

Results of Directional Survey

API number:	30-025-41435		
OGRID:		Operator:	APACHE CORP
		Property:	SOUTHLAND ROYALTY A # 2H

surface	ULSTR:	H	09	T 21S	R 37E
				2310 FNL	640 FEL

BH Loc	ULSTR:	I	04	T 21S	R 37E
11232	MD	6925.7	TVD	2309 FSL	656 FEL

Top Perf/OH	ULSTR:	H	09	T 21S	R 37E
7206	MD	6888.1	TVD	1713 FNL	636 FEL

Bot Perf/OH	ULSTR:	I	04	T 21S	R 37E
10848	MD	6931.2	TVD	1926 FSL	688 FEL

	MD	N/S	E/W	VD
	7195	585.70	4.50	6887.8
TOP PERFS/OH	7206	596.65	3.68	6888.06
	7238	628.50	1.30	6888.80
	10819	4207.20	-49.40	6930.80
BOT PERFS/OH	10848	4236.20	-48.23	6931.15
	10861	4249.20	-47.70	6931.30

NEXT TO LAST	11175	4561.90	-21.30	6926.50
LAST READING	11232	4618.70	-16.30	6925.70
TD	11232	4618.70	-16.30	6925.70

Surface Location	2310	FN	640	FE
Projected BHL	2309	FS	656	FE
Location of				
Top Perfs/OH	1713	FN	636	FE
Bottom Perfs/OH	1926	FS	688	FE

SUMMARY of Subsurface Locations

Surface Location	H-09-21S-37E	2310	FN	640	FE	Vert. Depth
Top Perfs/OH	H-09-21S-37E	1713	FN	636	FE	6888.06
Bottom Perfs/OH	I-04-21S-37E	1926	FS	688	FE	6931.15
Projected TD	I-04-21S-37E	2309	FS	656	FE	6925.70

MAY 19 2014

Apache Corporation (873)
303 Veterans Airpark Lane, #3000
Midland, TX 79705

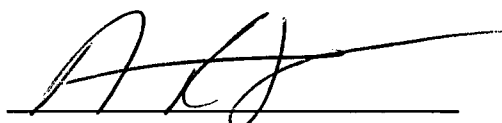
Southland Royalty A #2H
Lea County, New Mexico

30-025-41435 ULH 9-215-37E 2310' FUL + 640' FEL

241	2.41	0.90	1.58	3.80	3.80
501	2.60	1.30	2.28	5.92	9.71
760	2.59	1.70	2.98	7.71	17.42
1015	2.55	0.80	1.40	3.57	20.99
1228	2.13	1.50	2.63	5.59	26.58
1524	2.96	1.40	2.45	7.25	33.83
1740	2.16	1.60	2.80	6.05	39.88
1914	1.74	2.00	3.50	6.09	45.97
2300	3.86	2.70	4.73	18.24	64.21
2446	1.46	2.50	4.38	6.39	70.59
2574	1.28	2.30	4.03	5.15	75.75
2744	1.70	2.60	4.55	7.74	83.48
2914	1.70	2.50	4.38	7.44	90.92
3195	2.81	2.40	4.20	11.80	102.72
3280	0.85	1.90	3.33	2.83	105.55
3477	1.97	1.60	2.80	5.52	111.06
3680	2.03	0.80	1.40	2.84	113.90
3969	2.89	0.80	1.40	4.05	117.95
4174	2.05	0.40	0.70	1.44	119.39
4490	3.16	0.10	0.18	0.55	119.94
4682	1.92	0.10	0.18	0.34	120.27
4960	2.78	0.40	0.70	1.95	122.22
5173	2.13	0.30	0.53	1.12	123.34
5386	2.13	0.20	0.35	0.75	124.08
5686	3.00	0.40	0.70	2.10	126.18
5791	1.05	0.00	0.00	0.00	126.18
5961	1.70	0.10	0.18	0.30	126.48
6204	2.43	0.20	0.35	0.85	127.33

HOBBS OCD

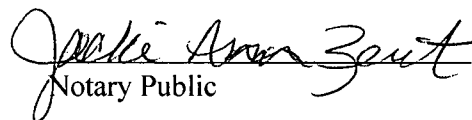
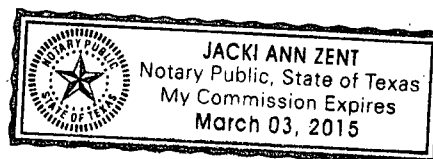
MAY 02 2014



Archie Brown - General Manager

RECEIVED

The attached instrument was acknowledged before me on the 31st day of December, 2013 by
Archie Brown - General Manager, CapStar Drilling, Inc.


