



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

30-015-35184

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

October 10, 2006

Devon Energy Corporation, L.P.  
Corporate Tower 03.055C  
Oklahoma City, OK 73102  
Attn: Judy A. Barnett or To Whom It May Concern:

Dear Judy Barnett or To Whom It May Concern:

**RE: Devon Energy Corporation, L.P.: Application to drill (APD) for the Perfecto '2' State Com. # 2.  
Surface location in Unit P, of Section 3, Township 22 South, Range 26 East, Eddy County, New Mexico,  
NMPM.**

In reference to the above noted APD, the New Mexico Oil Conservation Division (NMOCD) will require (in part) that drilling mud samples from the flow line be sampled every 100' in order to determine chloride levels during the drilling of the Capitan Reef section of the well bore. Results are to be submitted to our office before drilling to total depth of the well bore.

Please call me if you have any questions about this matter.

Respectfully yours,

Bryan G. Arrant  
NMOCD's District II Geologist  
Artesia, New Mexico  
505-748-1283 ext. 103

CC: well file

**Arrant, Bryan, EMNRD**

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**From:** Ysasaga, Stephanie [Stephanie.Ysasaga@dvn.com]  
**Sent:** Thursday, October 12, 2006 1:30 PM  
**To:** Arrant, Bryan, EMNRD  
**Subject:** Perfecto 2 State Com 2: Distance from the nearest dwelling

Bryan,

Just got an e-mail from Joe Lara in our Artesia field office, he said the Perfecto 2 State Com 2 is approximately 600' from the nearest dwelling. ☺

*Stephanie A. Ysasaga*

Sr. Staff Engineering Technician

(405)-552-7802 Phone

(405)-552-8113 Fax

Corporate Tower 03.056

[Stephanie.Ysasaga@dvn.com](mailto:Stephanie.Ysasaga@dvn.com)

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10/12/2006

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**Arrant, Bryan, EMNRD**

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**From:** Ysasaga, Stephanie [Stephanie.Ysasaga@dv.com]  
**Sent:** Tuesday, October 10, 2006 10:47 AM  
**To:** Arrant, Bryan, EMNRD  
**Cc:** Barnett, Judith  
**Subject:** Perfecto 2 State Com 2: APD Request for Information

Bryan,

Judy requested the H2S Plan yesterday, so this is WIP. I just sent an e-mail to Richard Aguillar with the City of Carlsbad to verify in writing that we are outside the Carlsbad City Limits. I e-mailed the field to find out distance to nearest public dwelling.

Attached is the cementing report for the Perfecto 2 State Com 2 and letter describing "BOP Testing Procedures". I have requested drilling prognosis and mud plan from drilling.

Will send everything to you ASAP, since we just moved this well up the drilling schedule! ☺

*Stephanie A. Ysasaga*

Sr. Staff Engineering Technician  
(405)-552-7802 Phone  
(405)-552-8113 Fax  
Corporate Tower 03.056  
[Stephanie.Ysasaga@dv.com](mailto:Stephanie.Ysasaga@dv.com)

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**From:** Arrant, Bryan, EMNRD [mailto:bryan.arrant@state.nm.us]  
**Sent:** Tuesday, October 10, 2006 10:06 AM  
**To:** Barnett, Judith  
**Subject:** Perfecto 2 State Com. # 2

Dear Judith,

In reference to the above noted well, if you have not already done so, please submit:  
The drilling, engineering, h2s contingency plan, cementing program, general information, etc.

Most of this information can be directly copied from your offset well, the Perfecto 2 State Com. #2 well with any minor corrections that may be needed.

Also, please note in writing if this well location is within the City Limits of Carlsbad and the distance in feet to the nearest public dwelling.

Thank you,

Bryan G. Arrant  
505-748-1283 ext. 103

10/10/2006

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

RECEIVED  
OCD - ARTESIA

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 78060	Pool Name HAPPY VALLEY;MORROW
Property Code	Property Name PERFECTO "2" STATE COM	Well Number 2
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3161'

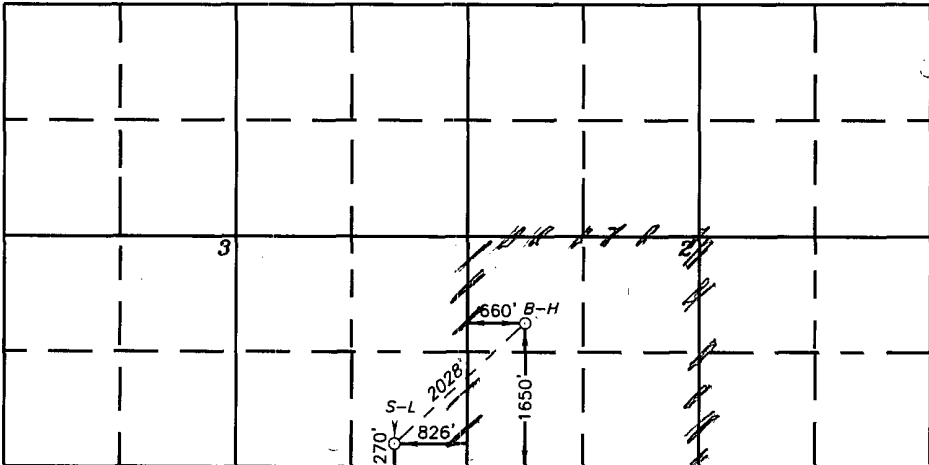
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	3	22 S	26 E		270	SOUTH	826	EAST	EDDY

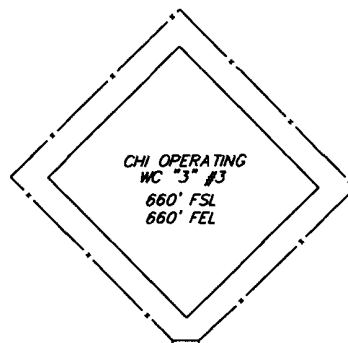
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	2	22 S	26 E		1650	SOUTH	660	WEST	EDDY
Dedicated Acres 320	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

 <p><b>SURFACE LOCATION</b> Lat - N32°25'55.2" Long - W104°16'29.6" (NAD-83)</p> <p><b>BOTTOM HOLE LOCATION</b> Lat - N32°25'02.9" Long - W104°16'20.9" (NAD-83)</p> <p>SCALE 1"=2000'</p>		<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Judy A. Barnett</i> Date: 10/10/06</p> <p>Printed Name: Regulatory Analyst</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>SEPTEMBER 30, 2006</p> <p>Date Surveyed: <i>Sept 30, 2006</i></p> <p>Signature: <i>Gary L. Jones</i> Professional Surveyor</p> <p>Certificate No. Gary L. Jones 7977</p> <p><b>BASIN SURVEYS</b></p>
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**SECTION 2, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.**



