

Results of Directional Survey

DD

API number:	30-025-29808		
OGRID:		Operator:	RMR OPERATING LLC
		Property:	MADERA 25 FEDERAL
			1

surface	ULSTR:	J	25	T	26S	R	34E
				1980	FSL	1980	FEL

BH Loc	ULSTR:	J	25	T	26S	R	34E

Top Perf/OH	ULSTR:	J	25	T	26S	R	34E
6885	MD	6884.5	TVD	1992	FSL	1927	FEL

Bot Perf/OH	ULSTR:	J	25	T	26S	R	34E
7165	MD	7164.5	TVD	2321	FSL	1948	FEL

	MD	N/S	E/W	VD
	6800	12.64	51.97	6799.48
TOP PERFS/OH	6885	12.33	52.54	6884.48
	6900	12.27	52.64	6899.48
	7100	340.80	31.50	7099.48
BOT PERFS/OH	7165	341.13	32.22	7164.48
	7200	341.30	32.60	7199.48

NEXT TO LAST				
LAST READING				
TD	7436	#DIV/0!	#DIV/0!	#DIV/0!

Surface Location	1980	FS	1980	FE
Projected BHL	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Location of				
Top Perfs/OH	1992	FS	1927	FE
Bottom Perfs/OH	2321	FS	1948	FE

SUMMARY of Subsurface Locations

Surface Location	J-25-26S-34E	1980	FS	1980	FE	Vert. Depth
Top Perfs/OH	J-25-26S-34E	1992	FS	1927	FE	6884.48
Bottom Perfs/OH	J-25-26S-34E	2321	FS	1948	FE	7164.48
Projected TD	J-25-26S-34E	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

JUL 02 2013



Scientific Drilling

Scientific Drilling International, Inc.

2034 Trade Drive • Midland, Texas 79706

P.O. Box 9699 • Midland, Texas 79708

Tel: 432-689-5600 • Fax: 432-697-0324

3 April 2013

**RMR Operating LLC
2515 McKinney Ave. Suite #900
Dallas, Texas 75201**

HOBBS OCD

JUN 17 2013

Subject: Madera 25 Federal #1

RECEIVED

To Whom It May Concern;

Enclosed are two original notarized surveys, for the above referenced well, for your records and/or OCD reports.

We would like to thank you for using Scientific Drilling on this project.

If I can be of further assistance, or if you have any questions, please feel free to contact me at (432)689-5600.

Regards,


Becky Wharton

Enclosures

RMR OPERATING LLC

Wildcat

Lea County, NM

Madera 25 Federal #1

VH - Job #320313-KW-317

HOBBS OCD

JUN 17 2013

RECEIVED

Survey: Gyro

SDI Standard Survey Report

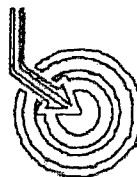
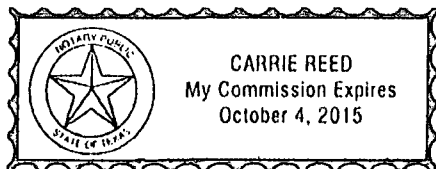
This survey is correct to the best of my knowledge and is supported by actual field data.

K. Wharton

Notarized this date 1st of April, 2013.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling

Scientific Drilling International, Inc.

SDI Standard Survey Report



Company: RMR OPERATING LLC
 Project: Wildcat
 Site: Lea County, NM
 Well: Madera 25 Federal #1
 Wellbore: VH - Job #320313-KW-317
 Design: VH - Job #320313-KW-317

Local Co-ordinate Reference: Well Madera 25 Federal #1
 TVD Reference: WELL @ 0.00usft (Original Well Elev)
 MD Reference: WELL @ 0.00usft (Original Well Elev)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM-Regulatory

Project	Wildcat		
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:	377,724.30 usft	Latitude:	32° 2' 6.720 N
From:	Lat/Long	Easting:	782,556.66 usft	Longitude:	103° 25' 17.447 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.48 °

Well	Madera 25 Federal #1, Vertical					
Well Position	+N/-S	0.00 usft	Northing:	369,346.24 usft	Latitude:	32° 0' 43.801 N
	+E/-W	0.00 usft	Easting:	782,726.27 usft	Longitude:	103° 25' 16.298 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	0.00 usft	

Wellbore	VH - Job #320313-KW-317				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/22/13	7.29	59.97	48,353

Design	VH - Job #320313-KW-317				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	94.85	

Survey Program		Date	04/07/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	9,500.00	Gyro (VH - Job #320313-KW-317)	Keeper	Keeper Gyro	