Notary Public



HOBBS OCD

MAY 02 2014

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Apache Corporation (873)

Lea County, NM

Sec 9, T21S, R37E

Southland Royalty #2H 30-025-41435

Wellbore #1

Surf. UL H 9-21S-37E 2310' FUL + 640' FEL
BHL UL I 4-21S-37E 2309' FSL + 656' FEL

Design: Wellbore #1

DDC Survey Report

06 January, 2014





DDC
Survey Report



Company: Apache Corporation
Project: Lea County, NM
Site: Sec 9, T21S, R37E
Well: Southland Royalty #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Southland Royalty #2H
TVD Reference: WELL @ 3476.0usft (Capstar #133)
MD Reference: WELL @ 3476.0usft (Capstar #133)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project	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	Sec 9, T21S, R37E		
Site Position:		Northing:	546,211.64 usft
From:	Map	Easting:	861,743.80 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 29' 46.234 N
		Longitude:	103° 9' 36.255 W
		Grid Convergence:	0.63 °

Well	Southland Royalty #2H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	
			usft
		Latitude:	32° 29' 39.166 N
		Longitude:	103° 9' 39.802 W
		Ground Level:	3,465.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	12/4/2013	7.11
			Dip Angle
			(°)
			60.44
			Field Strength
			(nT)
			48,575

Design	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			0.00

Survey Program	Date 1/6/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
3,855.0	6,112.1	Gyro Survey (Wellbore #1)	Good_gyro
6,225.0	11,232.0	MWD (Wellbore #1)	MWD_default
			Description
			Good Gyro
			MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
3,855.0	0.93	41.97	3,854.8	23.3	20.9	23.3	0.02	0.02	0.00
3,940.1	0.84	40.29	3,939.9	24.3	21.8	24.3	0.11	-0.11	-1.97
4,025.2	0.72	38.97	4,025.0	25.1	22.5	25.1	0.14	-0.14	-1.55
4,110.4	0.58	34.82	4,110.2	25.9	23.1	25.9	0.17	-0.16	-4.87
4,195.6	0.44	29.70	4,195.4	26.6	23.5	26.6	0.17	-0.16	-6.01
4,280.7	0.29	27.96	4,280.5	27.0	23.8	27.0	0.18	-0.18	-2.04
4,365.8	0.17	23.73	4,365.7	27.3	23.9	27.3	0.14	-0.14	-4.97
4,451.1	0.10	345.54	4,451.0	27.5	24.0	27.5	0.13	-0.08	-44.77
4,536.2	0.08	300.62	4,536.0	27.6	23.9	27.6	0.08	-0.02	-52.79



