

FAX COVER SHEET



**Southwestern Energy
Production Company**

**2350 N. Sam Houston Pkwy. E.
Suite 300
Houston, Texas 77032**

Date: July 15, 2004
To: Bryan Arrant
Fax No.: 505-748-9720
From: Vonnie Cermin
Tel. No.: 281-618-4739
Fax No.: 281-618-4755

Pages to follow: 16
(not including cover page)

Reference: Karlsbad Corral 2 State #2-H

30-015-33532

Dear Bryan:

Please find attachments for the above referenced well. The APD was electronically submitted on 07/15/04. If you have any questions or require any other information please contact me direct at 281-618-4739.

Regards,

Vonnie J. Bass

DISTRICT I

1625 N. FRENCH DR., ROSA, NM 86240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

DISTRICT II

1301 W. GRAND AVENUE, ALBUQUERQUE, NM 86210

OIL CONSERVATION DIVISION

Submit to Appropriate District Office

1220 SOUTH ST. FRANCIS DR.

State Lease - 4 Copies

Fee Lease - 3 Copies

Santa Fe, New Mexico 87505

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name KARLSBAD CORRAL 2	Well Number 2H
GRID No.	Operator Name SOUTHWESTERN ENERGY PRODUCTION COMPANY	Elevation 3088'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	25-S	29-E		330	SOUTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	2	25-S	29-E		2310	SOUTH	660	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 1	LOT 3	LOT 2	LOT 1
GEODETIC COORDINATES NAD 27 NME SURF. Y=419497.1 N X=619173.9 E LAT.=32°09'09.82" N LONG.=103°56'53.72" W			
B.H. Y=421476.7 N X=619168.1 E			
660' 2310' 330' 660'			

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

[Signature]
Signature
VONNIE J BASS
Printed Name
DRUG PROD TECH
Title
07/15/04
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 1, 2004
Date Surveyed
EIDSON JR
Signature & Seal of Professional Surveyor
[Signature]
04.11.0804
Certification No. **CARY EIDSON 12841**

T-540 P.006/017 F-513

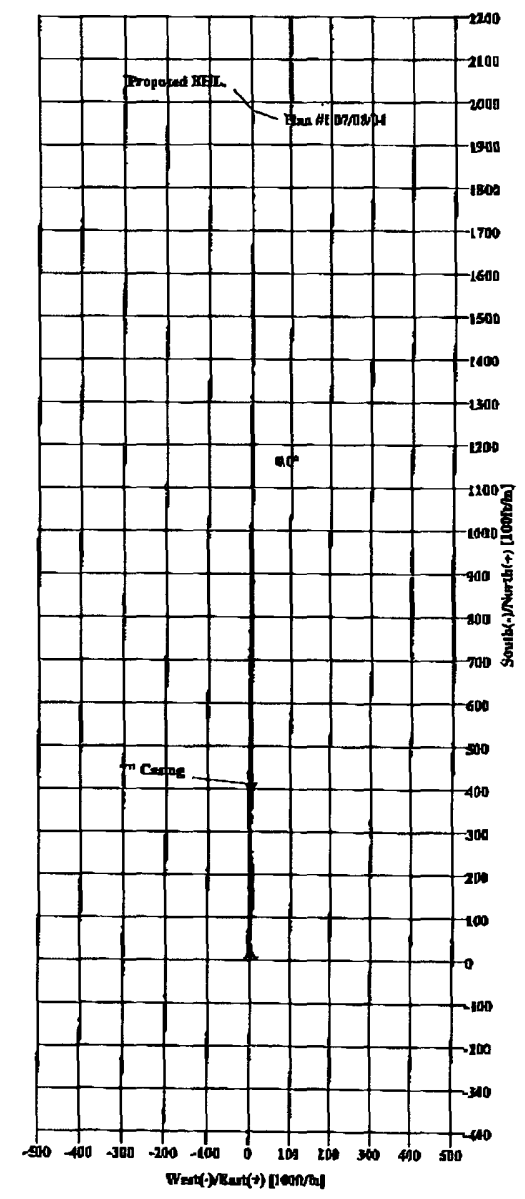
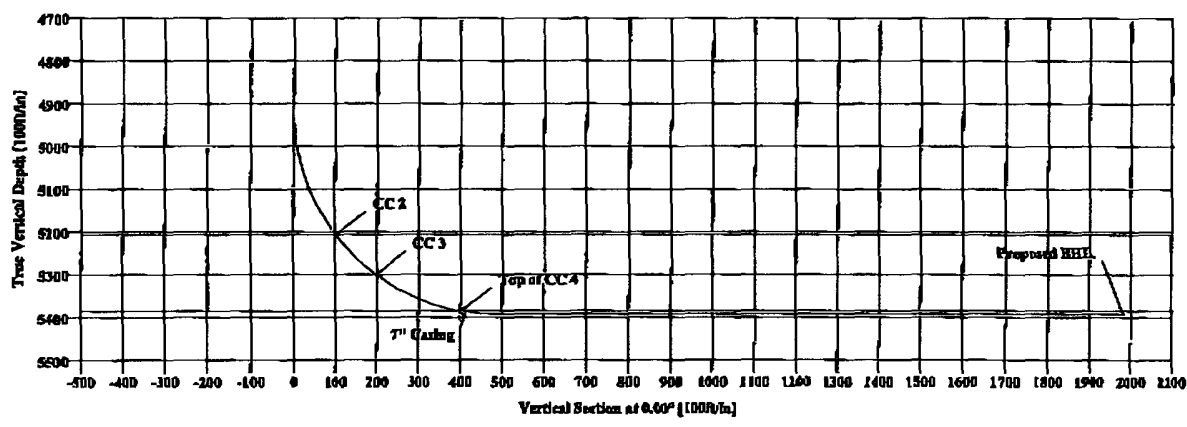
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Jul-15-04 08:58am From-SOUTHWESTERN ENERGY COMPANY