175' NORTH  
OFF SET  
3159.3'  
CB765

**DEVON ENERGY PRODUCTION CO., L.P.**  
**PERFECTO "2" STATE #2**  
**Elev. - 3161'**

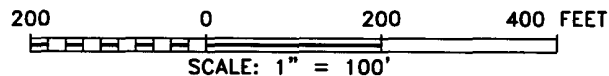
175' WEST  
OFF SET CB768  
3162.0'

Lat.-N 32°25'55.2"  
Long-W 104°16'29.6"  
(NAD-83)

175' EAST  
CB766 SET  
3158.5'

CB767  
175' SOUTH  
OFF SET  
3162.1'

CO. RD. 645 0.3 MILE



**Directions to Location:**

FROM THE JUNCTION STATE HWY 524 AND CO. RD.  
645, PROCEED WEST 0.3 MILE WEST TO LEASE  
ROAD, ON LEASE ROAD PROCEED NORTH APPROX.  
200 FEET TO PROPOSED LOCATION.

**DEVON ENERGY PROD. CO., L.P.**

REF: PERFECTO "2" STATE #2 / WELL PAD TOPO

THE PERFECTO "2" STATE No. 2 LOCATED 270'  
FROM THE SOUTH LINE AND 826' FROM THE EAST LINE OF  
SECTION 3, TOWNSHIP 22 SOUTH, RANGE 26 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

**Basin Surveys** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 17227

Drawn By: J. M. SMALL

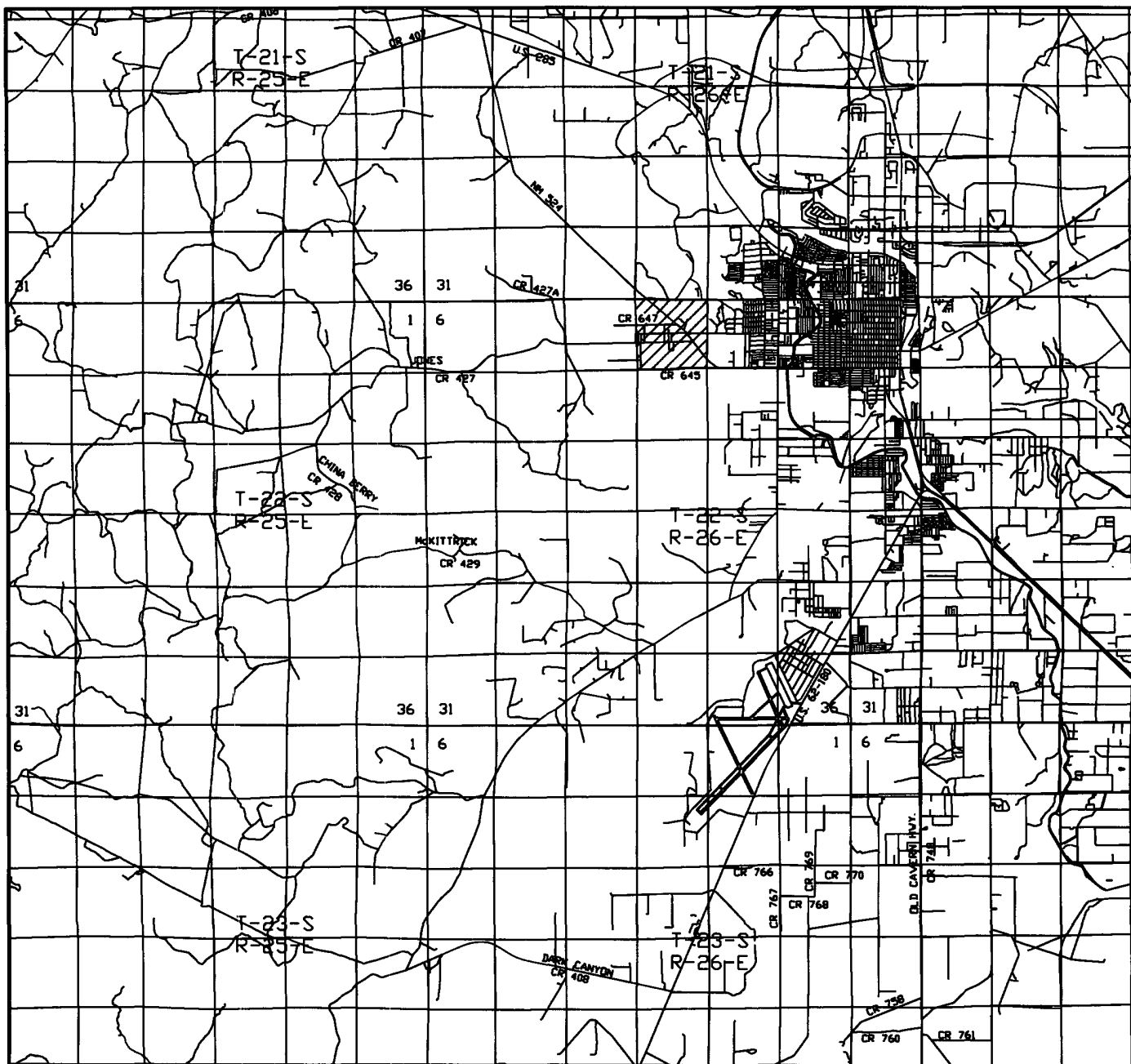
Date: 10-02-2006

Disk: 17227W JMS

Survey Date: 09-30-2006

Sheet 1 of 1 Sheets





PERFECTO "2" STATE #2

Located at 270' FSL AND 826' FEL

Section 3, Township 22 South, Range 26 East,  
N.M.P.M., EDDY County, New Mexico.

**basin**  
**surveys**  
focused on excellence  
in the oilfield

P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(505) 393-7316 - Office  
(505) 392-3074 - Fax  
basinsurveys.com

W.O. Number: JMS 17227T

Survey Date: 09-30-2006

Scale: 1" = 2 MILES

Date: 10-02-2006

DEVON ENERGY  
PROD. CO., L.P.



