4533.40	657.25	567.13	-332.22	1.70	657.28	329.64
4777.00	7.77	335.19	4627.52	670.15	578.49	-338.35	1.01	670.17	329.68
4872.00	7.95	334.30	4721.63	683.10	590.24	-343.89	0.23	683.11	329.77
4967.00	5.43	341.79	4815.98	694.05	600.43	-348.15	2.80	694.06	329.89
5062.00	5.38	341.27	4910.56	702.83	608.92	-350.98	0.07	702.83	330.04



**Scientific
Drilling**

Field: Vacuum Grayburg San Andres
Site: Lea County, NM
Well: Vacuum Grayburg San Andres Unit #439WI
Wellpath: DH - Job #32D0309086
Survey: 03/08/09-03/13/09



Azimuths to Grid North
True North 0.00°
Magnetic North 0.00°
Magnetic Field
Strength On1
Dip Angle 0.00°
Date 03/14/2009
Model igr2000