Southwestern Energy
Production Company
Karlsbad Corral "2" #2-H
Eddy County, New Mexico
Plan #1 07/08/04

PATHFINDER
ENERGY SERVICES

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	4913.42	0.00	0.00	4913.42	0.00	0.00	0.00	0.00	0.00	
3	5043.42	12.00	0.00	5012.69	10.43	0.00	12.00	0.00	10.43	
4	5113.42	24.00	0.00	5107.62	41.28	0.00	12.00	0.00	41.28	
5	5211.42	36.00	0.00	5194.07	91.19	0.00	12.00	0.00	91.19	
6	5229.61	37.94	0.00	5207.00	100.92	0.00	12.00	0.00	100.92	
7	5313.42	48.00	0.00	5268.25	157.98	0.00	12.00	0.00	157.98	
8	5363.94	54.06	0.00	5300.00	197.24	0.00	12.00	0.00	197.24	
9	5413.61	60.00	0.00	5326.92	238.73	0.00	12.00	0.00	238.73	
10	5513.42	72.00	0.00	5267.52	329.92	0.00	12.00	0.00	329.92	
11	5588.37	80.99	0.00	5185.00	402.73	0.00	12.00	0.00	402.73	
12	5588.42	81.00	0.00	5185.01	402.77	0.00	12.03	0.00	402.77	
13	5598.42	81.00	0.00	5386.57	412.65	0.00	0.00	0.00	412.65	
14	5673.42	90.00	0.00	5392.45	487.34	0.00	12.00	0.00	487.34	
15	5773.42	90.00	0.00	5392.45	587.34	0.00	0.00	0.00	587.34	
16	5873.42	90.00	0.00	5392.45	687.34	0.00	0.00	0.00	687.34	
17	5973.42	90.00	0.00	5392.45	787.34	0.00	0.00	0.00	787.34	
18	6073.42	90.00	0.00	5392.45	887.34	0.00	0.00	0.00	887.34	
19	6173.42	90.00	0.00	5392.45	987.34	0.00	0.00	0.00	987.34	
20	6273.42	90.00	0.00	5392.45	1087.34	0.00	0.00	0.00	1087.34	
21	6373.42	90.00	0.00	5392.45	1187.34	0.00	0.00	0.00	1187.34	
22	6473.42	90.00	0.00	5392.45	1287.34	0.00	0.00	0.00	1287.34	
23	6573.42	90.00	0.00	5392.45	1387.34	0.00	0.00	0.00	1387.34	
24	6673.42	90.00	0.00	5392.45	1487.34	0.00	0.00	0.00	1487.34	
25	6773.42	90.00	0.00	5392.45	1587.34	0.00	0.00	0.00	1587.34	
26	6873.42	90.00	0.00	5392.45	1687.34	0.00	0.00	0.00	1687.34	
27	6973.42	90.00	0.00	5392.45	1787.34	0.00	0.00	0.00	1787.34	
28	7073.42	90.00	0.00	5392.45	1887.34	0.00	0.00	0.00	1887.34	
29	7166.08	90.00	0.00	5392.45	1980.00	0.00	0.00	0.00	1980.00	



Plan View (1000/In) (Estimated Data) (1000/In)	
Quantity	Unit
Length	Feet
Volume	Cu Ft
Weight	Lbs