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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,621.5	0.09	252.14	4,621.3	27.6	23.8	27.6	0.08	0.01	-56.87
4,706.8	0.08	216.03	4,706.6	27.6	23.7	27.6	0.06	-0.01	-42.34
4,791.8	0.19	219.58	4,791.6	27.4	23.6	27.4	0.13	0.13	4.17
4,876.7	0.15	242.81	4,876.5	27.2	23.4	27.2	0.09	-0.05	27.35
4,961.9	0.36	247.52	4,961.7	27.1	23.0	27.1	0.25	0.25	5.53
5,047.5	0.36	250.78	5,047.3	26.9	22.5	26.9	0.02	0.00	3.81
5,132.8	0.35	255.98	5,132.6	26.7	22.0	26.7	0.04	-0.01	6.09
5,218.2	0.33	240.00	5,218.0	26.6	21.5	26.6	0.11	-0.02	-18.72
5,303.5	0.30	214.18	5,303.3	26.3	21.2	26.3	0.17	-0.04	-30.29
5,388.5	0.33	202.95	5,388.3	25.8	21.0	25.8	0.08	0.04	-13.21
5,473.6	0.33	217.30	5,473.4	25.4	20.7	25.4	0.10	0.00	16.85
5,559.2	0.28	222.60	5,559.0	25.1	20.5	25.1	0.07	-0.06	6.20
5,644.3	0.25	207.88	5,644.1	24.8	20.2	24.8	0.09	-0.04	-17.29
5,729.5	0.24	219.20	5,729.3	24.5	20.0	24.5	0.06	-0.01	13.29
5,814.6	0.21	209.75	5,814.4	24.2	19.8	24.2	0.06	-0.04	-11.10
5,899.3	0.21	213.13	5,899.1	23.9	19.7	23.9	0.01	0.00	3.99
5,984.5	0.22	212.24	5,984.2	23.6	19.5	23.6	0.01	0.01	-1.05
6,069.6	0.23	215.35	6,069.4	23.4	19.3	23.4	0.02	0.01	3.65
6,112.1	0.22	215.22	6,111.9	23.2	19.2	23.2	0.02	-0.02	-0.31
TIE IN @ 6112' MD / 6112' TVD									
6,112.2	0.22	215.22	6,112.0	23.2	19.2	23.2	0.00	0.00	0.00
6,225.0	0.20	233.60	6,224.8	22.9	18.9	22.9	0.06	-0.02	16.29
6,258.0	0.20	215.50	6,257.8	22.9	18.9	22.9	0.19	0.00	-54.85
6,300.0	2.10	347.90	6,299.8	23.6	18.7	23.6	5.33	4.52	315.24
6,343.0	5.60	355.20	6,342.7	26.4	18.3	26.4	8.20	8.14	16.98
6,386.0	9.00	357.90	6,385.3	31.9	18.0	31.9	7.94	7.91	6.28
6,428.0	12.60	358.40	6,426.6	39.7	17.8	39.7	8.57	8.57	1.19
6,471.0	16.90	358.00	6,468.1	50.7	17.4	50.7	10.00	10.00	-0.93
6,514.0	21.80	357.30	6,508.7	64.9	16.8	64.9	11.41	11.40	-1.63
6,556.0	26.60	356.80	6,547.0	82.1	15.9	82.1	11.44	11.43	-1.19
6,599.0	31.30	357.30	6,584.6	102.9	14.9	102.9	10.94	10.93	1.16
6,641.0	34.60	1.90	6,619.9	125.7	14.7	125.7	9.86	7.86	10.95
6,684.0	38.10	4.40	6,654.5	151.1	16.2	151.1	8.84	8.14	5.81
6,726.0	40.50	3.30	6,687.0	177.7	17.9	177.7	5.95	5.71	-2.62
6,769.0	44.50	1.90	6,718.7	206.7	19.3	206.7	9.56	9.30	-3.26
6,812.0	48.60	0.30	6,748.2	237.9	19.8	237.9	9.91	9.53	-3.72
6,854.0	52.50	358.90	6,774.9	270.3	19.6	270.3	9.64	9.29	-3.33
6,897.0	56.90	359.10	6,799.8	305.4	19.0	305.4	10.24	10.23	0.47
6,940.0	61.50	359.30	6,821.8	342.3	18.5	342.3	10.71	10.70	0.47
6,983.0	65.90	359.30	6,840.8	380.9	18.0	380.9	10.23	10.23	0.00
7,025.0	70.30	358.20	6,856.5	419.8	17.1	419.8	10.75	10.48	-2.62
7,068.0	74.80	356.10	6,869.4	460.8	15.1	460.8	11.45	10.47	-4.88
7,110.0	79.40	354.70	6,878.8	501.6	11.8	501.6	11.42	10.95	-3.33



