

PathFinder

Planning Report

Company: Marbob Energy
 Field: Sly Hawk Field
 Site: Sly Hawk State #3
 Well: Sly Hawk State #3
 Wellpath: Original Hole

Date: 3/29/2005 Time: 15:19:00 Page: 2
 Co-ordinate(NE) Reference: Well: Sly Hawk State #3, True North
 Vertical (TVD) Reference: SITE 0.0
 Section (VS) Reference: Well (0.00N,0.00E,0.00Azi)
 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	341.39	4425.00	0.16	-0.05	0.16	12.00	12.00	0.00	
4450.00	4.50	341.39	4449.96	1.39	-0.47	1.39	12.00	12.00	0.00	
4475.00	7.50	341.39	4474.82	3.87	-1.30	3.87	12.00	12.00	0.00	
4500.00	10.50	341.39	4499.51	7.58	-2.55	7.58	12.00	12.00	0.00	
4525.00	13.50	341.39	4523.96	12.50	-4.21	12.50	12.00	12.00	0.00	
4550.00	16.50	341.39	4548.11	18.63	-6.27	18.63	12.00	12.00	0.00	
4575.00	19.50	341.39	4571.88	25.95	-8.74	25.95	12.00	12.00	0.00	
4600.00	22.50	341.39	4595.22	34.44	-11.60	34.44	12.00	12.00	0.00	
4625.00	25.50	341.39	4618.06	44.07	-14.84	44.07	12.00	12.00	0.00	
4650.00	28.50	341.39	4640.33	54.83	-18.46	54.83	12.00	12.00	0.00	
4675.00	31.50	341.39	4661.98	66.67	-22.45	66.67	12.00	12.00	0.00	
4700.00	34.50	341.39	4682.94	79.57	-26.79	79.57	12.00	12.00	0.00	
4725.00	37.49	341.39	4703.17	93.50	-31.48	93.50	12.00	12.00	0.00	
4750.00	40.49	341.39	4722.60	108.40	-36.50	108.40	12.00	12.00	0.00	
4775.00	43.49	341.39	4741.17	124.25	-41.84	124.25	12.00	12.00	0.00	
4800.00	46.49	341.39	4758.85	141.00	-47.48	141.00	12.00	12.00	0.00	
4825.00	49.49	341.39	4775.58	158.60	-53.41	158.60	12.00	12.00	0.00	
4850.00	52.49	341.39	4791.31	177.01	-59.61	177.01	12.00	12.00	0.00	
4875.00	55.49	341.39	4806.01	196.18	-66.06	196.18	12.00	12.00	0.00	
4900.00	58.49	341.39	4819.63	216.04	-72.75	216.04	12.00	12.00	0.00	
4925.00	61.49	341.39	4832.13	236.56	-79.66	236.56	12.00	12.00	0.00	
4950.00	64.49	341.39	4843.48	257.66	-86.76	257.66	12.00	12.00	0.00	
4975.00	67.49	341.39	4853.65	279.30	-94.05	279.30	12.00	12.00	0.00	
5000.00	70.49	341.39	4862.61	301.42	-101.50	301.42	12.00	12.00	0.00	

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Section (VS) Reference: Well (0.00N,0.00E,0.00Azi)
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	341.39	4870.34	323.95	-109.08	323.95	12.00	12.00	0.00	
5050.00	76.49	341.39	4876.82	346.83	-116.79	346.83	12.00	12.00	0.00	
5075.00	79.49	341.39	4882.02	370.00	-124.59	370.00	12.00	12.00	0.00	
5100.00	82.49	341.39	4885.94	393.40	-132.47	393.40	12.00	12.00	0.00	
5125.00	85.49	341.39	4888.55	416.96	-140.40	416.96	12.00	12.00	0.00	
5150.00	88.49	341.39	4889.87	440.62	-148.37	440.62	12.00	12.00	0.00	
5156.94	89.32	341.39	4890.00	447.19	-150.58	447.19	12.00	12.00	0.00	End of Build w/89.9° Inc.
5200.00	89.32	341.39	4890.51	488.00	-164.32	488.00	0.00	0.00	0.00	
5300.00	89.32	341.39	4891.70	582.76	-196.23	582.76	0.00	0.00	0.00	
5400.00	89.32	341.39	4892.88	677.53	-228.15	677.53	0.00	0.00	0.00	
5500.00	89.32	341.39	4894.07	772.29	-260.06	772.29	0.00	0.00	0.00	
5600.00	89.32	341.39	4895.26	867.06	-291.97	867.06	0.00	0.00	0.00	
5700.00	89.32	341.39	4896.45	961.82	-323.88	961.82	0.00	0.00	0.00	
5800.00	89.32	341.39	4897.63	1056.59	-355.79	1056.59	0.00	0.00	0.00	
5900.00	89.32	341.39	4898.82	1151.35	-387.70	1151.35	0.00	0.00	0.00	
6000.00	89.32	341.39	4900.01	1246.12	-419.61	1246.12	0.00	0.00	0.00	
6100.00	89.32	341.39	4901.19	1340.88	-451.52	1340.88	0.00	0.00	0.00	
6200.00	89.32	341.39	4902.38	1435.64	-483.43	1435.64	0.00	0.00	0.00	
6300.00	89.32	341.39	4903.57	1530.41	-515.34	1530.41	0.00	0.00	0.00	
6400.00	89.32	341.39	4904.75	1625.17	-547.25	1625.17	0.00	0.00	0.00	
6500.00	89.32	341.39	4905.94	1719.94	-579.16	1719.94	0.00	0.00	0.00	
6600.00	89.32	341.39	4907.13	1814.70	-611.07	1814.70	0.00	0.00	0.00	
6700.00	89.32	341.39	4908.31	1909.47	-642.98	1909.47	0.00	0.00	0.00	
6721.70	89.32	341.39	4908.50	1930.00	-650.00	1930.00	0.00	0.00	0.00	Sly Hawk State #3 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 #3 PBHL			4908.50	1930.00	-650.00			30	59	24.800 N	105	55	20.749 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/89.9° Inc. @ 4890' TVD

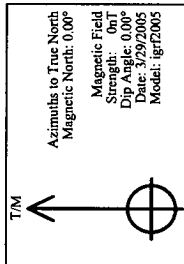
Marbob Energy

Sly Hawk State #3 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 System: Systematic Ellipse
Scan Method: Closest Approach 3D
Error Surface: Elliptical Cone
Warning Method: Error Ratio

PATHFINDER
ENERGY SERVICES



FIELD DETAILS
Sly Hawk Field
Section 3, T25-S, R28-E
Eddy County, New Mexico
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: GRS80
Datum: North American 83
Zone: New Mexico, Eastern Zone
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	
2	4412.50	0.00	0.00	4412.50	0.00	0.00	0.00	0.00	0.00	
3	5156.94	89.32	341.39	4890.00	447.19	-150.58	12.00	341.39	447.19	
4	6721.70	89.32	341.39	4908.50	1930.00	-650.00	0.00	0.00	1930.00	Sly Hawk State #3 PBHL

