

PathFinder

Planning Report

Company: Marbob Energy
 Field: Sly Hawk Field
 Site: Sly Hawk State #2
 Well: Sly Hawk State #2
 Wellpath: Original Hole

Date: 3/29/2005 Time: 14:27:44 Page: 2
 Co-ordinate(NE) Reference: Well: Sly Hawk State #2, True North
 Vertical (TVD) Reference: SITE 0.0
 Section (VS) Reference: Well (0.00N,0.00E,358.73Azi)
 Plan: Plan #1 032905

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4412.50	0.00	0.00	4412.50	0.00	0.00	0.00	0.00	0.00	0.00	KOP @ 4412.5' w/12° Build
4425.00	1.50	358.73	4425.00	0.16	0.00	0.16	12.00	12.00	0.00	
4450.00	4.50	358.73	4449.96	1.47	-0.03	1.47	12.00	12.00	0.00	
4475.00	7.50	358.73	4474.82	4.08	-0.09	4.08	12.00	12.00	0.00	
4500.00	10.50	358.73	4499.51	7.99	-0.18	7.99	12.00	12.00	0.00	
4525.00	13.50	358.73	4523.96	13.19	-0.29	13.19	12.00	12.00	0.00	
4550.00	16.50	358.73	4548.11	19.65	-0.44	19.66	12.00	12.00	0.00	
4575.00	19.50	358.73	4571.88	27.38	-0.61	27.38	12.00	12.00	0.00	
4600.00	22.50	358.73	4595.22	36.33	-0.81	36.34	12.00	12.00	0.00	
4625.00	25.50	358.73	4618.06	46.49	-1.03	46.51	12.00	12.00	0.00	
4650.00	28.50	358.73	4640.33	57.84	-1.28	57.85	12.00	12.00	0.00	
4675.00	31.50	358.73	4661.98	70.33	-1.56	70.35	12.00	12.00	0.00	
4700.00	34.50	358.73	4682.94	83.94	-1.86	83.96	12.00	12.00	0.00	
4725.00	37.49	358.73	4703.17	98.63	-2.19	98.65	12.00	12.00	0.00	
4750.00	40.49	358.73	4722.60	114.35	-2.54	114.38	12.00	12.00	0.00	
4775.00	43.49	358.73	4741.17	131.07	-2.91	131.11	12.00	12.00	0.00	
4800.00	46.49	358.73	4758.85	148.74	-3.30	148.78	12.00	12.00	0.00	
4825.00	49.49	358.73	4775.58	167.31	-3.71	167.36	12.00	12.00	0.00	
4850.00	52.49	358.73	4791.31	186.73	-4.14	186.78	12.00	12.00	0.00	
4875.00	55.49	358.73	4806.01	206.95	-4.59	207.00	12.00	12.00	0.00	
4900.00	58.49	358.73	4819.63	227.91	-5.05	227.96	12.00	12.00	0.00	
4925.00	61.49	358.73	4832.13	249.55	-5.53	249.61	12.00	12.00	0.00	
4950.00	64.49	358.73	4843.48	271.81	-6.03	271.88	12.00	12.00	0.00	
4975.00	67.49	358.73	4853.65	294.64	-6.53	294.71	12.00	12.00	0.00	
5000.00	70.49	358.73	4862.61	317.97	-7.05	318.05	12.00	12.00	0.00	

Marbob Energy

Sly Hawk State #2

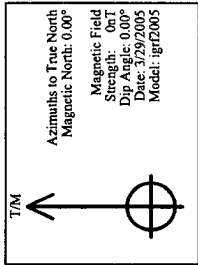
Section 3, T25-S, R28-E

Eddy County, New Mexico

Plan #1 032905

COMPANY DETAILS
 Marbob Energy
 2208 W. Main St.
 Artesia, New Mexico

Calculation Method: Minimum Curvature
 Error Method: Systematic Ellipse
 Scan Method: Closest Approach 3D
 Error Surface: Elliptical Conic
 Warning Method: Error Ratio