PAI INDEX
ENERGY SERVICES

Pathfinder

Planning Report

Company: SOUTHWESTERN ENERGY & PRODUCTS
Field: Eddy County, New Mexico
Site: Karlsbad Corral 2 #2-H
Well: Karlsbad Corral 2 #2-H
Wellpath: Karlsbad Corral 2 #2-H

Date: 7/8/2004
Co-ordinate(N/E) Reference: Well: Karlsbad Corral 2 #2-H, True North
Vertical (TVD) Reference: System: Mean Sea Level
Section (VS) Reference: Well (0.00N,0.00E,0.00Az)
Plan: Plan #1 07/08/04

Time: 14:28:28
Page: 1

Field: Eddy County, New Mexico
 Section 10 T-25-S & R28-E
 USA

Map System: US State Plane Coordinate System 1827
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: igr12000

Site: Karlsbad Corral 2 #2-H
 Section 2, T25S, R29E
 Eddy County, New Mexico

Site Position:
From: Local Only
Position Uncertainty: 0.00 ft
Ground Level: 0.00 ft

Northing: ft
Easting: ft
Latitude: ft
Longitude: ft
North Reference: True
Grid Convergence: dog

Well: Karlsbad Corral 2 #2-H

Slot Name:

Well Position: +N-S 0.00 ft
 +E-W 0.00 ft
Position Uncertainty: 0.00 ft

Northing: ft
Easting: ft
Latitude: ft
Longitude: ft

Wellpath: Karlsbad Corral 2 #2-H

Current Datum: SITE
Magnetic Data: 7/8/2004
Field Strength: 0 nT
Vertical Section: Depth From (TVD) ft
 0.00

Height: 0.00 ft
 +N-S ft
 0.00

Drilled From: Surface
Tie-on Depth: 0.00 ft
Above System Datum: Mean Sea Level
Declination: 0.00 deg
Mag Dip Angle: 0.00 deg
+E-W: ft
 Direction deg
 0.00

Plan: Plan #1 07/08/04

Date Composed: 7/8/2004
Version: 1
Tied-to: From Surface

Principal: Yes

Plan Section Information

MD	Incl	Azim	TVD	+N-S	+E-W	DLS	Bull	Turn	TWO	Target
ft	deg	deg	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft	deg	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4913.42	0.00	0.00	4913.42	0.00	0.00	0.00	0.00	0.00	0.00	
5013.42	12.00	0.00	5012.69	10.43	0.00	12.00	12.00	0.00	0.00	
5113.42	24.00	0.00	5107.62	41.28	0.00	12.00	12.00	0.00	0.00	
5213.42	36.00	0.00	5194.07	91.19	0.00	12.00	12.00	0.00	0.00	
5229.61	37.84	0.00	5207.00	100.82	0.00	12.00	12.00	0.00	0.00	
5313.42	48.00	0.00	5268.25	157.98	0.00	12.00	12.00	0.00	0.00	
5363.94	54.08	0.00	5300.00	197.24	0.00	12.00	12.00	0.00	0.00	
5413.42	60.00	0.00	5326.92	238.73	0.00	12.00	12.00	0.00	0.00	
5513.42	72.00	0.00	5367.52	329.92	0.00	12.00	12.00	0.00	0.00	
5588.37	80.99	0.00	5386.00	402.73	0.00	12.00	12.00	0.00	0.00	
5588.42	81.00	0.00	5385.01	402.77	0.00	12.03	12.03	0.00	0.00	
5598.42	81.00	0.00	5386.57	412.65	0.00	0.00	0.00	0.00	0.00	
5673.42	90.00	0.00	5392.45	487.34	0.00	12.00	12.00	0.00	0.00	
5773.42	90.00	0.00	5392.45	587.34	0.00	0.00	0.00	0.00	0.00	
5873.42	90.00	0.00	5392.45	687.34	0.00	0.00	0.00	0.00	0.00	
5973.42	90.00	0.00	5392.45	787.34	0.00	0.00	0.00	0.00	0.00	
6073.42	90.00	0.00	5392.45	887.34	0.00	0.00	0.00	0.00	0.00	
6173.42	90.00	0.00	5392.45	987.34	0.00	0.00	0.00	0.00	0.00	
6273.42	90.00	0.00	5392.45	1087.34	0.00	0.00	0.00	0.00	0.00	
6373.42	90.00	0.00	5392.45	1187.34	0.00	0.00	0.00	0.00	0.00	
6473.42	90.00	0.00	5392.45	1287.34	0.00	0.00	0.00	0.00	0.00	
6573.42	90.00	0.00	5392.45	1387.34	0.00	0.00	0.00	0.00	0.00	
6673.42	90.00	0.00	5392.45	1487.34	0.00	0.00	0.00	0.00	0.00	
6773.42	90.00	0.00	5392.45	1587.34	0.00	0.00	0.00	0.00	0.00	
6873.42	90.00	0.00	5392.45	1687.34	0.00	0.00	0.00	0.00	0.00	
6973.42	90.00	0.00	5392.45	1787.34	0.00	0.00	0.00	0.00	0.00	
7073.42	90.00	0.00	5392.45	1887.34	0.00	0.00	0.00	0.00	0.00	
7166.08	90.00	0.00	5392.45	1980.00	0.00	0.00	0.00	0.00	0.00	

