

HATHAWAY BURNHAM LLC.

JASMIN FIELD
SECTION 15
QUINN 308-15

Wellbore #1

Plan: Plan #1

Standard Planning Report

10 June, 2008

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well QUINN 308-15
Company:	HATHAWAY BURNHAM LLC.	TVD Reference:	QUINN 308-15 @ 703.5ft
Project:	JASMIN FIELD	MD Reference:	QUINN 308-15 @ 703.5ft
Site:	SECTION 15	North Reference:	Grid
Well:	QUINN 308-15	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	JASMIN FIELD, KERN COUNTY		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	California V 405		

Site	SECTION 15, T25S, R27E				
Site Position:		Northing:	822,254.00ft	Latitude:	35° 45' 17.307 N
From:	Map	Easting:	1,687,505.00ft	Longitude:	119° 3' 11.022 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-0.60 °

Well	QUINN 308-15					
Well Position	+N-S	-1,373.0 ft	Northing:	820,881.00 ft	Latitude:	35° 45' 3.675 N
	+E-W	-526.0 ft	Easting:	1,686,979.00 ft	Longitude:	119° 3' 17.228 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	703.5 ft	Ground Level:	690.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/21/2008	13.47	60.26	48,641

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)
	0.0	0.0	0.0	15.76

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
523.0	6.69	15.76	522.5	12.5	3.5	3.00	3.00	0.00	15.76	
2,970.7	6.69	15.76	2,953.5	287.0	81.0	0.00	0.00	0.00	0.00	QUINN 308-15 TG1

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Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
50.0	0.00	0.00	50.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
350.0	1.50	15.76	350.0	0.6	0.2	0.7	3.00	3.00	0.00
400.0	3.00	15.76	400.0	2.5	0.7	2.6	3.00	3.00	0.00
450.0	4.50	15.76	449.8	5.7	1.6	5.9	3.00	3.00	0.00
500.0	6.00	15.76	499.6	10.1	2.8	10.5	3.00	3.00	0.00
523.0	6.69	15.76	522.5	12.5	3.5	13.0	3.00	3.00	0.00
550.0	6.69	15.76	549.3	15.5	4.4	16.2	0.00	0.00	0.00
600.0	6.69	15.76	599.0	21.2	6.0	22.0	0.00	0.00	0.00
650.0	6.69	15.76	648.6	26.8	7.6	27.8	0.00	0.00	0.00
700.0	6.69	15.76	698.3	32.4	9.1	33.6	0.00	0.00	0.00
750.0	6.69	15.76	747.9	38.0	10.7	39.5	0.00	0.00	0.00
800.0	6.69	15.76	797.6	43.6	12.3	45.3	0.00	0.00	0.00
850.0	6.69	15.76	847.3	49.2	13.9	51.1	0.00	0.00	0.00
900.0	6.69	15.76	896.9	54.8	15.5	56.9	0.00	0.00	0.00
950.0	6.69	15.76	946.6	60.4	17.0	62.8	0.00	0.00	0.00
1,000.0	6.69	15.76	996.2	66.0	18.6	68.6	0.00	0.00	0.00
1,050.0	6.69	15.76	1,045.9	71.6	20.2	74.4	0.00	0.00	0.00
1,100.0	6.69	15.76	1,095.6	77.2	21.8	80.2	0.00	0.00	0.00
1,150.0	6.69	15.76	1,145.2	82.8	23.4	86.1	0.00	0.00	0.00
1,200.0	6.69	15.76	1,194.9	88.4	25.0	91.9	0.00	0.00	0.00
1,250.0	6.69	15.76	1,244.5	94.0	26.5	97.7	0.00	0.00	0.00
1,300.0	6.69	15.76	1,294.2	99.6	28.1	103.5	0.00	0.00	0.00
1,350.0	6.69	15.76	1,343.9	105.3	29.7	109.4	0.00	0.00	0.00
1,400.0	6.69	15.76	1,393.5	110.9	31.3	115.2	0.00	0.00	0.00
1,450.0	6.69	15.76	1,443.2	116.5	32.9	121.0	0.00	0.00	0.00
1,500.0	6.69	15.76	1,492.8	122.1	34.5	126.8	0.00	0.00	0.00
1,550.0	6.69	15.76	1,542.5	127.7	36.0	132.7	0.00	0.00	0.00
1,600.0	6.69	15.76	1,592.2	133.3	37.6	138.5	0.00	0.00	0.00
1,650.0	6.69	15.76	1,641.8	138.9	39.2	144.3	0.00	0.00	0.00
1,700.0	6.69	15.76	1,691.5	144.5	40.8	150.2	0.00	0.00	0.00
1,750.0	6.69	15.76	1,741.1	150.1	42.4	156.0	0.00	0.00	0.00
1,800.0	6.69	15.76	1,790.8	155.7	43.9	161.8	0.00	0.00	0.00
1,850.0	6.69	15.76	1,840.5	161.3	45.5	167.6	0.00	0.00	0.00
1,900.0	6.69	15.76	1,890.1	166.9	47.1	173.5	0.00	0.00	0.00
1,950.0	6.69	15.76	1,939.8	172.5	48.7	179.3	0.00	0.00	0.00
2,000.0	6.69	15.76	1,989.4	178.1	50.3	185.1	0.00	0.00	0.00
2,050.0	6.69	15.76	2,039.1	183.8	51.9	190.9	0.00	0.00	0.00
2,100.0	6.69	15.76	2,088.8	189.4	53.4	196.8	0.00	0.00	0.00
2,150.0	6.69	15.76	2,138.4	195.0	55.0	202.6	0.00	0.00	0.00
2,200.0	6.69	15.76	2,188.1	200.6	56.6	208.4	0.00	0.00	0.00
2,250.0	6.69	15.76	2,237.7	206.2	58.2	214.2	0.00	0.00	0.00
2,300.0	6.69	15.76	2,287.4	211.8	59.8	220.1	0.00	0.00	0.00
2,350.0	6.69	15.76	2,337.0	217.4	61.4	225.9	0.00	0.00	0.00
2,400.0	6.69	15.76	2,386.7	223.0	62.9	231.7	0.00	0.00	0.00
2,450.0	6.69	15.76	2,436.4	228.6	64.5	237.5	0.00	0.00	0.00
2,500.0	6.69	15.76	2,486.0	234.2	66.1	243.4	0.00	0.00	0.00
2,550.0	6.69	15.76	2,535.7	239.8	67.7	249.2	0.00	0.00	0.00
2,600.0	6.69	15.76	2,585.3	245.4	69.3	255.0	0.00	0.00	0.00

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2,650.0	6.69	15.76	2,635.0	251.0	70.9	260.8	0.00	0.00	0.00
2,700.0	6.69	15.76	2,684.7	256.6	72.4	266.7	0.00	0.00	0.00
2,750.0	6.69	15.76	2,734.3	262.3	74.0	272.5	0.00	0.00	0.00
2,800.0	6.69	15.76	2,784.0	267.9	75.6	278.3	0.00	0.00	0.00
2,850.0	6.69	15.76	2,833.6	273.5	77.2	284.2	0.00	0.00	0.00
2,900.0	6.69	15.76	2,883.3	279.1	78.8	290.0	0.00	0.00	0.00
2,950.0	6.69	15.76	2,933.0	284.7	80.3	295.8	0.00	0.00	0.00
2,970.7	6.69	15.76	2,953.5	287.0	81.0	298.2	0.00	0.00	0.00