# Devon Energy

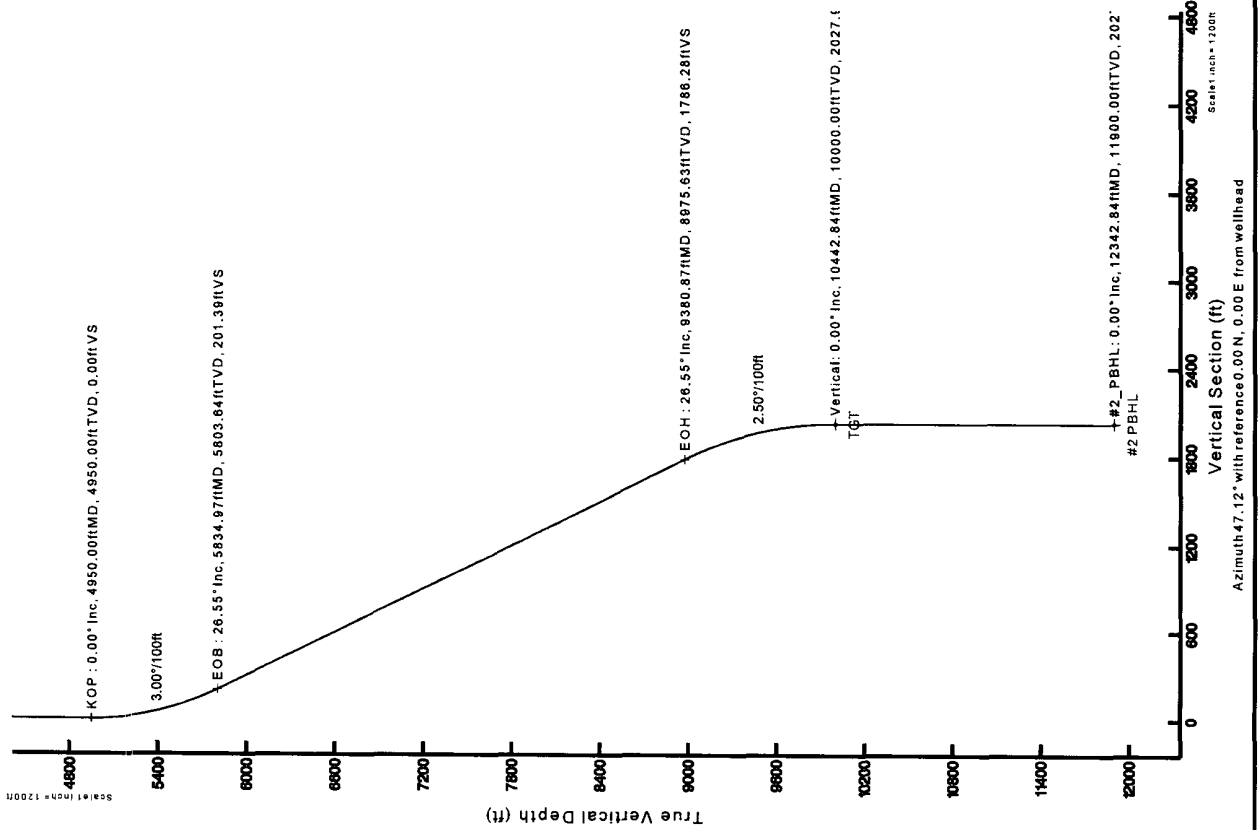
Location: Eddy County, NM  
Field: Section 3 T22 R26E  
Facility: Perfecto 2 State Com

Skt: #2\_SHL  
Well: Perfecto 2 State Com 2  
Wellbore: #2\_PWB



Well Profile Data									
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)	
Tie On	0.00	0.000	47.118	0.00	0.00	0.00	0.00	0.00	
KOP	4950.00	0.000	47.118	4950.00	0.00	0.00	0.00	0.00	
EOB	5834.97	26.549	47.118	5803.64	137.04	147.57	3.00	201.39	
EOH	9380.87	26.549	47.118	8975.63	1215.55	1308.91	0.00	1785.28	
Vertical	10442.84	0.000	47.118	10000.00	1360.00	1485.00	2.50	2027.95	
#2_PBHL	12342.84	0.000	47.118	11900.00	1360.00	1485.00	0.00	2027.95	

Baker Hughes INTEQ		Grid System: NAD83 (2011) / Zone 10N	
Tie On: 4950.00 ft		Northings: 1360.00 ft	
EOB: 5834.97 ft		Easting: 147.57 ft	
EOH: 9380.87 ft		Scale: True North	
Vertical: 10442.84 ft		Length: 1485.00 ft	
#2_PBHL: 12342.84 ft		Created: 10/12/2006	







# Planned Wellpath Report

Plan #1  
Page 1 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	#2_SHL
Area	Eddy County, NM	Well	Perfecto 2 State Com 2
Field	Section 3 T22 R26E	Wellbore	#2 PWB
Facility	Perfecto 2 State Com		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect™ 1.2
North Reference	True	User	Gomeoscr
Scale	1.00024	Report Generated	10/03/06 at 15:48:09
Wellbore last revised	10/03/06	Database/Source file	WellArchitectDB/#2_PV

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	0.00	0.00	0.00	0.00	30 59 18.404N	106 03 38.987W
Facility Reference Pt			0.00	0.00	30 59 18.404N	106 03 38.987W
Field Reference Pt			0.00	0.00	30 59 18.404N	106 03 38.987W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on #2_SHL (RT) to Facility Vertical Datum	0.00 feet
Horizontal Reference Pt	Slot	Rig on #2_SHL (RT) to Mean Sea Level	0.00 feet
Vertical Reference Pt	Rig on #2_SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00 feet
MD Reference Pt	Rig on #2_SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	47.12°