DDC
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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,153.0	83.90	354.90	6,885.0	543.9	8.0	543.9	10.48	10.47	0.47
7,195.0	88.50	355.60	6,887.8	585.7	4.5	585.7	11.08	10.95	1.67
7,238.0	88.90	355.80	6,888.8	628.5	1.3	628.5	1.04	0.93	0.47
7,280.0	90.40	356.10	6,889.0	670.4	-1.7	670.4	3.64	3.57	0.71
7,323.0	90.20	356.60	6,888.8	713.3	-4.4	713.3	1.25	-0.47	1.16
7,366.0	90.90	356.50	6,888.4	756.3	-7.0	756.3	1.64	1.63	-0.23
7,408.0	91.50	357.00	6,887.5	798.2	-9.4	798.2	1.86	1.43	1.19
7,451.0	91.60	357.20	6,886.3	841.1	-11.6	841.1	0.52	0.23	0.47
7,494.0	90.80	357.20	6,885.4	884.0	-13.7	884.0	1.86	-1.86	0.00
7,536.0	90.90	357.20	6,884.8	926.0	-15.7	926.0	0.24	0.24	0.00
7,579.0	90.30	358.20	6,884.4	969.0	-17.5	969.0	2.71	-1.40	2.33
7,622.0	90.10	358.40	6,884.2	1,011.9	-18.7	1,011.9	0.66	-0.47	0.47
7,664.0	90.00	358.40	6,884.2	1,053.9	-19.9	1,053.9	0.24	-0.24	0.00
7,707.0	90.10	358.20	6,884.1	1,096.9	-21.2	1,096.9	0.52	0.23	-0.47
7,749.0	89.70	358.00	6,884.2	1,138.9	-22.6	1,138.9	1.06	-0.95	-0.48
7,792.0	89.80	358.20	6,884.4	1,181.9	-24.0	1,181.9	0.52	0.23	0.47
7,834.0	90.30	358.60	6,884.4	1,223.8	-25.2	1,223.8	1.52	1.19	0.95
7,877.0	90.00	358.60	6,884.3	1,266.8	-26.2	1,266.8	0.70	-0.70	0.00
7,920.0	89.50	358.80	6,884.4	1,309.8	-27.2	1,309.8	1.25	-1.16	0.47
7,963.0	89.90	358.60	6,884.7	1,352.8	-28.2	1,352.8	1.04	0.93	-0.47
8,005.0	90.50	358.90	6,884.5	1,394.8	-29.1	1,394.8	1.60	1.43	0.71
8,048.0	90.70	358.80	6,884.1	1,437.8	-30.0	1,437.8	0.52	0.47	-0.23
8,090.0	91.00	359.10	6,883.4	1,479.8	-30.7	1,479.8	1.01	0.71	0.71
8,133.0	90.80	359.30	6,882.8	1,522.8	-31.3	1,522.8	0.66	-0.47	0.47
8,176.0	91.10	359.50	6,882.1	1,565.8	-31.8	1,565.8	0.84	0.70	0.47
8,219.0	89.80	359.10	6,881.7	1,608.7	-32.3	1,608.7	3.16	-3.02	-0.93
8,261.0	90.20	359.50	6,881.7	1,650.7	-32.8	1,650.7	1.35	0.95	0.95
8,304.0	89.30	358.60	6,881.9	1,693.7	-33.5	1,693.7	2.96	-2.09	-2.09
8,346.0	88.80	358.00	6,882.6	1,735.7	-34.8	1,735.7	1.86	-1.19	-1.43
8,389.0	89.80	357.70	6,883.1	1,778.7	-36.4	1,778.7	2.43	2.33	-0.70
8,432.0	90.90	358.20	6,882.9	1,821.6	-37.9	1,821.6	2.81	2.56	1.16
8,474.0	90.90	358.40	6,882.2	1,863.6	-39.2	1,863.6	0.48	0.00	0.48
8,517.0	91.20	358.20	6,881.4	1,906.6	-40.4	1,906.6	0.84	0.70	-0.47
8,560.0	91.50	358.40	6,880.4	1,949.6	-41.7	1,949.6	0.84	0.70	0.47
8,602.0	90.50	359.10	6,879.7	1,991.5	-42.6	1,991.5	2.91	-2.38	1.67
8,645.0	90.60	359.10	6,879.3	2,034.5	-43.3	2,034.5	0.23	0.23	0.00
8,687.0	91.00	359.10	6,878.7	2,076.5	-44.0	2,076.5	0.95	0.95	0.00
8,730.0	89.80	359.80	6,878.4	2,119.5	-44.4	2,119.5	3.23	-2.79	1.63
8,772.0	88.90	359.50	6,878.8	2,161.5	-44.6	2,161.5	2.26	-2.14	-0.71
8,815.0	87.90	358.80	6,880.1	2,204.5	-45.3	2,204.5	2.84	-2.33	-1.63
8,857.0	88.60	358.80	6,881.3	2,246.5	-46.2	2,246.5	1.67	1.67	0.00
8,900.0	88.30	358.40	6,882.5	2,289.4	-47.2	2,289.4	1.16	-0.70	-0.93
8,942.0	88.50	358.20	6,883.7	2,331.4	-48.5	2,331.4	0.67	0.48	-0.48



