



Directional Services

Job Number: 061117505888
Company: EOG Resources, Inc.
Lease/Well: San Saba "A" 12 Fee, Well #2H
Location: Eddy County, NM
Rig Name: Key #463
RKB: 22'
G.L. or M.S.L.: GL

State/Country: New Mexico/USA
Declination: 8.78°
Grid: East To Grid
File name: F:\2006SU~1\EOGRES~1\SANSAB2H.SVY
Date/Time: 21-Jun-06 / 17:14
Curve Name: Surface - 4836' M.D.

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method
Vertical Section Plane .00

Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
San Saba MD to 4836' MD is, to the best of
our knowledge a true and accurate account of
the well bore.

[Signature]
Multi-Shot
Date 06/21/06

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	1.00	165.03	99.99	-.84	.23	-.84	.87	165.03	1.00
200.00	1.00	169.92	199.98	-2.55	.60	-2.55	2.62	166.66	.09
300.00	1.25	179.82	299.96	-4.50	.76	-4.50	4.56	170.41	.32
400.00	1.00	187.72	399.94	-6.45	.65	-6.45	6.48	174.28	.29
500.00	1.50	191.62	499.92	-8.60	.27	-8.60	8.60	178.23	.51
600.00	7.25	226.50	599.59	-14.23	-4.58	-14.23	14.95	197.84	6.08
700.00	8.25	230.44	698.68	-23.14	-14.69	-23.14	27.41	212.41	1.13
800.00	8.25	231.35	797.64	-32.19	-25.82	-32.19	41.27	218.74	.13
900.00	9.00	230.24	896.51	-41.68	-37.44	-41.68	56.02	221.94	.77
1000.00	8.25	234.69	995.38	-50.83	-49.31	-50.83	70.81	224.13	1.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1100.00	7.25	234.57	1094.47	-58.63	-60.30	-58.63	84.11	225.81	1.00
1200.00	6.50	236.47	1193.75	-65.41	-70.16	-65.41	95.93	227.01	.78
1300.00	5.50	236.36	1293.20	-71.20	-78.87	-71.20	106.25	227.93	1.00
1400.00	5.00	238.26	1392.78	-76.14	-86.57	-76.14	115.29	228.67	.53
1500.00	4.50	238.15	1492.44	-80.51	-93.61	-80.51	123.46	229.30	.50
1600.00	4.25	240.05	1592.14	-84.43	-100.15	-84.43	130.99	229.87	.29
1700.00	3.25	250.96	1691.93	-87.20	-106.04	-87.20	137.29	230.57	1.22
1800.00	1.75	263.83	1791.83	-88.29	-110.24	-88.29	141.24	231.31	1.59
1900.00	1.50	276.73	1891.79	-88.30	-113.06	-88.30	143.45	232.01	.44
2000.00	1.25	287.63	1991.76	-87.82	-115.39	-87.82	145.01	232.73	.36
2100.00	1.25	296.53	2091.74	-87.00	-117.41	-87.00	146.13	233.46	.19
2200.00	1.25	304.43	2191.72	-85.90	-119.29	-85.90	146.99	234.24	.17
2300.00	1.25	318.33	2291.69	-84.46	-120.91	-84.46	147.49	235.06	.30
2400.00	1.25	320.23	2391.67	-82.81	-122.33	-82.81	147.73	235.90	.04
2500.00	1.50	306.13	2491.64	-81.20	-124.09	-81.20	148.30	236.80	.42
2600.00	1.50	297.03	2591.61	-79.83	-126.31	-79.83	149.43	237.71	.24
2700.00	1.50	308.93	2691.57	-78.42	-128.50	-78.42	150.53	238.61	.31
2800.00	1.50	297.84	2791.54	-76.98	-130.67	-76.98	151.66	239.50	.29
2900.00	1.75	299.74	2891.50	-75.61	-133.15	-75.61	153.13	240.41	.26
3000.00	2.00	303.15	2991.45	-73.90	-135.94	-73.90	154.73	241.47	.27
3100.00	1.50	293.05	3091.40	-72.44	-138.61	-72.44	156.39	242.41	.59
3200.00	1.25	289.94	3191.37	-71.55	-140.84	-71.55	157.97	243.07	.26
3300.00	1.00	287.84	3291.35	-70.91	-142.69	-70.91	159.34	243.57	.25
3400.00	.75	331.74	3391.34	-70.07	-143.83	-70.07	159.99	244.03	.69
3500.00	.50	25.64	3491.33	-69.10	-143.95	-69.10	159.68	244.36	.61
3600.00	.50	46.54	3591.33	-68.41	-143.45	-68.41	158.92	244.51	.18
3700.00	1.50	50.45	3691.31	-67.27	-142.12	-67.27	157.24	244.67	1.00
3800.00	.50	45.35	3791.30	-66.13	-140.80	-66.13	155.56	244.84	1.00
3900.00	.25	358.25	3891.30	-65.61	-140.50	-65.61	155.06	244.97	.38
4000.00	.25	88.15	3991.29	-65.38	-140.29	-65.38	154.78	245.01	.35
4100.00	.25	86.05	4091.29	-65.36	-139.85	-65.36	154.37	244.95	.01
4200.00	1.00	69.95	4191.29	-65.05	-138.81	-65.05	153.30	244.89	.76