# Planned Wellpath Report

Plan #1  
Page 2 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	#2_SHL
Area	Eddy County, NM	Well	Perfecto 2 State Com 2
Field	Section 3 T22 R26E	Wellbore	#2 PWB
Facility	Perfecto 2 State Com		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
0.00	0.000	47.118	0.00	0.00	0.00	0.00	0.00	Tie On	
100.00†	0.000	0.000	100.00	0.00	0.00	0.00	0.00		
200.00†	0.000	0.000	200.00	0.00	0.00	0.00	0.00		
290.00†	0.000	47.118	290.00	0.00	0.00	0.00	0.00		Yates/Seven Rivers
300.00†	0.000	0.000	300.00	0.00	0.00	0.00	0.00		
400.00†	0.000	0.000	400.00	0.00	0.00	0.00	0.00		
485.00†	0.000	47.118	485.00	0.00	0.00	0.00	0.00		Capitan/Salado
500.00†	0.000	0.000	500.00	0.00	0.00	0.00	0.00		
600.00†	0.000	0.000	600.00	0.00	0.00	0.00	0.00		
700.00†	0.000	0.000	700.00	0.00	0.00	0.00	0.00		
800.00†	0.000	0.000	800.00	0.00	0.00	0.00	0.00		
900.00†	0.000	0.000	900.00	0.00	0.00	0.00	0.00		
1000.00†	0.000	0.000	1000.00	0.00	0.00	0.00	0.00		
1100.00†	0.000	0.000	1100.00	0.00	0.00	0.00	0.00		
1200.00†	0.000	0.000	1200.00	0.00	0.00	0.00	0.00		
1300.00†	0.000	0.000	1300.00	0.00	0.00	0.00	0.00		
1400.00†	0.000	0.000	1400.00	0.00	0.00	0.00	0.00		
1500.00†	0.000	0.000	1500.00	0.00	0.00	0.00	0.00		
1600.00†	0.000	0.000	1600.00	0.00	0.00	0.00	0.00		
1700.00†	0.000	0.000	1700.00	0.00	0.00	0.00	0.00		
1800.00†	0.000	0.000	1800.00	0.00	0.00	0.00	0.00		
1900.00†	0.000	0.000	1900.00	0.00	0.00	0.00	0.00		
2000.00†	0.000	0.000	2000.00	0.00	0.00	0.00	0.00		
2100.00†	0.000	0.000	2100.00	0.00	0.00	0.00	0.00		
2200.00†	0.000	0.000	2200.00	0.00	0.00	0.00	0.00		
2300.00†	0.000	0.000	2300.00	0.00	0.00	0.00	0.00		
2400.00†	0.000	0.000	2400.00	0.00	0.00	0.00	0.00		
2500.00†	0.000	0.000	2500.00	0.00	0.00	0.00	0.00		Delaware Sd
2600.00†	0.000	0.000	2600.00	0.00	0.00	0.00	0.00		
2700.00†	0.000	0.000	2700.00	0.00	0.00	0.00	0.00		
2800.00†	0.000	0.000	2800.00	0.00	0.00	0.00	0.00		
2900.00†	0.000	0.000	2900.00	0.00	0.00	0.00	0.00		
3000.00†	0.000	0.000	3000.00	0.00	0.00	0.00	0.00		
3100.00†	0.000	0.000	3100.00	0.00	0.00	0.00	0.00		
3200.00†	0.000	0.000	3200.00	0.00	0.00	0.00	0.00		
3300.00†	0.000	0.000	3300.00	0.00	0.00	0.00	0.00		
3400.00†	0.000	0.000	3400.00	0.00	0.00	0.00	0.00		
3500.00†	0.000	0.000	3500.00	0.00	0.00	0.00	0.00		
3600.00†	0.000	0.000	3600.00	0.00	0.00	0.00	0.00		
3700.00†	0.000	0.000	3700.00	0.00	0.00	0.00	0.00		



# Planned Wellpath Report

Plan #1  
Page 3 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	#2_SHL
Area	Eddy County, NM	Well	Perfecto 2 State Com 2
Field	Section 3 T22 R26E	Wellbore	#2 PWB
Facility	Perfecto 2 State Com		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
3800.00†	0.000	0.000	3800.00	0.00	0.00	0.00	0.00		
3900.00†	0.000	0.000	3900.00	0.00	0.00	0.00	0.00		
4000.00†	0.000	0.000	4000.00	0.00	0.00	0.00	0.00		
4100.00†	0.000	0.000	4100.00	0.00	0.00	0.00	0.00		
4200.00†	0.000	0.000	4200.00	0.00	0.00	0.00	0.00		
4300.00†	0.000	0.000	4300.00	0.00	0.00	0.00	0.00		
4400.00†	0.000	0.000	4400.00	0.00	0.00	0.00	0.00		
4500.00†	0.000	0.000	4500.00	0.00	0.00	0.00	0.00		
4600.00†	0.000	0.000	4600.00	0.00	0.00	0.00	0.00		
4700.00†	0.000	0.000	4700.00	0.00	0.00	0.00	0.00		
4800.00†	0.000	0.000	4800.00	0.00	0.00	0.00	0.00		
4900.00†	0.000	0.000	4900.00	0.00	0.00	0.00	0.00		
4915.00†	0.000	47.118	4915.00	0.00	0.00	0.00	0.00		Bone Spring Sd
4950.00	0.000	47.118	4950.00	0.00	0.00	0.00	0.00	KOP	
5000.00†	1.500	47.118	4999.99	0.65	0.45	0.48	3.00		
5100.00†	4.500	47.118	5099.85	5.89	4.01	4.31	3.00		
5200.00†	7.500	47.118	5199.29	16.34	11.12	11.97	3.00		
5300.00†	10.500	47.118	5298.04	31.98	21.76	23.43	3.00		
5400.00†	13.500	47.118	5395.85	52.77	35.91	38.67	3.00		
5500.00†	16.500	47.118	5492.43	78.65	53.52	57.63	3.00		
5600.00†	19.500	47.118	5587.52	109.55	74.55	80.27	3.00		
5700.00†	22.500	47.118	5680.87	145.38	98.93	106.53	3.00		
5800.00†	25.500	47.118	5772.22	186.05	126.60	136.33	3.00		
5834.97	26.549	47.118	5803.64	201.39	137.04	147.57	3.00	EOB	
5900.00†	26.549	47.118	5861.81	230.46	156.82	168.87	0.00		
6000.00†	26.549	47.118	5951.27	275.15	187.24	201.62	0.00		
6065.66†	26.549	47.118	6010.00	304.50	207.21	223.12	0.00		1st Bone Spring Sd
6100.00†	26.549	47.118	6040.72	319.85	217.65	234.37	0.00		
6200.00†	26.549	47.118	6130.18	364.55	248.07	267.12	0.00		
6300.00†	26.549	47.118	6219.63	409.24	278.49	299.88	0.00		
6400.00†	26.549	47.118	6309.09	453.94	308.90	332.63	0.00		
6500.00†	26.549	47.118	6398.54	498.64	339.32	365.38	0.00		
6600.00†	26.549	47.118	6488.00	543.33	369.73	398.13	0.00		
6700.00†	26.549	47.118	6577.45	588.03	400.15	430.88	0.00		
6800.00†	26.549	47.118	6666.91	632.73	430.56	463.63	0.00		
6881.71†	26.549	47.118	6740.00	669.25	455.41	490.40	0.00		2nd Bone Spring Sd
6900.00†	26.549	47.118	6756.36	677.42	460.98	496.39	0.00		
7000.00†	26.549	47.118	6845.82	722.12	491.39	529.14	0.00		
7100.00†	26.549	47.118	6935.27	766.81	521.81	561.89	0.00		
7200.00†	26.549	47.118	7024.73	811.51	552.22	594.64	0.00		