Pathfinder
ENERGY SERVICES
Pathfinder
Planning Report

Company: SOUTHWESTERN ENERGY & PRODUCTS Date: 7/8/2004 Time: 14:28:28 Page: 2
 Field: Eddy County, New Mexico Co-ordinate(NE) Reference: Well: Karlsbad Corral 2 #2-H, True North
 Site: Karlsbad Corral 2 #2-H Vertical (TVD) Reference: System: Mean Sea Level
 Well: Karlsbad Corral 2 #2-H Section (VS) Reference: Well (0.00N,0.00E,0.00Az)
 Wellpath: Karlsbad Corral 2 #2-H Plan: Plan #1 07/08/04

Section 1 : Start Hold

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	TFO deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4913.42	0.00	0.00	4913.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 2 : Start Build 12.00

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	TFO deg
4925.00	1.39	0.00	4925.00	0.14	0.00	0.14	12.00	12.00	0.00	0.00
4950.00	4.39	0.00	4949.96	1.40	0.00	1.40	12.00	12.00	0.00	0.00
4975.00	7.39	0.00	4974.83	3.97	0.00	3.97	12.00	12.00	0.00	0.00
5000.00	10.39	0.00	4999.53	7.83	0.00	7.83	12.00	12.00	0.00	0.00
5013.42	12.00	0.00	5012.69	10.43	0.00	10.43	12.00	12.00	0.00	0.00

Section 3 : Start Build 12.00

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	TFO deg
5025.00	13.39	0.00	5023.99	12.98	0.00	12.98	12.00	12.00	0.00	0.00
5050.00	16.39	0.00	5048.14	19.40	0.00	19.40	12.00	12.00	0.00	0.00
5075.00	19.39	0.00	5071.93	27.08	0.00	27.08	12.00	12.00	0.00	0.00
5100.00	22.39	0.00	5095.29	35.99	0.00	35.99	12.00	12.00	0.00	0.00
5113.42	24.00	0.00	5107.62	41.28	0.00	41.28	12.00	12.00	0.00	0.00

Section 4 : Start Build 12.00

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	TFO deg
5125.00	25.39	0.00	5118.14	48.12	0.00	48.12	12.00	12.00	0.00	0.00
5150.00	28.39	0.00	5140.44	57.42	0.00	57.42	12.00	12.00	0.00	0.00
5175.00	31.39	0.00	5162.11	69.88	0.00	69.88	12.00	12.00	0.00	0.00
5200.00	34.39	0.00	5183.10	83.45	0.00	83.45	12.00	12.00	0.00	0.00
5213.42	36.00	0.00	5194.07	91.19	0.00	91.19	12.00	12.00	0.00	0.00

Section 5 : Start Build 12.00

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	TFO deg
5225.00	37.39	0.00	5203.35	98.11	0.00	98.11	12.00	12.00	0.00	0.00
5229.61	37.94	0.00	5207.00	100.92	0.00	100.92	12.00	12.00	0.00	0.00

Section 6 : Start Build 12.00

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	TFO deg
5250.00	40.39	0.00	5222.81	113.80	0.00	113.80	12.00	12.00	0.00	0.00
5275.00	43.39	0.00	5241.42	130.48	0.00	130.49	12.00	12.00	0.00	0.00
5300.00	46.39	0.00	5259.13	148.13	0.00	148.13	12.00	12.00	0.00	0.00
5313.42	48.00	0.00	5268.25	157.98	0.00	157.98	12.00	12.00	0.00	0.00

Section 7 : Start Build 12.00

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	TFO deg
5325.00	49.39	0.00	5275.69	166.68	0.00	166.68	12.00	12.00	0.00	0.00
5350.00	52.39	0.00	5291.66	186.07	0.00	186.07	12.00	12.00	0.00	0.00
5363.94	54.06	0.00	5300.00	197.24	0.00	197.24	12.00	12.00	0.00	0.00