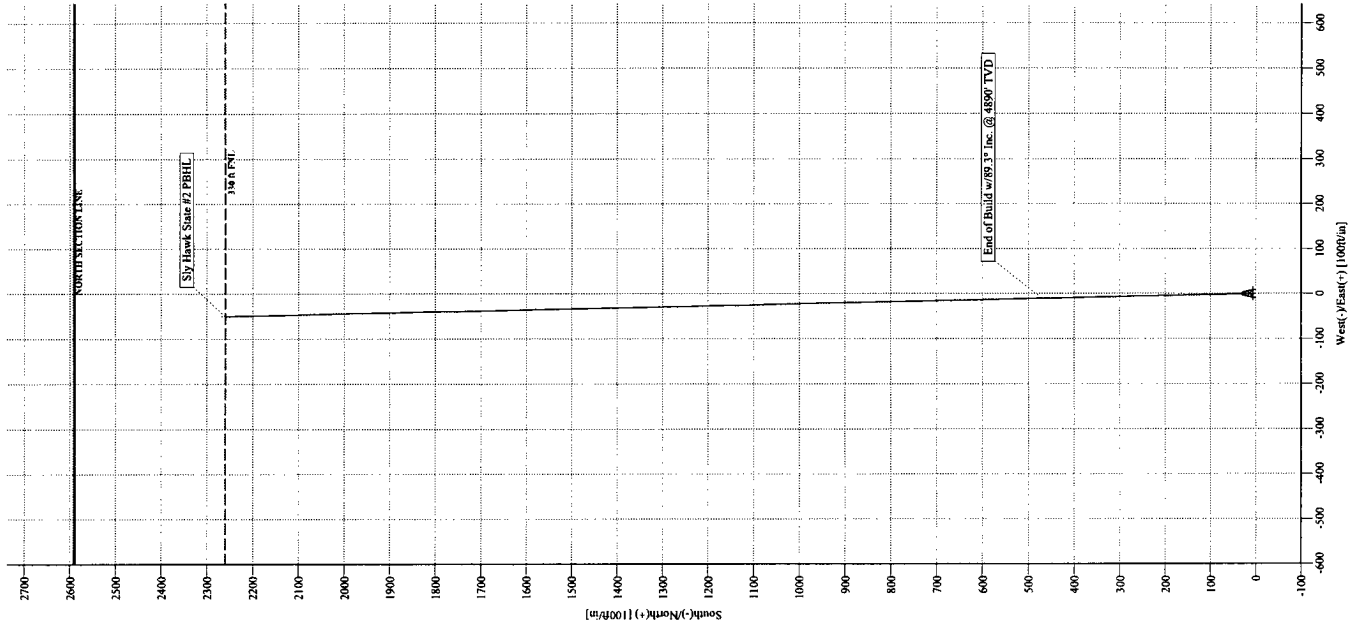
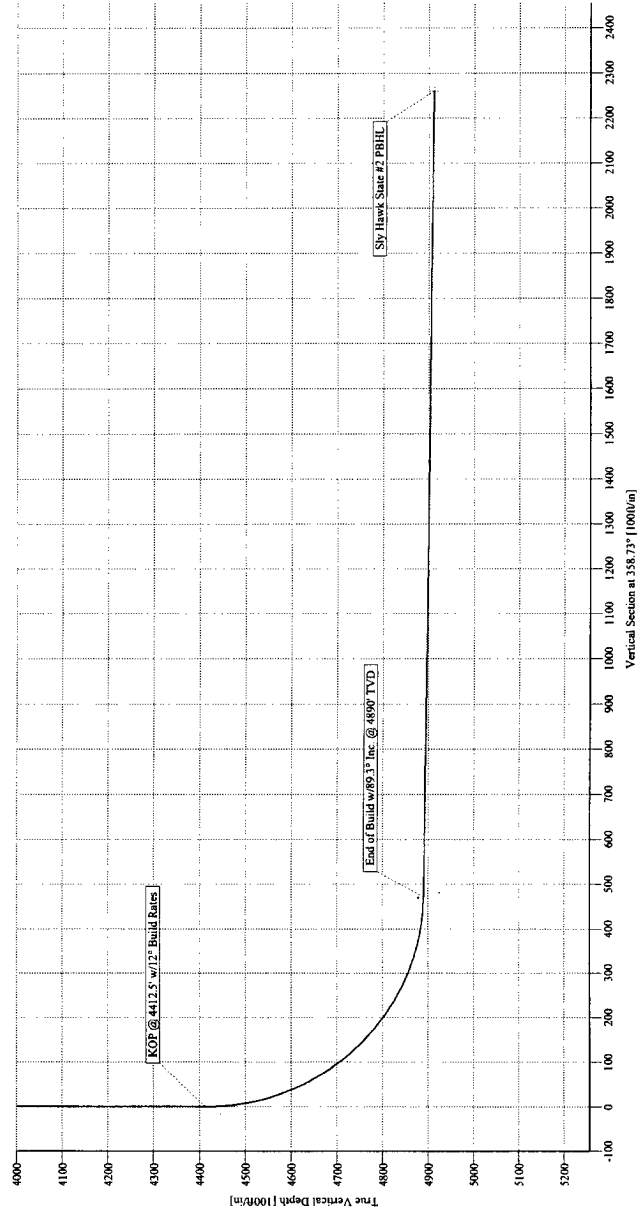