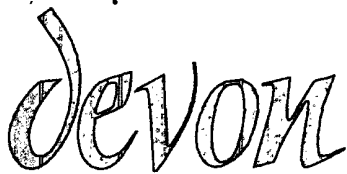
# Planned Wellpath Report

Plan #1  
Page 4 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	#2_SHL
Area	Eddy County, NM	Well	Perfecto 2 State Com 2
Field	Section 3 T22 R26E	Wellbore	#2_PWB
Facility	Perfecto 2 State Com		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
7300.00†	26.549	47.118	7114.18	856.21	582.64	627.39	0.00		
7400.00†	26.549	47.118	7203.64	900.90	613.06	660.15	0.00		
7500.00†	26.549	47.118	7293.09	945.60	643.47	692.90	0.00		
7600.00†	26.549	47.118	7382.55	990.30	673.89	725.65	0.00		
7700.00†	26.549	47.118	7472.01	1034.99	704.30	758.40	0.00		
7800.00†	26.549	47.118	7561.46	1079.69	734.72	791.15	0.00		
7900.00†	26.549	47.118	7650.92	1124.39	765.13	823.90	0.00		
8000.00†	26.549	47.118	7740.37	1169.08	795.55	856.66	0.00		
8100.00†	26.549	47.118	7829.83	1213.78	825.96	889.41	0.00		
8200.00†	26.549	47.118	7919.28	1258.48	856.38	922.16	0.00		
8300.00†	26.549	47.118	8008.74	1303.17	886.79	954.91	0.00		
8400.00†	26.549	47.118	8098.19	1347.87	917.21	987.66	0.00		
8497.04†	26.549	47.118	8185.00	1391.24	946.73	1019.44	0.00		3rd Bone Spring Sd
8500.00†	26.549	47.118	8187.65	1392.57	947.63	1020.41	0.00		
8600.00†	26.549	47.118	8277.10	1437.26	978.04	1053.17	0.00		
8700.00†	26.549	47.118	8366.56	1481.96	1008.46	1085.92	0.00		
8800.00†	26.549	47.118	8456.01	1526.65	1038.87	1118.67	0.00		
8900.00†	26.549	47.118	8545.47	1571.35	1069.29	1151.42	0.00		
9000.00†	26.549	47.118	8634.92	1616.05	1099.70	1184.17	0.00		
9061.57†	26.549	47.118	8690.00	1643.57	1118.43	1204.34	0.00		Wolfcamp
9100.00†	26.549	47.118	8724.38	1660.74	1130.12	1216.92	0.00		
9200.00†	26.549	47.118	8813.83	1705.44	1160.53	1249.68	0.00		
9300.00†	26.549	47.118	8903.29	1750.14	1190.95	1282.43	0.00		
9380.87	26.549	47.118	8975.63	1786.28	1215.55	1308.91	0.00	EOH	
9400.00†	26.071	47.118	8992.78	1794.76	1221.32	1315.13	2.50		
9500.00†	23.571	47.118	9083.53	1836.74	1249.88	1345.88	2.50		
9600.00†	21.071	47.118	9176.03	1874.71	1275.72	1373.71	2.50		
9700.00†	18.571	47.118	9270.10	1908.62	1298.79	1398.56	2.50		
9800.00†	16.071	47.118	9365.56	1938.39	1319.05	1420.37	2.50		
9882.26†	14.014	47.118	9445.00	1959.74	1333.58	1436.01	2.50		Pennsylvania
9900.00†	13.571	47.118	9462.22	1963.97	1336.46	1439.11	2.50		
10000.00†	11.071	47.118	9559.91	1985.30	1350.98	1454.75	2.50		
10100.00†	8.571	47.118	9658.44	2002.36	1362.58	1467.25	2.50		
10200.00†	6.071	47.118	9757.62	2015.10	1371.25	1476.58	2.50		
10300.00†	3.571	47.118	9857.26	2023.50	1376.97	1482.74	2.50		
10400.00†	1.071	47.118	9957.17	2027.55	1379.73	1485.71	2.50		
10442.84	0.000	47.118	10000.00†	2027.95	1380.00	1486.00	2.50	Vertical	Strawn
10500.00†	0.000	0.000	10057.16	2027.95	1380.00	1486.00	0.00		
10600.00†	0.000	0.000	10157.16	2027.95	1380.00	1486.00	0.00		
10700.00†	0.000	0.000	10257.16	2027.95	1380.00	1486.00	0.00		



# Planned Wellpath Report

Plan #1  
Page 5 of 5



REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	#2_SHL
Area	Eddy County, NM	Well	Perfecto 2 State Com 2
Field	Section 3 T22 R26E	Wellbore	#2 PWB
Facility	Perfecto 2 State Com		