Section 8 : Start Build 12.00

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	TFO deg
5375.00	55.39	0.00	5306.39	206.27	0.00	206.27	12.00	12.00	0.00	0.00
5400.00	58.39	0.00	5320.04	227.21	0.00	227.21	12.00	12.00	0.00	0.00

FAIRFINDER
ENERGY SERVICES**Pathfinder**
Planning Report

Company: SOUTHWESTERN ENERGY & PRODUCTS
 Field: Eddy County, New Mexico
 Site: Karlsbad Corral 2 #2-H
 Well: Karlsbad Corral 2 #2-H
 Wellpath: Karlsbad Corral 2 #2-H

Date: 7/8/2004 Time: 14:28:28 Page: 3
 Co-ordinate(N/E) Reference: Well: Karlsbad Corral 2 #2-H, True North
 Vertical (TVD) Reference: System: Mean Sea Level
 Section (VS) Reference: Well (0.00N,0.00E,0.00Az)
 Plan: Plan #1 07/08/04

Section 8 : Start Build 12.00

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	TFO deg
5413.42	60.00	0.00	5326.92	238.73	0.00	238.73	12.00	12.00	0.00	0.00

Section 9 : Start Build 12.00

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	TFO deg
5425.00	61.39	0.00	5332.58	248.83	0.00	248.83	12.00	12.00	0.00	0.00
5450.00	64.39	0.00	5343.98	271.08	0.00	271.08	12.00	12.00	0.00	0.00
5475.00	67.39	0.00	5354.19	293.90	0.00	293.90	12.00	12.00	0.00	0.00
5500.00	70.39	0.00	5363.19	317.22	0.00	317.22	12.00	12.00	0.00	0.00
5513.42	72.00	0.00	5367.52	329.92	0.00	329.92	12.00	12.00	0.00	0.00

Section 10 : Start Build 12.00

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	TFO deg
5525.00	73.39	0.00	5370.96	340.98	0.00	340.98	12.00	12.00	0.00	0.00
5550.00	76.39	0.00	5377.48	365.11	0.00	365.11	12.00	12.00	0.00	0.00
5575.00	79.39	0.00	5382.72	389.55	0.00	389.55	12.00	12.00	0.00	0.00
5588.37	80.99	0.00	5385.00	402.73	0.00	402.73	12.00	12.00	0.00	0.00

Section 11 : Start Build 12.03

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	TFO deg
5588.42	81.00	0.00	5385.01	402.77	0.00	402.77	12.03	12.03	0.00	0.00

Section 12 : Start Hold

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	TFO deg
5598.42	81.00	0.00	5386.57	412.65	0.00	412.65	0.00	0.00	0.00	0.00

Section 13 : Start Build 12.00

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	TFO deg
5600.00	81.19	0.00	5386.82	414.21	0.00	414.21	12.00	12.00	0.00	0.00
5625.00	84.19	0.00	5390.00	439.00	0.00	439.00	12.00	12.00	0.00	0.00
5650.00	87.19	0.00	5391.87	463.93	0.00	463.93	12.00	12.00	0.00	0.00
5673.42	90.00	0.00	5392.45	487.34	0.00	487.34	12.00	12.00	0.00	0.00

Section 14 : Start Hold

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	TFO deg
5700.00	90.00	0.00	5392.45	513.92	0.00	513.92	0.00	0.00	0.00	0.00
5773.42	90.00	0.00	5392.45	587.34	0.00	587.34	0.00	0.00	0.00	0.00

Section 15 : Start Hold

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	TFO deg
5800.00	90.00	0.00	5392.45	613.92	0.00	613.92	0.00	0.00	0.00	0.00
5873.42	90.00	0.00	5392.45	687.34	0.00	687.34	0.00	0.00	0.00	0.00

Section 16 : Start Hold

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	TFO deg
5900.00	90.00	0.00	5392.45	713.92	0.00	713.92	0.00	0.00	0.00	0.00
5973.42	90.00	0.00	5392.45	787.34	0.00	787.34	0.00	0.00	0.00	0.00



Pathfinder

Planning Report

Company: SOUTHWESTERN ENERGY & PRODUCTS
 Field: Eddy County, New Mexico
 Site: Karlsbad Corral 2 #2-H
 Well: Karlsbad Corral 2 #2-H
 Wellpath: Karlsbad Corral 2 #2-H

Date: 7/6/2004 Time: 14:28:28 Page: 4
 Co-ordinate(N/E) Reference: Well: Karlsbad Corral 2 #2-H, True North
 Vertical (TVD) Reference: System: Mean Sea Level
 Section (VS) Reference: Well (0.00N,0.00E,0.00Azi)
 Plan: #1.07/08/04

