

LEAM Drilling Systems, Inc.
Survey Calculations

LEAM Job Number: D-3927-MD

Operator: SAMSON RESOURCES **Location:** LEA CO., NM

Lease/Well: LEA FEDERAL UNIT #24

Calculation Method: Minimum Curvature

Proposed Azimuth: 0.00

Bearing: N0.00E

Units: English(ft)

<u>MeasDepth</u>	<u>CrsLen</u>	<u>Drift</u>	<u>Azimuth</u>	<u>Bearing</u>	<u>TVD</u>	<u>Vsect</u>	<u>NS(±)</u>	<u>EW(±)</u>	<u>Build</u>	<u>Turn</u>	<u>Dogleg</u>
TIE INTO SURFACE											
0.00	0.00	0.00	0.00	N0.00E	0.00	0.00	0.00	0.00	0.00	0.00	0.00
THE FOLLOWING ARE LEAM DIRECTIONAL SURVEYS.											
1600.00	1600.00	0.30	273.96	N86.04W	1599.99	0.29	0.29	-4.18	0.02	-5.38	0.02
2077.00	477.00	0.40	32.40	N32.40E	2076.99	1.78	1.78	-4.53	0.02	24.83	0.13
2553.00	476.00	0.30	71.20	N71.20E	2552.98	3.59	3.59	-2.46	-0.02	8.15	0.05
3029.00	476.00	0.60	32.50	N32.50E	3028.97	6.09	6.09	0.06	0.06	-8.13	0.09
3220.00	191.00	0.70	42.40	N42.40E	3219.95	7.79	7.79	1.38	0.05	5.18	0.08
3251.00	31.00	0.40	351.20	N8.80W	3250.95	8.04	8.04	1.49	-0.97	-165.16	1.76
3284.00	33.00	1.20	250.70	S70.70W	3283.95	8.04	8.04	1.15	2.42	-304.55	4.04
3316.00	32.00	1.90	245.57	S65.57W	3315.94	7.71	7.71	0.35	2.19	-16.03	2.23
3411.00	95.00	2.60	240.70	S60.70W	3410.86	6.00	6.00	-2.96	0.74	-5.13	0.76
3475.00	64.00	2.50	243.60	S63.60W	3474.80	4.67	4.67	-5.48	-0.16	4.53	0.26
3600.00	125.00	2.40	250.20	S70.20W	3599.69	2.58	2.58	-10.39	-0.08	5.28	0.24
3696.00	96.00	2.20	248.60	S68.60W	3695.61	1.22	1.22	-13.99	-0.21	-1.67	0.22
3791.00	95.00	2.40	247.80	S67.80W	3790.53	-0.20	-0.20	-17.53	0.21	-0.84	0.21
3886.00	95.00	2.20	247.10	S67.10W	3885.46	-1.66	-1.66	-21.05	-0.21	-0.74	0.21
3949.00	63.00	2.10	243.60	S63.60W	3948.41	-2.64	-2.64	-23.20	-0.16	-5.56	0.26
STRAIGHT LINE PROJECTION TO BIT											
3995.00	46.00	2.10	243.60	S63.60W	3994.38	-3.39	-3.39	-24.71	0.00	0.00	0.00