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.19	204.80	100.00	-0.15	-0.07	204.80	0.17
200.00	0.30	220.81	200.00	-0.50	-0.31	211.86	0.59
300.00	0.19	213.61	300.00	-0.84	-0.57	214.45	1.01
400.00	0.22	251.36	400.00	-1.03	-0.85	219.29	1.34
500.00	0.24	311.65	500.00	-0.96	-1.19	231.08	1.52
600.00	0.37	340.82	600.00	-0.51	-1.45	250.49	1.54
700.00	0.41	347.86	699.99	0.14	-1.63	274.98	1.64
800.00	0.30	337.71	799.99	0.73	-1.80	292.14	1.95
900.00	0.33	349.08	899.99	1.26	-1.96	302.75	2.33
1,000.00	0.26	341.57	999.99	1.76	-2.08	310.14	2.73
1,100.00	0.25	348.17	1,099.99	2.19	-2.20	314.81	3.10

Scientific Drilling International, Inc.
SDI Standard Survey Report



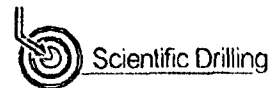
Company: RMR OPERATING LLC
Project: Wildcat
Site: Lea County, NM
Well: Madera 25 Federal #1
Wellbore: VH - Job #320313-KW-317
Design: VH - Job #320313-KW-317

Local Co-ordinate Reference: Well Madera 25 Federal #1
TVD Reference: WELL @ 0.00usft (Original Well Elev)
MD Reference: WELL @ 0.00usft (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)
1,200.00	0.21	6.43	1,199.99	2.58	-2.22	319.25	3.41
1,300.00	0.07	329.96	1,299.99	2.82	-2.23	321.57	3.60
1,400.00	0.07	317.87	1,399.99	2.91	-2.31	321.65	3.72
1,500.00	0.05	329.79	1,499.99	3.00	-2.37	321.68	3.82
1,600.00	0.09	289.80	1,599.99	3.06	-2.46	321.17	3.93
1,700.00	0.05	30.16	1,699.99	3.13	-2.52	321.16	4.01
1,800.00	0.12	66.46	1,799.99	3.21	-2.40	323.19	4.00
1,900.00	0.21	43.88	1,899.99	3.38	-2.18	327.23	4.02
2,000.00	0.13	82.49	1,999.98	3.53	-1.94	331.23	4.02
2,100.00	0.33	100.04	2,099.98	3.49	-1.54	336.19	3.82
2,200.00	0.26	73.70	2,199.98	3.50	-1.04	343.49	3.66
2,300.00	0.25	98.42	2,299.98	3.54	-0.61	350.29	3.59
2,400.00	0.33	74.82	2,399.98	3.58	-0.11	358.21	3.58
2,500.00	0.38	63.73	2,499.98	3.80	0.46	6.95	3.83
2,600.00	0.38	71.72	2,599.98	4.05	1.08	14.87	4.19
2,700.00	0.48	78.39	2,699.97	4.24	1.80	23.01	4.61
2,800.00	0.51	78.16	2,799.97	4.42	2.65	30.93	5.15
2,900.00	0.63	73.16	2,899.97	4.67	3.61	37.71	5.90
3,000.00	0.59	72.12	2,999.96	4.98	4.62	42.86	6.80
3,100.00	0.72	70.92	3,099.95	5.35	5.71	46.87	7.82
3,200.00	0.77	62.63	3,199.94	5.86	6.90	49.64	9.05
3,300.00	0.85	59.88	3,299.93	6.54	8.14	51.20	10.44
3,400.00	0.92	55.05	3,399.92	7.38	9.44	51.99	11.98
3,500.00	0.89	50.53	3,499.91	8.33	10.69	52.09	13.56
3,600.00	0.93	47.66	3,599.90	9.37	11.89	51.77	15.14
3,700.00	0.78	51.65	3,699.89	10.34	13.03	51.57	16.63
3,800.00	0.54	34.16	3,799.88	11.15	13.83	51.11	17.76
3,900.00	0.32	348.39	3,899.88	11.81	14.03	49.91	18.35
4,000.00	0.33	0.74	3,999.88	12.38	13.98	48.49	18.67
4,100.00	0.53	15.63	4,099.87	13.11	14.11	47.11	19.26
4,200.00	0.76	19.92	4,199.87	14.18	14.46	45.57	20.25
4,300.00	0.70	27.92	4,299.86	15.34	14.97	44.30	21.44
4,400.00	0.63	25.22	4,399.85	16.38	15.49	43.41	22.55
4,500.00	0.67	38.13	4,499.84	17.34	16.09	42.86	23.65
4,600.00	0.91	67.43	4,599.84	18.10	17.18	43.51	24.96
4,700.00	1.10	76.60	4,699.82	18.63	18.85	45.34	26.50
4,800.00	1.23	90.30	4,799.80	18.84	20.86	47.90	28.11
4,900.00	1.87	92.54	4,899.76	18.77	23.56	51.46	30.12
5,000.00	2.15	91.21	4,999.70	18.65	27.07	55.42	32.87
5,100.00	1.69	100.87	5,099.65	18.34	30.39	58.89	35.49
5,200.00	1.16	103.78	5,199.61	17.82	32.82	61.50	37.34
5,300.00	0.84	100.73	5,299.60	17.44	34.52	63.20	38.68
5,400.00	0.83	93.83	5,399.59	17.26	35.97	64.37	39.89
5,500.00	0.82	101.10	5,499.58	17.07	37.39	65.46	41.10

Scientific Drilling International, Inc.