Section 17 : Start Hold

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	TFO deg
8000.00	90.00	0.00	5392.45	813.92	0.00	813.92	0.00	0.00	0.00	0.00
8073.42	90.00	0.00	5392.45	887.34	0.00	887.34	0.00	0.00	0.00	0.00

Section 18 : Start Hold

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	TFO deg
8100.00	90.00	0.00	5392.45	913.92	0.00	913.92	0.00	0.00	0.00	0.00
8173.42	90.00	0.00	5392.45	987.34	0.00	987.34	0.00	0.00	0.00	0.00

Section 19 : Start Hold

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	TFO deg
8200.00	90.00	0.00	5392.45	1013.92	0.00	1013.92	0.00	0.00	0.00	0.00
8273.42	90.00	0.00	5392.45	1087.34	0.00	1087.34	0.00	0.00	0.00	0.00

Section 20 : Start Hold

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	TFO deg
8300.00	90.00	0.00	5392.45	1113.92	0.00	1113.92	0.00	0.00	0.00	0.00
8373.42	90.00	0.00	5392.45	1187.34	0.00	1187.34	0.00	0.00	0.00	0.00

Section 21 : Start Hold

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	TFO deg
8400.00	90.00	0.00	5392.45	1213.92	0.00	1213.92	0.00	0.00	0.00	0.00
8473.42	90.00	0.00	5392.45	1287.34	0.00	1287.34	0.00	0.00	0.00	0.00

Section 22 : Start Hold

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	TFO deg
8500.00	90.00	0.00	5392.45	1313.92	0.00	1313.92	0.00	0.00	0.00	0.00
8573.42	90.00	0.00	5392.45	1387.34	0.00	1387.34	0.00	0.00	0.00	0.00

Section 23 : Start Hold

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	TFO deg
8600.00	90.00	0.00	5392.45	1413.92	0.00	1413.92	0.00	0.00	0.00	0.00
8673.42	90.00	0.00	5392.45	1487.34	0.00	1487.34	0.00	0.00	0.00	0.00

Section 24 : Start Hold

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	TFO deg
8700.00	90.00	0.00	5392.45	1513.92	0.00	1513.92	0.00	0.00	0.00	0.00
8773.42	90.00	0.00	5392.45	1587.34	0.00	1587.34	0.00	0.00	0.00	0.00

Section 25 : Start Hold

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	TFO deg
8800.00	90.00	0.00	5392.45	1613.92	0.00	1613.92	0.00	0.00	0.00	0.00
8873.42	90.00	0.00	5392.45	1687.34	0.00	1687.34	0.00	0.00	0.00	0.00



Pathfinder Planning Report

Company: SOUTHWESTERN ENERGY & PRODUCT	Date: 7/6/2004	Time: 14:28:28	Page: 5
Field: Eddy County, New Mexico	Co-ordinate(N/E) Reference: Well: Karisbad Corral 2 #2-H, True North		
Site: Karisbad Corral 2 #2-H	Vertical (TVD) Reference: System: Mean Sea Level		
Well: Karisbad Corral 2 #2-H	Section (VS) Reference: Well (0.00N,0.00E,0.00Az)		
Wellpath: Karisbad Corral 2 #2-H	Plan: Plan #1 07/08/04		

Section 26 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Bulld deg/100ft	Turn deg/100ft	TFO deg
6900.00	90.00	0.00	5392.45	1713.92	0.00	1713.92	0.00	0.00	0.00	0.00
6973.42	90.00	0.00	5392.45	1767.34	0.00	1767.34	0.00	0.00	0.00	0.00

Section 27 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Bulld deg/100ft	Turn deg/100ft	TFO deg
7000.00	90.00	0.00	5392.45	1813.92	0.00	1813.92	0.00	0.00	0.00	0.00
7073.42	90.00	0.00	5392.45	1867.34	0.00	1867.34	0.00	0.00	0.00	0.00

Section 28 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Bulld deg/100ft	Turn deg/100ft	TFO deg
7100.00	90.00	0.00	5392.45	1913.92	0.00	1913.92	0.00	0.00	0.00	0.00
7166.08	90.00	0.00	5392.45	1980.00	0.00	1980.00	0.00	0.00	0.00	0.00

