

30-025-40004

CHEVRON

Dollarhide (Lea County, NM)
Lea County, NM
West Dollarhide Drinkard Unit #162
VH - Job #32K0211169

RECEIVED

APR 25 2011
HOBBSOCD

Survey: Actual

SDI Standard Survey Report

21 March, 2011

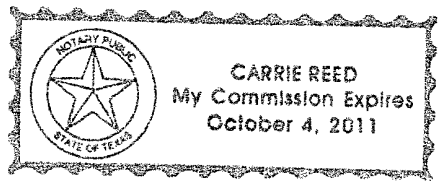
This survey is correct to the best of my knowledge and is supported by actual field data.

Therese

Notarized this date 22nd of March, 2011.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	CHEVRON	Local Co-ordinate Reference:	Well West Dollarhide Drinkard Unit #162
Project:	Dollarhide (Lea County, NM)	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	West Dollarhide Drinkard Unit #162	North Reference:	Grid
Wellbore:	VH - Job #32K0211169	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0211169	Database:	EDM-Regulatory

Project	Dollarhide (Lea County, NM)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Lea County, NM				
Site Position:	Northing:	433,171.69 usft	Latitude:	32° 11' 5.132 N	
From:	Lat/Long	Easting:	885,771.07 usft	Longitude:	103° 5' 11.131 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.66 °

Well:	West Dollarhide Drinkard Unit #162, Vertical					
Well Position	+N/-S	0.0 usft	Northing:	432,850.72 usft	Latitude:	32° 11' 2.400 N
	+E/-W	0.0 usft	Easting:	881,883.58 usft	Longitude:	103° 5' 56.400 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	0.0 usft	

Wellbore	VH - Job #32K0211169				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	BGGM2010	2/24/2011	(°)	(°)	(nT)
			7.44	60.25	48,742

Design	VH - Job #32K0211169				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	115.87	

Survey Program	Date			
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.0	7,033.0	Actual (VH - Job #32K0211169)	Keeper	Keeper Gyro

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0
100.0	0.18	131.03	100.0	-0.1	0.1	131.03	0.2
200.0	0.14	190.39	200.0	-0.3	0.2	146.63	0.4
300.0	0.12	162.59	300.0	-0.5	0.2	157.69	0.6
400.0	0.20	187.74	400.0	-0.8	0.2	164.19	0.9
500.0	0.26	177.60	500.0	-1.2	0.2	169.86	1.2
600.0	0.35	164.59	600.0	-1.7	0.3	169.94	1.8
700.0	0.42	150.90	700.0	-2.4	0.6	166.44	2.4
800.0	0.53	140.83	800.0	-3.0	1.0	161.10	3.2
900.0	0.59	127.74	900.0	-3.7	1.7	154.89	4.1
1,000.0	0.67	131.95	1,000.0	-4.4	2.6	149.69	5.1
1,100.0	0.67	134.31	1,100.0	-5.2	3.4	146.63	6.2