DDC
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8,985.0	87.80	359.10	6,885.1	2,374.4	-49.5	2,374.4	2.65	-1.63	2.09
9,028.0	87.60	359.10	6,886.8	2,417.3	-50.1	2,417.3	0.47	-0.47	0.00
9,071.0	87.00	358.60	6,888.8	2,460.3	-51.0	2,460.3	1.82	-1.40	-1.16
9,156.0	87.30	358.40	6,893.0	2,545.1	-53.2	2,545.1	0.42	0.35	-0.24
9,199.0	87.60	358.90	6,894.9	2,588.1	-54.2	2,588.1	1.36	0.70	1.16
9,241.0	87.70	359.10	6,896.7	2,630.0	-55.0	2,630.0	0.53	0.24	0.48
9,284.0	87.60	359.10	6,898.4	2,673.0	-55.6	2,673.0	0.23	-0.23	0.00
9,327.0	87.90	359.30	6,900.1	2,716.0	-56.2	2,716.0	0.84	0.70	0.47
9,369.0	88.40	359.30	6,901.5	2,757.9	-56.8	2,757.9	1.19	1.19	0.00
9,412.0	88.20	359.50	6,902.8	2,800.9	-57.2	2,800.9	0.66	-0.47	0.47
9,454.0	87.50	359.50	6,904.3	2,842.9	-57.6	2,842.9	1.67	-1.67	0.00
9,497.0	87.40	0.00	6,906.2	2,885.8	-57.8	2,885.8	1.18	-0.23	1.16
9,540.0	87.10	0.30	6,908.3	2,928.8	-57.6	2,928.8	0.99	-0.70	0.70
9,582.0	87.10	359.80	6,910.4	2,970.7	-57.6	2,970.7	1.19	0.00	-1.19
9,625.0	87.30	358.80	6,912.5	3,013.7	-58.1	3,013.7	2.37	0.47	-2.33
9,668.0	87.40	358.60	6,914.5	3,056.6	-59.1	3,056.6	0.52	0.23	-0.47
9,710.0	87.70	358.60	6,916.3	3,098.6	-60.1	3,098.6	0.71	0.71	0.00
9,753.0	87.90	358.80	6,918.0	3,141.5	-61.1	3,141.5	0.66	0.47	0.47
9,796.0	88.10	359.60	6,919.5	3,184.5	-61.7	3,184.5	1.92	0.47	1.86
9,838.0	88.50	359.80	6,920.7	3,226.5	-61.9	3,226.5	1.06	0.95	0.48
9,881.0	88.90	359.80	6,921.7	3,269.5	-62.1	3,269.5	0.93	0.93	0.00
9,924.0	89.30	0.70	6,922.4	3,312.5	-61.9	3,312.5	2.29	0.93	2.09
9,966.0	89.30	0.50	6,922.9	3,354.5	-61.5	3,354.5	0.48	0.00	-0.48
10,009.0	89.30	0.00	6,923.4	3,397.5	-61.3	3,397.5	1.16	0.00	-1.16
10,051.0	89.30	0.20	6,923.9	3,439.5	-61.2	3,439.5	0.48	0.00	0.48
10,094.0	89.10	0.30	6,924.5	3,482.5	-61.0	3,482.5	0.52	-0.47	0.23
10,136.0	88.90	0.30	6,925.2	3,524.4	-60.8	3,524.4	0.48	-0.48	0.00
10,179.0	89.30	359.80	6,925.9	3,567.4	-60.7	3,567.4	1.49	0.93	-1.16
10,222.0	89.50	0.30	6,926.4	3,610.4	-60.7	3,610.4	1.25	0.47	1.16
10,264.0	89.60	0.00	6,926.7	3,652.4	-60.6	3,652.4	0.75	0.24	-0.71
10,307.0	89.50	0.30	6,927.0	3,695.4	-60.5	3,695.4	0.74	-0.23	0.70
10,349.0	90.00	0.90	6,927.2	3,737.4	-60.0	3,737.4	1.86	1.19	1.43
10,392.0	90.20	1.00	6,927.1	3,780.4	-59.3	3,780.4	0.52	0.47	0.23
10,435.0	90.20	1.00	6,927.0	3,823.4	-58.6	3,823.4	0.00	0.00	0.00
10,477.0	90.70	0.90	6,926.7	3,865.4	-57.9	3,865.4	1.21	1.19	-0.24
10,520.0	90.50	0.90	6,926.2	3,908.4	-57.2	3,908.4	0.47	-0.47	0.00
10,563.0	90.80	1.20	6,925.7	3,951.4	-56.4	3,951.4	0.99	0.70	0.70
10,605.0	89.30	1.20	6,925.7	3,993.4	-55.5	3,993.4	3.57	-3.57	0.00
10,648.0	88.30	1.60	6,926.6	4,036.4	-54.5	4,036.4	2.50	-2.33	0.93
10,691.0	88.40	1.20	6,927.8	4,079.3	-53.4	4,079.3	0.96	0.23	-0.93
10,733.0	88.60	1.60	6,928.9	4,121.3	-52.4	4,121.3	1.06	0.48	0.95
10,776.0	88.70	2.10	6,929.9	4,164.3	-51.0	4,164.3	1.19	0.23	1.16
10,819.0	89.10	2.30	6,930.8	4,207.2	-49.4	4,207.2	1.04	0.93	0.47
10,861.0	89.40	2.40	6,931.3	4,249.2	-47.7	4,249.2	0.75	0.71	0.24