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4300.00	.50	38.85	4291.28	-64.41	-137.72	-64.41	152.04	244.94	.63
4400.00	.50	345.75	4391.28	-63.64	-137.55	-63.64	151.56	245.17	.45
4500.00	.75	334.65	4491.27	-62.63	-137.94	-62.63	151.49	245.58	.28
4600.00	.75	311.55	4591.26	-61.60	-138.71	-61.60	151.78	246.05	.30
4700.00	.75	285.46	4691.25	-61.00	-139.83	-61.00	152.56	246.43	.34
4800.00	1.50	280.36	4791.23	-60.59	-141.75	-60.59	154.16	246.86	.76
Last Survey Depth Recorded									
4836.00	1.50	283.26	4827.22	-60.39	-142.67	-60.39	154.93	247.06	.21

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Date: 7/6/2006

Time: 11:02 pm

201000034 WT-WT

Created: 6/25/2006

Revision: 7/6/2006

Survey Report

wellpath ID:

Date

Last

Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 268.20 deg.

Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

EOG RESOURCES
COTTONWOOD CREEK
KEY #463
SAN SABA A 12 FEE #2
201000034 WT-WT

DECL: 8.77° EAST FROM GRID NORTH
KBH : 17.0' (GROUND LEVEL - ROTARY TABLE)

PATHFINDER OFFICE SUPERVISORS:
CODY MEBANE
PATHFINDER FIELD ENGINEERS:
PATRICK OKIMI

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
4159.00	0.69	72.31	4150.29	0.00	140.28	64.42 S 138.32 W	152.59 @ 245.03		0.00

TIE INTO GYRO SURVEY:

THE FOLLOWING ARE PATHFINDER ENERGY MWD SURVEYS:

San saba A 12 Fee #2H Final survey.txt							
4186.00	4.40	256.10	4177.27	27.00	141.13	64.62 S	139.17 W
4218.00	9.58	256.10	4209.02	32.00	144.94	65.55 S	142.95 W
4249.00	14.60	256.54	4239.32	31.00	151.29	67.08 S	149.26 W
4281.00	19.35	261.37	4269.92	32.00	160.51	68.82 S	158.43 W
4313.00	23.48	264.18	4299.71	32.00	172.14	70.26 S	170.02 W
4344.00	26.64	265.50	4327.78	31.00	185.25	71.43 S	183.09 W
4376.00	29.90	266.73	4355.96	32.00	200.39	72.45 S	198.21 W
4408.00	32.80	267.52	4383.29	32.00	217.03	73.28 S	214.84 W
4439.00	35.53	270.07	4408.94	31.00	234.44	73.64 S	232.24 W
4471.00	39.04	270.69	4434.39	32.00	253.80	73.50 S	251.62 W
4503.00	42.74	270.25	4458.58	32.00	274.73	73.33 S	272.56 W
4534.00	46.08	269.46	4480.72	31.00	296.41	73.39 S	294.25 W
4566.00	49.51	269.63	4502.22	32.00	320.10	73.58 S	317.95 W
4598.00	52.85	269.63	4522.27	32.00	345.03	73.74 S	342.88 W
4630.00	56.89	270.77	4540.69	32.00	371.17	73.64 S	369.04 W
4661.00	60.23	270.07	4556.85	31.00	397.60	73.45 S	395.49 W
4693.00	63.84	270.60	4571.86	32.00	425.84	73.29 S	423.75 W

□

Pathfinder

Date: 7/6/2006

201000034 WT-WT

Survey Report

wellpath ID:

Measured Depth (ft)	Inc1 (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical section (ft)	T O T A L Rectangular offsets (ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
4725.00	67.09	270.25	4585.14	32.00	454.92	73.07 S	458.71	@ 260.83	10.20
4757.00	68.59	269.37	4597.21	32.00	484.55	73.17 S	488.00	@ 261.38	5.33
4788.00	71.40	269.10	4607.82	31.00	513.67	73.56 S	516.87	@ 261.82	9.10
4820.00	73.16	268.84	4617.56	32.00	544.15	74.11 S	547.13	@ 262.22	5.55
4852.00	75.27	267.26	4626.26	32.00	574.94	75.16 S	577.77	@ 262.53	8.13
4884.00	77.56	267.26	4633.78	32.00	606.03	76.64 S	608.77	@ 262.77	7.16
4916.00	82.22	266.29	4639.39	32.00	637.52	78.42 S	640.19	@ 262.96	14.86
4948.00	86.70	266.38	4642.48	32.00	669.34	80.45 S	671.98	@ 263.12	14.00

	San	saba	A	12	Fee	#2H	Final	survey.txt				
4980.00	90.75	264.45	4643.19	32.00	701.29	83.01	S	699.03	W	703.94	@	263.23
5012.00	90.40	263.30	4642.87	32.00	733.20	86.42	S	730.84	W	735.94	@	263.26
5044.00	89.78	263.66	4642.82	32.00	765.09	90.06	S	762.64	W	767.94	@	263.27
5075.00	91.19	264.36	4642.56	31.00	796.00	93.29	S	793.46	W	798.93	@	263.29
5107.00	91.19	264.36	4641.89	32.00	827.92	96.44	S	825.30	W	830.92	@	263.34
5139.00	92.07	266.29	4640.98	32.00	859.87	99.04	S	857.18	W	862.88	@	263.41
5171.00	92.07	266.38	4639.83	32.00	891.83	101.09	S	889.10	W	894.82	@	263.51
5203.00	93.83	268.31	4638.18	32.00	923.78	102.57	S	921.02	W	926.71	@	263.65
5235.00	90.22	267.00	4637.05	32.00	955.76	103.88	S	952.96	W	958.61	@	263.78
5266.00	89.08	268.23	4637.24	31.00	986.75	105.17	S	983.93	W	989.54	@	263.90
5298.00	90.22	269.72	4637.44	32.00	1018.75	105.74	S	1015.93	W	1021.42	@	264.06
5330.00	94.35	272.00	4636.16	32.00	1050.68	105.26	S	1047.89	W	1053.16	@	264.26
5362.00	91.80	270.86	4634.44	32.00	1082.58	104.46	S	1079.83	W	1084.87	@	264.47
5394.00	92.07	270.95	4633.36	32.00	1114.52	103.96	S	1111.81	W	1116.66	@	264.66
5426.00	90.31	269.46	4632.70	32.00	1146.50	103.84	S	1143.80	W	1148.50	@	264.81
5457.00	91.63	270.60	4632.17	31.00	1177.47	103.83	S	1174.79	W	1179.37	@	264.95
5489.00	92.59	270.95	4631.00	32.00	1209.42	103.40	S	1206.77	W	1211.19	@	265.10
5521.00	92.59	271.04	4629.55	32.00	1241.35	102.84	S	1238.73	W	1242.99	@	265.25
5552.00	92.51	272.36	4628.17	31.00	1272.26	101.92	S	1269.69	W	1273.77	@	265.41
5584.00	90.66	270.95	4627.29	32.00	1304.19	101.00	S	1301.66	W	1305.57	@	265.56
5616.00	91.54	272.71	4626.67	32.00	1336.12	99.98	S	1333.63	W	1337.38	@	265.71
5648.00	90.75	271.92	4626.03	32.00	1368.03	98.68	S	1365.60	W	1369.16	@	265.87
5680.00	91.19	272.80	4625.49	32.00	1399.94	97.37	S	1397.57	W	1400.96	@	266.01
5712.00	89.78	271.83	4625.22	32.00	1431.85	96.07	S	1429.54	W	1432.77	@	266.16
5744.00	88.37	270.42	4625.74	32.00	1463.81	95.45	S	1461.53	W	1464.64	@	266.26
5776.00	88.72	270.60	4626.55	32.00	1495.77	95.16	S	1493.52	W	1496.55	@	266.35
5807.00	89.60	270.33	4627.00	31.00	1526.74	94.91	S	1524.51	W	1527.46	@	266.44
5839.00	93.21	272.71	4626.22	32.00	1558.67	94.06	S	1556.48	W	1559.32	@	266.54
5871.00	94.26	273.06	4624.13	32.00	1590.50	92.46	S	1588.37	W	1591.06	@	266.67
5903.00	93.83	271.48	4621.88	32.00	1622.33	91.19	S	1620.27	W	1622.83	@	266.78
5935.00	91.71	270.16	4620.33	32.00	1654.26	90.73	S	1652.23	W	1654.72	@	266.86
5966.00	93.30	271.39	4618.97	31.00	1685.20	90.32	S	1683.19	W	1685.61	@	266.93