WELLPATH DATA (141 stations) † = interpolated/extrapolated station									
MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
10800.00†	0.000	0.000	10357.16	2027.95	1380.00	1486.00	0.00		
10847.84†	0.000	47.118	10405.00	2027.95	1380.00	1486.00	0.00		Atoka
10900.00†	0.000	0.000	10457.16	2027.95	1380.00	1486.00	0.00		
11000.00†	0.000	0.000	10557.16	2027.95	1380.00	1486.00	0.00		
11100.00†	0.000	0.000	10657.16	2027.95	1380.00	1486.00	0.00		
11200.00†	0.000	0.000	10757.16	2027.95	1380.00	1486.00	0.00		
11300.00†	0.000	0.000	10857.16	2027.95	1380.00	1486.00	0.00		
11400.00†	0.000	0.000	10957.16	2027.95	1380.00	1486.00	0.00		
11500.00†	0.000	0.000	11057.16	2027.95	1380.00	1486.00	0.00		
11587.84†	0.000	47.118	11145.00	2027.95	1380.00	1486.00	0.00		M. Mrrw Lm
11600.00†	0.000	0.000	11157.16	2027.95	1380.00	1486.00	0.00		
11700.00†	0.000	0.000	11257.16	2027.95	1380.00	1486.00	0.00		
11800.00†	0.000	0.000	11357.16	2027.95	1380.00	1486.00	0.00		
11822.84†	0.000	47.118	11380.00	2027.95	1380.00	1486.00	0.00		Lwr. Mrrw. Shale Mkr.
11900.00†	0.000	0.000	11457.16	2027.95	1380.00	1486.00	0.00		
11992.84†	0.000	47.118	11550.00	2027.95	1380.00	1486.00	0.00		Barnett Shale
12000.00†	0.000	0.000	11557.16	2027.95	1380.00	1486.00	0.00		
12100.00†	0.000	0.000	11657.16	2027.95	1380.00	1486.00	0.00		
12200.00†	0.000	0.000	11757.16	2027.95	1380.00	1486.00	0.00		
12300.00†	0.000	0.000	11857.16	2027.95	1380.00	1486.00	0.00		
12342.84	0.000	47.118	11900.00	2027.95	1380.00	1486.00	0.00	#2_PBHL	

TARGETS									
Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
1) TGT	10442.84	10000.00	1380.00	1486.00	1507.61	1357.09	30 59 32.061N	106 03 21.916W	point
#2 PBHL		11900.00	1380.00	1486.00	1507.61	1357.09	30 59 32.061N	106 03 21.916W	point

ARTESIA, N.M.

AUG 08 2005

Wildcat Measurement Service  
P.O. Box 1836  
Artesia, New Mexico 88211-1836  
TollFree #888-421-9453  
Office #505-746-3481

"Quality and Service is our First Concern"

PDS 06/25/00

Run No. 250728-35  
Date Run 07/28/2005  
Date Sampled 07/27/2005

Analysis for: DEVON ENERGY PRODUCTION COMPANY

GPANGL 160

Well Name: RIFLEMAN "5" FEDERAL #4

Field:

Sta. Number: 885-12-057

Purpose: SPOT-EFM

Sampling Temp: 82.2 DEG F

Volume/day: 1.8 MMCF/DAY

Pressure on Cylinder: 518.4 PSIG

Producer: DEVON ENERGY PRODUCTION

County: EDDY State: NM

Sampled By: JACK PITTMAN

Atmos Temp: DEG F

Formation:

Line Pressure: 531.6 PSIA

## GAS COMPONENT ANALYSIS

Pressure Base: 14.7300

		Mol %	GPM
Carbon Dioxide	CO2	1.9215	
Nitrogen	N2	0.5124	
Methane	C1	92.1455	
Ethane	C2	4.0539	1.0836
Propane	C3	0.8552	0.2355
Iso-Butane	IC4	0.1361	0.0445
Nor-Butane	NC4	0.1278	0.0403
Iso-Pentane	IC5	0.0496	0.0182
Nor-Pentane	NC5	0.0345	0.0125
Hexanes Plus	C6+	0.1635	0.0713
TOTAL		100.0000	1.5058

Real BTU Dry: 1049.11  
Real BTU Wet: 1030.85  
Real Calc. Specific Gravity: 0.6134  
Field Specific Gravity: 0.0000

Standard Pressure: 14.6960  
BTU Dry: 1044.28  
BTU Wet: 1026.11

Z Factor: 0.9977  
N Value: 1.3008  
Avg Mol Weight: 17.7347  
Avg CuFt/Gal: 57.9357  
26 Lb Product: 0.1630  
Methane+ GPM: 17.1241  
Ethane+ GPM: 1.5058  
Propane+ GPM: 0.4223  
Butane+ GPM: 0.1868  
Pentane+ GPM: 0.1020

REMARKS:  
SAMPLE TAKEN FOR EFM

Approved by: DON NORMAN

Thu Jul 28 20:40:45 2005

*Nearby Gas Analysis for the  
Perfecto I State Com #2*



Proposal No: 215852806A

**Devon Energy Corporation**  
**Perfecto 2 State Com #2**

Sec. 3-22S-26E  
Eddy County, New Mexico  
May 3, 2006

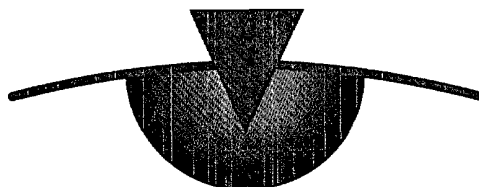
**Well Recommendation**

**Prepared for:**

Bill Dougherty  
Oklahoma City, Oklahoma  
Bus Phone: (405) 552-4590

**Prepared by:**

John Parks  
Region Technical Rep.  
Oklahoma City, Oklahoma  
Bus Phone: (405) 228-4302



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**Service Point:**

Artesia  
Bus Phone: (505) 746-3140  
Fax: (505) 746-2293

**Service Representatives:**

Mark Malone  
Manager, Region Technical  
Bus Phone: (432) 683-2781

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Surface Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

### **JOB AT A GLANCE**

<b>Depth (TVD)</b>	260 ft
<b>Depth (MD)</b>	260 ft
<b>Hole Size</b>	17.5 in
<b>Casing Size/Weight :</b>	13 3/8 in, 48 lbs/ft
<b>Pump Via</b>	13 3/8" O.D. (12.715" I.D) 48
<b>Total Mix Water Required</b>	1,872 gals
<b>Spacer</b>	
<b>Fresh Water</b>	20 bbls
<b>Density</b>	8.3 ppg
<b>Cement Slurry</b>	
<b>Class C</b>	295 sacks
<b>Density</b>	14.8 ppg
<b>Yield</b>	1.35 cf/sack
<b>Displacement</b>	
<b>Mud</b>	35 bbls
<b>Density</b>	9.0 ppg



**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Surface Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
17.500 HOLE	260	260

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
13.375	12.715	48	260	260

Float Collar set @ 220 ft  
 Mud Density 9.00 ppg  
 Est. Static Temp. 80 ° F  
 Est. Circ. Temp. 80 ° F

### VOLUME CALCULATIONS

260 ft x 0.6946 cf/ft with 100 % excess = 361.2 cf  
 40 ft x 0.8818 cf/ft with 0 % excess = 35.3 cf (inside pipe)  
**TOTAL SLURRY VOLUME** = 396.5 cf  
 = 71 bbls

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Surface Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## **FLUID SPECIFICATIONS**