FIELD DETAILS
 Sly Hawk Field
 Section 3, T25-S, R28-E
 Eddy County, New Mexico
 Geodetic System: US State Plane Coordinate System 1927
 Ellipsoid: NAD27 (Clarke 1866)
 Magnetic Model: Igr2005
 System Datum: Mean Sea Level
 Local North: True North

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4412.50	0.00	0.00	4412.50	0.00	0.00	0.00	0.00	0.00	0.00
3	5156.94	89.32	358.73	4890.00	471.75	-10.46	12.00	358.73	471.87	471.87
4	6945.76	89.32	358.73	4911.45	2260.00	-50.00	0.00	0.00	2260.55	2260.55

Sly Hawk State #2 PBHL

Sly Hawk State #2 PBHL



PathFinder

Planning Report

Company: Marbob Energy
 Field: Sly Hawk Field
 Site: Sly Hawk State #2
 Well: Sly Hawk State #2
 Wellpath: Original Hole

Date: 3/29/2005 Time: 14:27:44 Page: 3
 Co-ordinate(N/E) Reference: Well: Sly Hawk State #2, True North
 Vertical (TVD) Reference: SITE 0.0
 Section (VS) Reference: Well (0.00N,0.00E,358.73Azi)
 Plan: Plan #1 032905

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
5025.00	73.49	358.73	4870.34	341.74	-7.58	341.82	12.00	12.00	0.00	
5050.00	76.49	358.73	4876.82	365.88	-8.11	365.97	12.00	12.00	0.00	
5075.00	79.49	358.73	4882.02	390.32	-8.65	390.42	12.00	12.00	0.00	
5100.00	82.49	358.73	4885.94	415.00	-9.20	415.10	12.00	12.00	0.00	
5125.00	85.49	358.73	4888.55	439.86	-9.75	439.96	12.00	12.00	0.00	
5150.00	88.49	358.73	4889.87	464.81	-10.30	464.93	12.00	12.00	0.00	
5156.94	89.32	358.73	4890.00	471.75	-10.46	471.87	12.00	12.00	0.00	End of Build w/89.3° Inc.
5200.00	89.32	358.73	4890.51	514.80	-11.41	514.92	0.00	0.00	0.00	
5300.00	89.32	358.73	4891.70	614.76	-13.63	614.92	0.00	0.00	0.00	
5400.00	89.32	358.73	4892.88	714.73	-15.85	714.91	0.00	0.00	0.00	
5500.00	89.32	358.73	4894.07	814.70	-18.06	814.90	0.00	0.00	0.00	
5600.00	89.32	358.73	4895.26	914.67	-20.28	914.89	0.00	0.00	0.00	
5700.00	89.32	358.73	4896.45	1014.64	-22.49	1014.89	0.00	0.00	0.00	
5800.00	89.32	358.73	4897.63	1114.61	-24.71	1114.88	0.00	0.00	0.00	
5900.00	89.32	358.73	4898.82	1214.57	-26.93	1214.87	0.00	0.00	0.00	
6000.00	89.32	358.73	4900.01	1314.54	-29.14	1314.87	0.00	0.00	0.00	
6100.00	89.32	358.73	4901.19	1414.51	-31.36	1414.86	0.00	0.00	0.00	
6200.00	89.32	358.73	4902.38	1514.48	-33.58	1514.85	0.00	0.00	0.00	
6300.00	89.32	358.73	4903.57	1614.45	-35.79	1614.85	0.00	0.00	0.00	
6400.00	89.32	358.73	4904.75	1714.42	-38.01	1714.84	0.00	0.00	0.00	
6500.00	89.32	358.73	4905.94	1814.39	-40.22	1814.83	0.00	0.00	0.00	
6600.00	89.32	358.73	4907.13	1914.35	-42.44	1914.82	0.00	0.00	0.00	
6700.00	89.32	358.73	4908.31	2014.32	-44.66	2014.82	0.00	0.00	0.00	
6800.00	89.32	358.73	4909.50	2114.29	-46.87	2114.81	0.00	0.00	0.00	
6900.00	89.32	358.73	4910.69	2214.26	-49.09	2214.80	0.00	0.00	0.00	
6945.76	89.32	358.73	4911.45	2260.00	-50.00	2260.55	0.00	0.00	0.00	Sly Hawk State #2 PBHL

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
Sly Hawk State #2 PBHL		4911.45	2260.00	-50.00			30	59	24.832 N	105	55	18.176 W

Annotation

MD ft	TVD ft	
4412.50	4412.50	KOP @ 4412.5' w/12° Build Rates
5156.94	4890.00	End of Build w/89.3° Inc. @ 4890' TVD