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Well: West Dollarhide Drinkard Unit #162	North Reference: Grid
Wellbore: VH - Job #32K0211169	Survey Calculation Method: Minimum Curvature
Design: VH - Job #32K0211169	Database: EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200.0	0.67	130.65	1,200.0	-6.0	4.3	144.41	7.4
1,300.0	0.66	131.62	1,300.0	-6.8	5.2	142.62	8.5
1,400.0	0.64	125.58	1,400.0	-7.5	6.1	140.99	9.6
1,500.0	0.67	127.48	1,499.9	-8.2	7.0	139.47	10.7
1,600.0	0.76	141.97	1,599.9	-9.0	7.8	139.02	12.0
1,700.0	1.31	154.73	1,699.9	-10.6	8.7	140.46	13.7
1,800.0	2.13	152.13	1,799.9	-13.3	10.1	142.72	16.7
1,900.0	2.12	151.74	1,899.8	-16.5	11.8	144.39	20.3
2,000.0	2.75	120.42	1,999.7	-19.4	14.8	142.66	24.4
2,100.0	3.03	115.25	2,099.6	-21.7	19.2	138.46	29.0
2,200.0	3.82	97.82	2,199.4	-23.3	24.9	133.04	34.1
2,300.0	3.92	96.92	2,299.2	-24.1	31.6	127.35	39.8
2,400.0	4.09	93.32	2,398.9	-24.8	38.6	122.69	45.8
2,500.0	4.09	90.65	2,498.7	-25.0	45.7	116.68	52.1
2,600.0	3.43	92.26	2,598.5	-25.2	52.3	115.71	58.0
2,700.0	3.04	96.32	2,698.3	-25.6	57.9	113.84	63.3
2,800.0	2.83	96.39	2,798.2	-26.1	63.0	112.54	68.2
2,900.0	2.51	100.66	2,898.1	-26.6	67.6	111.65	72.7
3,000.0	2.34	106.88	2,998.0	-27.8	71.7	111.21	76.9
3,100.0	2.22	114.45	3,097.9	-29.2	75.4	111.18	80.9
3,200.0	2.13	113.25	3,197.8	-30.3	78.9	111.30	84.7
3,300.0	2.04	110.37	3,297.8	-32.1	82.3	111.32	88.3
3,400.0	1.99	114.82	3,397.7	-33.5	85.5	111.37	91.8
3,500.0	1.97	111.91	3,497.6	-34.8	88.7	111.44	95.3
3,600.0	2.12	118.67	3,597.6	-36.4	91.9	111.58	98.8
3,700.0	1.95	114.42	3,697.5	-37.9	95.1	111.76	102.4
3,800.0	1.99	110.97	3,797.5	-39.3	98.2	111.79	105.8
3,900.0	1.75	111.23	3,897.4	-40.4	101.3	111.77	109.1
4,000.0	1.74	114.31	3,997.4	-41.6	104.1	111.80	112.1
4,100.0	1.60	117.04	4,097.3	-42.9	106.7	111.89	115.0
4,200.0	1.57	115.81	4,197.3	-44.1	109.2	112.00	117.8
4,300.0	1.51	119.65	4,297.2	-45.4	111.6	112.13	120.4
4,400.0	1.52	120.53	4,397.2	-46.7	113.9	112.30	123.1
4,500.0	1.64	118.45	4,497.2	-48.0	116.3	112.45	125.8
4,600.0	1.67	113.11	4,597.1	-49.3	118.9	112.53	128.7
4,700.0	1.68	109.72	4,697.1	-50.4	121.6	112.50	131.6
4,800.0	1.60	113.82	4,797.0	-51.4	124.2	112.49	134.4
4,900.0	1.37	115.29	4,897.0	-52.5	126.6	112.52	137.0
5,000.0	1.22	106.70	4,997.0	-53.3	128.7	112.50	139.3
5,100.0	1.20	117.49	5,097.0	-54.1	130.6	112.50	141.4
5,200.0	1.31	122.84	5,196.9	-55.2	132.5	112.61	143.6
5,300.0	1.17	122.59	5,296.9	-56.4	134.3	112.76	145.7
5,400.0	1.32	120.73	5,396.9	-57.5	136.2	112.89	147.8
5,500.0	1.28	118.69	5,496.9	-58.6	138.2	113.00	150.1

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Site: Lea County, NM
Well: West Dollarhide Drinkard Unit #162
Wellbore: VH - Job #32K0211169
Design: VH - Job #32K0211169

Local Co-ordinate Reference: Well West Dollarhide Drinkard Unit #162
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
5,600.0	1.34	122.33	5,596.8	-59.8	140.1	113.11	152.4
5,700.0	1.52	128.81	5,696.8	-61.3	142.2	113.31	154.8
5,800.0	1.50	121.31	5,796.8	-62.8	144.3	113.51	157.4
5,900.0	1.40	120.72	5,896.7	-64.1	146.5	113.63	159.9
6,000.0	1.24	128.06	5,996.7	-65.4	148.4	113.77	162.1
6,100.0	1.15	130.20	6,096.7	-66.7	150.0	113.97	164.1
6,200.0	1.29	128.96	6,196.7	-68.0	151.6	114.16	166.2
6,300.0	1.21	132.82	6,296.7	-69.5	153.3	114.37	168.3
6,400.0	1.19	133.48	6,396.6	-70.9	154.8	114.60	170.3
6,500.0	1.01	131.09	6,496.6	-72.2	156.2	114.80	172.1
6,600.0	0.89	136.55	6,596.6	-73.3	157.4	114.97	173.7
6,700.0	1.03	141.07	6,696.6	-74.6	158.5	115.19	175.2
6,800.0	1.01	139.40	6,796.6	-76.0	159.7	115.44	176.8
6,900.0	1.03	131.22	6,896.6	-77.2	160.9	115.63	178.5
7,000.0	1.27	132.01	6,996.5	-78.5	162.4	115.81	180.4
7,033.0	1.13	133.73	7,029.5	-79.0	162.9	115.87	181.1