Spacer 20.0 bbls Fresh Water @ 8.34 ppg

<b><u>FLUID</u></b>	<b><u>VOLUME CU-FT</u></b>	<b><u>VOLUME FACTOR</u></b>	<b><u>AMOUNT AND TYPE OF CEMENT</u></b>
Cement Slurry	396	/ 1.3	= 295 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 56.3% Fresh Water

Displacement 34.6 bbls Mud @ 9 ppg

## **CEMENT PROPERTIES**

### **SLURRY NO. 1**

Slurry Weight (ppg)	14.80
Slurry Yield (cf/sack)	1.35
Amount of Mix Water (gps)	6.35
Estimated Pumping Time - 70 BC (HH:MM)	2:30

## **COMPRESSIVE STRENGTH**

8 hrs @ 80 ° F (psi)	500
12 hrs @ 80 ° F (psi)	1150
24 hrs @ 80 ° F (psi)	2100
72 hrs @ 80 ° F (psi)	2700

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Surface Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

### PRICE ESTIMATE

#### Product Material

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
295	94lbs	Class C Cement	2,836.07
555	lbs	Calcium Chloride	214.45
74	lbs	Cello Flake	113.75
1	ea	Cement Plug, Wooden, Top 13-3/8 in	220.50
Product Material Subtotal:			\$3,384.77

#### Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc	53.97
312	cu ft	Bulk Materials Service Charge	374.77
Service Charges Subtotal:			\$428.74

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	4hrs	Cement Pump Casing, 0 - 1000 ft	735.00
1	job	Cement Head	189.84
1	job	Data Acquisition, Cement, Standard	493.50
80	miles	Mileage, Heavy Vehicle	208.32
80	miles	Mileage, Auto, Pick-Up or Treating Van	118.61
Equipment Subtotal:			\$1,745.27

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.

This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Surface Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

**PRICE ESTIMATE**

**Freight/Delivery Charges**

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
567	tonmi	Bulk Delivery, Dry Products	495.33
Freight/Delivery Charges Subtotal:			\$495.33
<b>TOTAL:</b>			<b>\$6,054.11</b>

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

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**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Intermediate Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

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**JOB AT A GLANCE**

<b>Depth (TVD)</b>	2,800 ft
<b>Depth (MD)</b>	2,800 ft
<b>Hole Size</b>	12.25 in
<b>Casing Size/Weight :</b>	9 5/8 in, 40 lbs/ft
<b>Pump Via</b>	9 5/8" O.D. (8.835" I.D) 40
<b>Total Mix Water Required</b>	8,587 gals
<b>Spacer</b>	
<b>Fresh Water</b>	20 bbls
<b>Density</b>	8.3 ppg
<b>Lead Slurry</b>	
<b>35:65:6 Poz:Class C</b>	700 sacks
<b>Density</b>	12.7 ppg
<b>Yield</b>	1.95 cf/sack
<b>Tail Slurry</b>	
<b>60:40 Poz:Class C (MPA)</b>	250 sacks
<b>Density</b>	13.8 ppg
<b>Yield</b>	1.37 cf/sack
<b>Displacement</b>	
<b>Mud</b>	209 bbls
<b>Density</b>	9.0 ppg

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Intermediate Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
12.715 CASING	260	260
12.250 HOLE	2,800	2,800

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
9.625	8.835	40	2,800	2,800

Float Collar set @ 2,760 ft  
 Mud Density 9.00 ppg  
 Est. Static Temp. 99 ° F  
 Est. Circ. Temp. 93 ° F

### VOLUME CALCULATIONS

260 ft	x	0.3765 cf/ft	with	0 % excess	=	97.9 cf
2,019 ft	x	0.3132 cf/ft	with	100 % excess	=	1264.9 cf
521 ft	x	0.3132 cf/ft	with	100 % excess	=	326.1 cf
40 ft	x	0.4257 cf/ft	with	0 % excess	=	17.0 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	1705.9 cf
					=	304 bbls

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Intermediate Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## **FLUID SPECIFICATIONS**

Spacer 20.0 bbls Fresh Water @ 8.34 ppg

<b>FLUID</b>	<b>VOLUME CU-FT</b>	<b>VOLUME FACTOR</b>	<b>AMOUNT AND TYPE OF CEMENT</b>
Lead Slurry	1363	/ 1.9	= 700 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 6% bwoc Bentonite + 95.8% Fresh Water
Tail Slurry	343	/ 1.3	= 250 sacks (60:40) Poz (Fly Ash):Class C Cement + 0.5% bwoc Sodium Metasilicate + 0.25 lbs/sack Cello Flake + 4% bwoc MPA-1 + 5% bwow Sodium Chloride + 64.7% Fresh Water

Displacement 209.3 bbls Mud @ 9 ppg

## **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	12.70	13.80
Slurry Yield (cf/sack)	1.95	1.37
Amount of Mix Water (gps)	9.99	6.36
Estimated Pumping Time - 70 BC (HH:MM)	4:00	2:30
<b>COMPRESSIVE STRENGTH</b>		
12 hrs @ 88 ° F (psi)	150	
24 hrs @ 88 ° F (psi)	350	
72 hrs @ 88 ° F (psi)	800	
8 hrs @ 99 ° F (psi)		500
12 hrs @ 99 ° F (psi)		750
24 hrs @ 99 ° F (psi)		2000
72 hrs @ 99 ° F (psi)		2900

IF CIRCULATION IS LOST DURING DRILLING, PUMP 250 SX CLASS H + 10% A-10 (GYPSUM) + 1% CACL2 + 10 PPS GILSONITE + 1/4 PPS CELLO FLAKE. MIX CEMENT @ 14.6 PPG (6.16 GPS WATER) AND PUMP AHEAD OF THE LEAD CEMENT LISTED ABOVE.