DDC
Survey Report



Company: Apache Corporation
Project: Lea County, NM
Site: Sec 9, T21S, R37E
Well: Southland Royalty #2H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Southland Royalty #2H
TVD Reference: WELL @ 3476.0usft (Capstar #133)
MD Reference: WELL @ 3476.0usft (Capstar #133)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,904.0	89.70	2.30	6,931.7	4,292.2	-45.9	4,292.2	0.74	0.70	-0.23
10,946.0	90.60	4.00	6,931.5	4,334.1	-43.6	4,334.1	4.58	2.14	4.05
10,989.0	91.20	5.60	6,930.9	4,376.9	-40.0	4,376.9	3.97	1.40	3.72
11,032.0	91.30	6.10	6,929.9	4,419.7	-35.6	4,419.7	1.19	0.23	1.16
11,074.0	91.40	5.90	6,928.9	4,461.5	-31.2	4,461.5	0.53	0.24	-0.48
11,117.0	91.40	5.60	6,927.9	4,504.2	-26.9	4,504.2	0.70	0.00	-0.70
11,160.0	91.60	5.60	6,926.8	4,547.0	-22.7	4,547.0	0.47	0.47	0.00
11,175.0	90.80	5.10	6,926.5	4,561.9	-21.3	4,561.9	6.29	-5.33	-3.33
TD @ 11232' MD / 6926' TVD									
11,232.0	90.80	5.10	6,925.7	4,618.7	-16.3	4,618.7	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,112.2	6,112.0	23.2	19.2	TIE IN @ 6112' MD / 6112' TVD
11,232.0	6,925.7	4,618.7	-16.3	TD @ 11232' MD / 6926' TVD

Checked By: _____ Approved By: _____ Date: _____