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Bulld deg/100ft	Turn deg/100ft	Tool/Comment
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4913.42	0.00	0.00	4913.42	0.00	0.00	0.00	0.00	0.00	0.00	
4925.00	1.39	0.00	4925.00	0.14	0.00	0.14	12.00	12.00	0.00	
4950.00	4.39	0.00	4949.96	1.40	0.00	1.40	12.00	12.00	0.00	
4975.00	7.39	0.00	4974.83	3.97	0.00	3.97	12.00	12.00	0.00	
5000.00	10.39	0.00	4999.53	7.83	0.00	7.83	12.00	12.00	0.00	
5013.42	12.00	0.00	5012.69	10.43	0.00	10.43	12.00	12.00	0.00	
5025.00	13.39	0.00	5023.99	12.98	0.00	12.98	12.00	12.00	0.00	
5050.00	16.39	0.00	5048.14	19.40	0.00	19.40	12.00	12.00	0.00	
5075.00	19.39	0.00	5071.93	27.08	0.00	27.08	12.00	12.00	0.00	
5100.00	22.39	0.00	5095.29	35.99	0.00	35.99	12.00	12.00	0.00	
5113.42	24.00	0.00	5107.82	41.28	0.00	41.28	12.00	12.00	0.00	
5125.00	25.39	0.00	5118.14	46.12	0.00	46.12	12.00	12.00	0.00	
5150.00	28.39	0.00	5140.44	57.42	0.00	57.42	12.00	12.00	0.00	
5175.00	31.39	0.00	5162.11	69.88	0.00	69.88	12.00	12.00	0.00	
5200.00	34.39	0.00	5183.10	83.45	0.00	83.45	12.00	12.00	0.00	
5213.42	36.00	0.00	5194.07	91.19	0.00	91.19	12.00	12.00	0.00	
5225.00	37.39	0.00	5203.35	98.11	0.00	98.11	12.00	12.00	0.00	
5229.61	37.94	0.00	5207.00	100.92	0.00	100.92	12.00	12.00	0.00	
5250.00	40.39	0.00	5222.81	113.80	0.00	113.80	12.00	12.00	0.00	
5275.00	43.39	0.00	5241.42	130.49	0.00	130.49	12.00	12.00	0.00	
5300.00	46.39	0.00	5259.13	148.13	0.00	148.13	12.00	12.00	0.00	
5313.42	48.00	0.00	5268.25	157.98	0.00	157.98	12.00	12.00	0.00	
5325.00	49.39	0.00	5275.89	166.68	0.00	166.68	12.00	12.00	0.00	
5350.00	52.39	0.00	5291.66	186.07	0.00	186.07	12.00	12.00	0.00	
5363.94	54.06	0.00	5300.00	197.24	0.00	197.24	12.00	12.00	0.00	
5375.00	55.39	0.00	5308.39	206.27	0.00	206.27	12.00	12.00	0.00	
5400.00	58.39	0.00	5320.04	227.21	0.00	227.21	12.00	12.00	0.00	
5413.42	60.00	0.00	5326.92	238.73	0.00	238.73	12.00	12.00	0.00	
5425.00	61.39	0.00	5332.58	248.63	0.00	248.63	12.00	12.00	0.00	
5450.00	64.39	0.00	5343.98	271.08	0.00	271.08	12.00	12.00	0.00	
5475.00	67.39	0.00	5354.19	293.90	0.00	293.90	12.00	12.00	0.00	
5500.00	70.39	0.00	5363.19	317.22	0.00	317.22	12.00	12.00	0.00	
5513.42	72.00	0.00	5367.52	329.92	0.00	329.92	12.00	12.00	0.00	
5525.00	73.39	0.00	5370.96	340.98	0.00	340.98	12.00	12.00	0.00	
5550.00	76.39	0.00	5377.48	365.11	0.00	365.11	12.00	12.00	0.00	

CASING PROGRAM:

SIZE	WEIGHT	GRADE	COUPLING	DEPTH (MD-RKB)	TORQUE
16"	Structural Pipe		LP	40'	
9-5/8"	36#	J-55	STC	700'	4530 ft-lbs
7"	23#	J-55 or N-80	LTC	0' - 4549'	3130 ft-lbs
7"	23#	N-80	BTC	4549' - 5575'	to triangle

LOGGING PROGRAM:

Gamma ray LWD tools will be run in the 8-3/4" build section. Gamma sensor is $\pm$ 41' above the bit in 8-3/4" hole and $\pm$ 51' above the bit (if run) in 6-1/8" hole.

MUD PROGRAM:

DEPTH	MW	Viscosity	WL	Synopsis
0'-700'	8.6-9.5	34-36	NC	NewGel/Lime Spud mud & paper as needed.
700'-5575' MD	9.9-10.0	28-29	NC	Brine, Lime, Paper, New-55, Super Sweep
5575' -7118'	8.6-8.7	28-30	NC	Field Produced Saltwater, Dynazan, HB-411

See attached Newpark Drilling Fluids mud program for additional specifications.