SDI Standard Survey Report



Company: RMR OPERATING LLC
 Project: Wildcat
 Site: Lea County, NM
 Well: Madera 25 Federal #1
 Wellbore: VH - Job #320313-KW-317
 Design: VH - Job #320313-KW-317

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Database:

Well Madera 25 Federal #1
 WELL @ 0.00usft (Original Well Elev)
 WELL @ 0.00usft (Original Well Elev)
 Grid
 Minimum Curvature
 EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
5,600.00	0.72	91.56	5,599.57	16.91	38.72	66.40	42.25
5,700.00	0.86	97.17	5,699.56	16.80	40.09	67.26	43.47
5,800.00	0.75	103.18	5,799.55	16.56	41.48	68.23	44.66
5,900.00	0.68	101.92	5,899.54	16.29	42.69	69.12	45.70
6,000.00	0.76	111.71	5,999.53	15.92	43.89	70.06	46.69
6,100.00	0.80	109.41	6,099.52	15.44	45.17	71.12	47.73
6,200.00	0.69	111.11	6,199.52	14.99	46.39	72.09	48.75
6,300.00	0.70	113.41	6,299.51	14.54	47.51	72.99	49.68
6,400.00	0.60	116.78	6,399.50	14.06	48.54	73.85	50.53
6,500.00	0.55	114.58	6,499.50	13.62	49.44	74.60	51.28
6,600.00	0.48	115.92	6,599.49	13.24	50.25	75.24	51.97
6,700.00	0.58	101.99	6,699.49	12.95	51.12	75.79	52.74
6,800.00	0.46	120.29	6,799.48	12.64	51.97	76.33	53.48
6,900.00	0.42	117.54	6,899.48	12.27	52.64	76.88	54.05
7,000.00	0.38	112.75	6,999.48	11.97	53.27	77.33	54.60
7,100.00	0.38	109.79	7,099.48	11.73	53.89	77.72	55.15
7,200.00	0.30	104.71	7,199.48	11.55	54.45	78.02	55.66
7,300.00	0.21	143.99	7,299.47	11.34	54.81	78.31	55.97
7,400.00	0.26	121.37	7,399.47	11.07	55.11	78.64	56.22
7,500.00	0.25	145.03	7,499.47	10.78	55.43	79.00	56.47
7,600.00	0.34	159.75	7,599.47	10.32	55.66	79.50	56.61
7,700.00	0.22	145.69	7,699.47	9.88	55.87	79.97	56.74
7,800.00	0.12	193.99	7,799.47	9.62	55.95	80.24	56.78
7,900.00	0.12	139.71	7,899.47	9.44	56.00	80.43	56.79
8,000.00	0.44	184.91	7,999.47	8.98	56.03	80.90	56.75
8,100.00	0.61	169.47	8,099.46	8.07	56.10	81.81	56.67
8,200.00	0.64	171.56	8,199.46	7.00	56.28	82.91	56.71
8,300.00	0.57	170.57	8,299.45	5.95	56.44	83.98	56.75
8,400.00	0.62	177.32	8,399.45	4.92	56.55	85.03	56.76
8,500.00	0.64	171.14	8,499.44	3.83	56.66	86.13	56.79
8,600.00	0.72	174.42	8,599.43	2.65	56.80	87.33	56.87
8,700.00	0.51	184.98	8,699.43	1.58	56.83	88.40	56.85
8,800.00	0.43	200.42	8,799.42	0.79	56.66	89.20	56.66
8,900.00	0.39	187.93	8,899.42	0.10	56.48	89.90	56.48
9,000.00	0.44	175.31	8,999.42	-0.62	56.46	90.63	56.47
9,100.00	0.36	182.39	9,099.42	-1.32	56.48	91.34	56.50
9,200.00	0.36	169.90	9,199.42	-1.94	56.52	91.97	56.56
9,300.00	0.50	172.67	9,299.41	-2.68	56.63	92.71	56.70
9,400.00	0.69	164.78	9,399.41	-3.70	56.85	93.72	56.97
9,500.00	0.72	157.98	9,499.40	-4.86	57.24	94.85	57.45