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 Lea County, NM
 Well: West Dollarhide Drinkard Unit #162
 Wellbore: VH - Job #32K0211169
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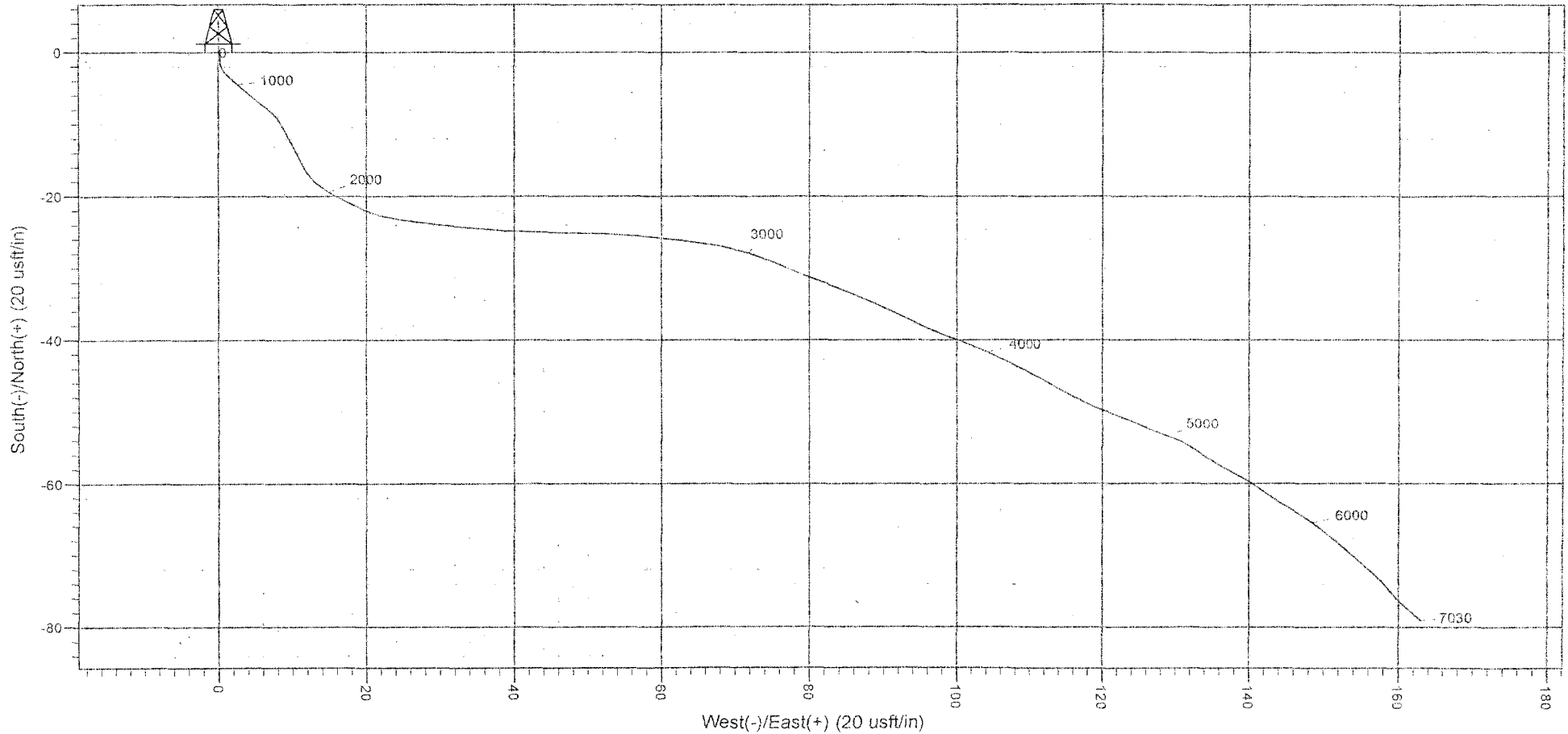


Azimuths to Grid North
 True North: -0.66°
 Magnetic North: 6.78°

Magnetic Field
 Strength: 45741.7snT
 Dip Angle: 60.25°
 Date: 2/24/2011
 Model: BGCM2010

WELL DETAILS: West Dollarhide Drinkard Unit #162
 WELL @ 0.0usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	432850.72	881883.58	32° 11' 2.400 N	103° 5' 56.400 W	



PROJECT DETAILS: Dollarhide (Lea County, NM)
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
 Site Centre Latitude: 32° 11' 5.132 N
 Longitude: 103° 5' 11.131 W
 Positional Uncertainty: 0.0
 Convergence: 0.66
 Local North: Grid