MUD LOGGING:

Mud logging unit rigged up and logging Below 9-5/8" csg. Collect 30' samples from 2400' to TD. From the top of the Cherry Canyon 6 Sand at $\pm$ 4778' TVD RKB, collect 15' samples for the next 150'. See mud logging letter.

Operator Name: Southwestern Energy / Prod Co
 Well Name: Karlsbad Corral 2 #2H
 Job Description: 9 5/8" Surface Casing
 Date: February 27, 2004



Proposal No: 180261825A

WELL DATA**ANNULAR GEOMETRY**

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
12.250 HOLE	700	700

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
9.625	8.877	38	700	700

Float Collar set @ 660 ft
 Mud Density 8.40 ppg
 Est. Static Temp. 86 ° F
 Est. Circ. Temp. 80 ° F

VOLUME CALCULATIONS

405 ft	x	0.3132 cf/ft	with	100 % excess	=	253.9 cf
295 ft	x	0.3132 cf/ft	with	100 % excess	=	184.5 cf
40 ft	x	0.4298 cf/ft	with	0 % excess	=	17.2 cf (inside pipe)
TOTAL SLURRY VOLUME					=	455.7 cf
					=	81 bbls

Operator Name: Southwestern Energy Prod Co
Well Name: Karlsbad Corral 2 #2H
Job Description: 9 5/8" Surface Casing
Date: February 27, 2004



Proposal No: 180261825A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	254	/ 2.01	= 125 sacks (35:65) Poz (Fly Ash):Class C Cement + 6% bwoc Bentonite + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 106.5% Fresh Water
Tail Slurry	202	/ 1.34	= 150 sacks Class C Cement + 2% bwoc Calcium Chloride + 56.4% Fresh Water
Displacement			50.5 bbls Displacement

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.40	14.80
Slurry Yield (cf/sack)	2.01	1.34
Amount of Mix Water (gps)	11.11	6.36
Estimated Pumping Time - 70 BC (HH:MM)	3:45	3:30

Operator Name: Southwestern Energy Prod Co
 Well Name: Karisbad Corral 2 #1H
 Job Description: 7" Production Casing
 Date: February 27, 2004



Proposal No: 180261825A

WELL DATA**ANNULAR GEOMETRY**

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.877 CASING	700	700
8.750 HOLE	5,549	5,341

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
7.000	6.094	32	5,549	5,341

Float Collar set @ 5,509 ft
 Mud Density 10.00 ppg
 Est. Static Temp. 123 ° F
 Est. Circ. Temp. 107 ° F

VOLUME CALCULATIONS

1,708 ft	x	0.1503 cf/ft	with	50 % excess	=	385.1 cf
500 ft	x	0.1503 cf/ft	with	50 % excess	=	112.7 cf
40 ft	x	0.2026 cf/ft	with	0 % excess	=	8.1 cf (Inside pipe)
TOTAL SLURRY VOLUME					=	506.0 cf
					=	90 bbls

For Name: Southwestern Energy Prod Co
Name: Karlsbad Corral 2 #2H
Description: 7" Production Casing
Date: February 27, 2004



Proposal No: 180261825A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	385	/ 2.09	= 185 sacks (35:65) Poz (Fly Ash):Class C Cement + 6% bwoc Bentonite + 5% bwow Sodium Chloride + 111.6% Fresh Water
Tail Slurry	121	/ 1.35	= 90 sacks Class C Cement + 1% bwoc FL-62 + 0.3% bwoc CD-32 + 3% bwow Sodium Chloride + 56.4% Fresh Water
Displacement			198.7 bbls Displacement

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.40	14.80
Slurry Yield (cf/sack)	2.09	1.35
Amount of Mix Water (gps)	11.64	6.36
Estimated Pumping Time - 70 BC (HH:MM)	3:30	2:45
Fluid Loss (cc/30min) at 1000 psi and ° F	850.0	75.0



**Southwestern Energy
Production Company**

A subsidiary of Southwestern Energy Company

2350 N. Sam Houston Parkway East
Suite 300
Houston, Texas 77032
(281) 618-4700 FAX: (281) 618-4757

July 15, 2004

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division-District 2
1301 W. Grand Avenue
Artesia, NM 88210

Attn: Bryan Arrant

Re: Karlsbad Corral 2 #2-H
Sec. 2, T25S-R29E
Eddy County, NM

Dear Bryan:

This area does not warrant H2S contingency plan. Also, please find enclosed a copy of the directional drilling plan.

If you have any questions or need additional information, please feel free to contact me at 281-618-4739.

Sincerely,

Vonnie J. Bass
Drilling/Production Technician

Enclosures