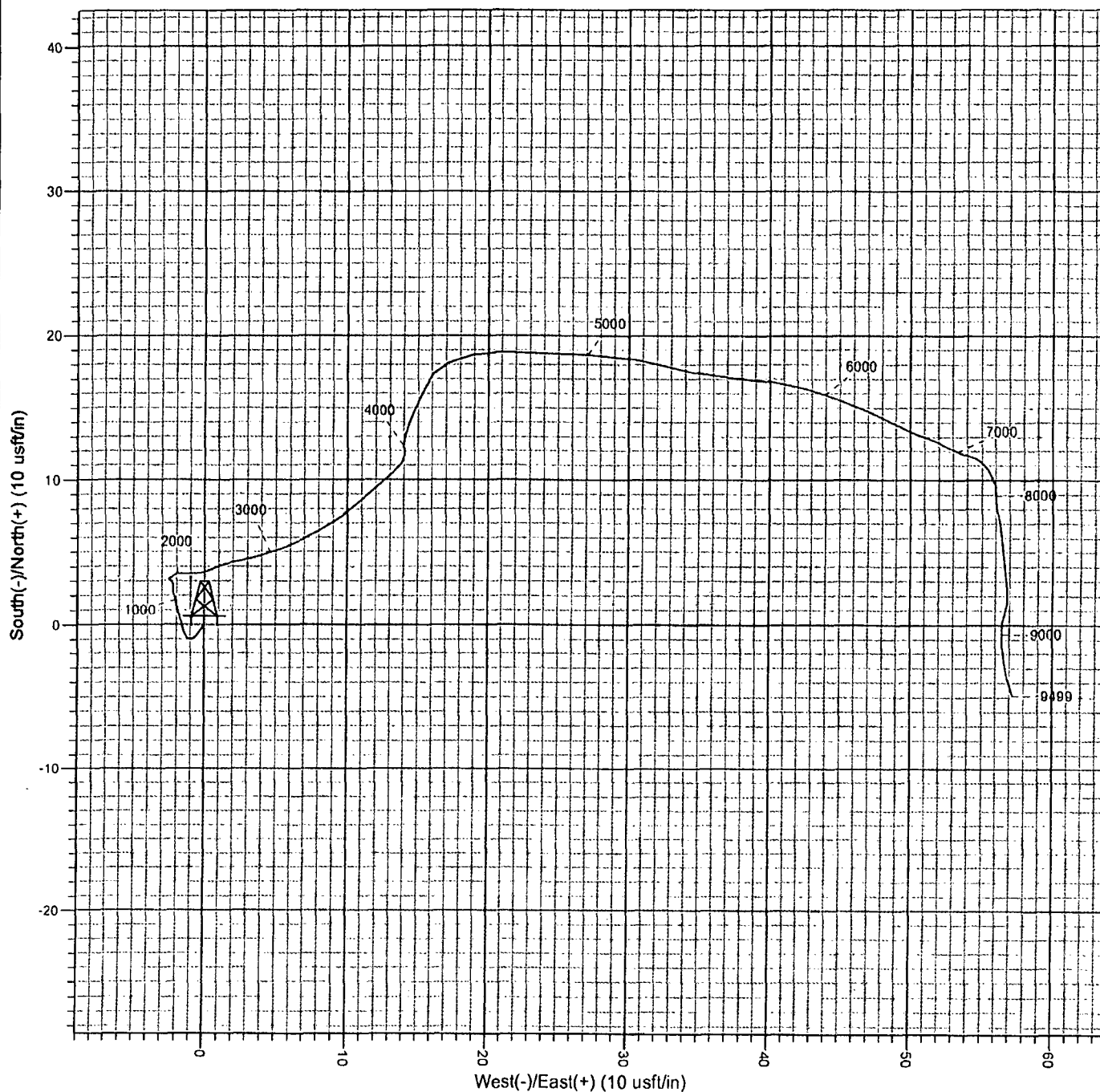


Scientific Drilling

Project: Wildcat
Lea County, NM
Well: Madera 25 Federal #1
Wellbore: VH - Job #320313-KW-317
Design: VH - Job #320313-KW-317

WELL DETAILS: Madera 25 Federal #1
WELL @ 0.00usft (Original Well Elev)
Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	369346.24	782726.27	32° 0' 43.801 N	103° 25' 16.298 W	



PROJECT DETAILS: Wildcat		SITE DETAILS: Lea County, NM	
Geodetic System: US State Plane 1927 (Exact solution)	Datum: NAD 1927 (NADCON CONUS)	Site Centre Latitude: 32° 2' 6.720 N	Longitude: 103° 25' 17.447 W
Ellipsoid: Clarke 1866	Zone: New Mexico East 3001	Positional Uncertainty: 0.00	Convergence: 0.48
System Datum: Mean Sea Level		Local North: Grid	