□

Pathfinder

San Saba A 12 Fee #2H Final Survey.txt

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Survey Report

wellpath ID:

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	T O T A L Rectangular Offsets (ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
5998.00	93.65	270.86	4617.04	32.00	1717.10	89.69 S	1715.13 W	1717.47 @ 267.01	1.98
6030.00	94.00	271.04	4614.90	32.00	1748.99	89.16 S	1747.05 W	1749.32 @ 267.08	1.23
6062.00	94.35	271.13	4612.57	32.00	1780.86	88.55 S	1778.96 W	1781.16 @ 267.15	1.13
6094.00	91.98	271.21	4610.80	32.00	1812.77	87.90 S	1810.90 W	1813.03 @ 267.22	7.41
6126.00	90.75	271.48	4610.04	32.00	1844.71	87.15 S	1842.88 W	1844.94 @ 267.29	3.94
6158.00	90.48	270.69	4609.70	32.00	1876.67	86.55 S	1874.88 W	1876.87 @ 267.36	2.61
6190.00	90.48	270.86	4609.43	32.00	1908.64	86.11 S	1906.87 W	1908.82 @ 267.41	0.53
6221.00	89.78	269.28	4609.36	31.00	1939.62	86.07 S	1937.87 W	1939.78 @ 267.46	5.57
6253.00	90.31	269.37	4609.34	32.00	1971.61	86.45 S	1969.87 W	1971.76 @ 267.49	1.68
6285.00	90.84	270.77	4609.01	32.00	2003.59	86.41 S	2001.87 W	2003.73 @ 267.53	4.68
6317.00	91.98	271.13	4608.23	32.00	2035.55	85.88 S	2033.85 W	2035.66 @ 267.58	3.74
6349.00	89.16	269.37	4607.91	32.00	2067.52	85.74 S	2065.84 W	2067.62 @ 267.62	10.39
6381.00	88.72	269.02	4608.50	32.00	2099.51	86.19 S	2097.84 W	2099.61 @ 267.65	1.76
6419.00	89.43	269.48	4609.11	38.00	2137.50	86.69 S	2135.83 W	2137.59 @ 267.68	2.23
6451.00	90.48	270.10	4609.14	32.00	2169.48	86.81 S	2167.83 W	2169.56 @ 267.71	3.81
6482.00	90.22	270.14	4608.95	31.00	2200.47	86.74 S	2198.83 W	2200.54 @ 267.74	0.85
6514.00	90.92	270.36	4608.63	32.00	2232.44	86.60 S	2230.82 W	2232.50 @ 267.78	2.29
6547.00	91.63	271.56	4607.90	33.00	2265.40	86.05 S	2263.81 W	2265.45 @ 267.82	4.22
6578.00	92.24	272.28	4606.85	31.00	2296.31	85.01 S	2294.77 W	2296.35 @ 267.88	3.04
6610.00	92.15	272.43	4605.62	32.00	2328.21	83.70 S	2326.72 W	2328.23 @ 267.94	0.55
6642.00	91.36	271.65	4604.64	32.00	2360.12	82.56 S	2358.69 W	2360.13 @ 268.00	3.47
6673.00	91.36	271.30	4603.91	31.00	2391.06	81.76 S	2389.67 W	2391.07 @ 268.04	1.13
6705.00	90.75	271.48	4603.32	32.00	2423.00	80.99 S	2421.65 W	2423.01 @ 268.08	1.99
6737.00	90.31	271.53	4603.02	32.00	2454.95	80.15 S	2453.64 W	2454.95 @ 268.13	1.38
6769.00	91.71	271.29	4602.46	32.00	2486.89	79.36 S	2485.63 W	2486.89 @ 268.17	4.44
6801.00	91.80	271.51	4601.48	32.00	2518.83	78.58 S	2517.60 W	2518.83 @ 268.21	0.74

6833.00	91.63	271.88	4600.52	San Saba A 12	Fee #2H Final	Survey.txt	2549.57 W	2550.76 @ 268.26	1.27.
				32.00	2550.75	77.63 S			
STRAIGHT LINE PROJECTION TO BIT DEPTH @ 6897.5' MD									
6897.50	91.63	271.88	4598.69	64.50	2615.09	75.51 S	2614.01 W	2615.10 @ 268.35	0.00