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Intermediate Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

### PRICE ESTIMATE

#### Product Material

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
555	94lbs	Class C Cement	5,335.66
3654	lbs	Bentonite	552.48
103	lbs	Sodium Metasilicate	126.75
3500	lbs	LCM-1	1,264.20
238	lbs	Cello Flake	365.85
395	74lbs	Poz (Fly Ash)	1,531.26
3577	lbs	Sodium Chloride	525.82
1	ea	Cement Plug, Rubber, Top 9-5/8 in	121.80
820	lbs	MPA-1	547.60
Product Material Subtotal:			\$10,371.42

#### Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc	53.97
1170	cu ft	Bulk Materials Service Charge	1,405.40
Service Charges Subtotal:			\$1,459.37

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	4hrs	Cement Pump Casing, 2001 - 3000 ft	1,207.50
1	job	Cement Head	189.84
1	job	Data Acquisition, Cement, Standard	493.50
80	miles	Mileage, Heavy Vehicle	208.32
80	miles	Mileage, Auto, Pick-Up or Treating Van	118.61
Equipment Subtotal:			\$2,217.77

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

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**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** Intermediate Casing  
**Date:** May 3, 2006



**Proposal No:** 215852806A

**PRICE ESTIMATE**

**Freight/Delivery Charges**

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1866	tonmi	Bulk Delivery, Dry Products	1,630.14
Freight/Delivery Charges Subtotal:			\$1,630.14
<b>TOTAL:</b>			<b>\$15,678.70</b>

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.

This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



**Proposal No:** 215852806A

### **JOB AT A GLANCE**

<b>Depth (TVD)</b>	11,525 ft
<b>Depth (MD)</b>	11,525 ft
<b>Hole Size</b>	8.75 in
<b>Casing Size/Weight :</b>	5 1/2 in, 17 lbs/ft
<b>Pump Via</b>	5 1/2" O.D. (4.892" I.D) 17
<b>Total Mix Water Required</b>	17,967 gals
<b>Stage No: 1</b>	<b>Float Collar set @</b> 11,445 ft
<b>Spacer</b>	
<b>Turbo Flow III</b>	40 bbls
<b>Density</b>	11.5 ppg
<b>Spacer</b>	
<b>Fresh Water</b>	5 bbls
<b>Density</b>	8.3 ppg
<b>Spacer</b>	
<b>Surebond III</b>	1,000 gals
<b>Density</b>	9.4 ppg
<b>Spacer</b>	
<b>Fresh Water</b>	10 bbls
<b>Density</b>	8.3 ppg
<b>Cement Slurry</b>	
<b>Super C Modified</b>	850 sacks
<b>Density</b>	13.3 ppg
<b>Yield</b>	1.59 cf/sack
<b>Displacement</b>	
<b>Displacement Fluid</b>	266 bbls



### **JOB AT A GLANCE (Continued)**

<b>Spacer</b>	
Fresh Water	10 bbls
Density	8.3 ppg
<b>Lead Slurry</b>	
35:65:6 Poz:Class C	359 sacks
Density	12.5 ppg
Yield	2.04 cf/sack
<b>Tail Slurry</b>	
60:40 Poz:Class C (MPA)	150 sacks
Density	13.8 ppg
Yield	1.37 cf/sack
<b>Displacement</b>	
Displacement Fluid	105 bbls

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.835 CASING	2,800	2,800
8.750 HOLE	11,525	11,525

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
5.500	4.892	17	11,525	11,525

**STAGE: 1**      **Float Collar set @**      11,445 ft  
                  **Mud Density**      10.00 ppg  
                  **Est. Static Temp.**      179 ° F  
                  **Est. Circ. Temp.**      144 ° F

### VOLUME CALCULATIONS

3,525 ft    x    0.2526 cf/ft    with    50 % excess    =    1335.6 cf  
 80 ft      x    0.1305 cf/ft    with    0 % excess    =    10.4 cf (inside pipe)  
    **TOTAL SLURRY VOLUME** =    1346.0 cf  
    =    240 bbls

**STAGE: 2**      **Stage Collar set @**      8,000 ft  
                  **Mud Density**      10.00 ppg  
                  **Est. Static Temp.**      146 ° F  
                  **Est. Circ. Temp.**      125 ° F

### VOLUME CALCULATIONS

3,500 ft    x    0.2526 cf/ft    with    70 % excess    =    1503.3 cf  
    **TOTAL SLURRY VOLUME** =    1503.3 cf  
    =    268 bbls

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #1  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



**Proposal No:** 215852806A

**WELL DATA (Continued)**

<b><u>STAGE:</u> 3</b>	<b>Stage Collar set @</b>	4,500 ft
	<b>Mud Density</b>	10.00 ppg
	<b>Est. Static Temp.</b>	115 ° F
	<b>Est. Circ. Temp.</b>	101 ° F

**VOLUME CALCULATIONS**

300 ft	x	0.2607 cf/ft	with	0 % excess	=	78.2 cf
1,293 ft	x	0.2526 cf/ft	with	100 % excess	=	653.1 cf
407 ft	x	0.2526 cf/ft	with	100 % excess	=	205.7 cf
<b>TOTAL SLURRY VOLUME</b>					=	937.0 cf
					=	167 bbls

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## **FLUID SPECIFICATIONS**

### **STAGE NO.: 1**

Spacer	40.0 bbls Turbo Flow III @ 11.5 ppg
Spacer	5.0 bbls Fresh Water @ 8.34 ppg
Spacer	1,000.0 gals Surebond III @ 9.35 ppg
Spacer	10.0 bbls Fresh Water @ 8.34 ppg

<b><u>FLUID</u></b>	<b><u>VOLUME CU-FT</u></b>	<b><u>VOLUME FACTOR</u></b>	<b><u>AMOUNT AND TYPE OF CEMENT</u></b>
Cement Slurry	1346	/ 1.5	= 850 sacks (15:61:11) Poz (Fly Ash):Class C Cement:CSE-2 + 0.5% bwoc BA-10 + 0.15% bwoc R-3 + 2% bwow Potassium Chloride + 0.75% bwoc EC-1 + 0.25 lbs/sack Cello Flake + 0.7% bwoc CD- 32 + 5 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.6% bwoc FL-52A + 70.6% Fresh Water
Displacement			266.1 bbls Displacement Fluid

### **CEMENT PROPERTIES**

#### **SLURRY NO. 1**

Slurry Weight (ppg)	13.30
Slurry Yield (cf/sack)	1.59
Amount of Mix Water (gps)	7.36
Estimated Pumping Time - 70 BC (HH:MM)	3:45
Free Water (mls) @ 139 ° F @ 90 ° angle	0.0
Fluid Loss (cc/30min) at 1000 psi and 139 ° F	50.0

### **COMPRESSIVE STRENGTH**

12 hrs @ 173 ° F (psi)	1400
24 hrs @ 173 ° F (psi)	2000
72 hrs @ 173 ° F (psi)	2500

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



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**FLUID SPECIFICATIONS (Continued)**

**STAGE NO.: 2**

Spacer 1,000.0 gals Mud Clean II @ 8.45 ppg

Cement Slurry 1503 / 1.3 = 1117 sacks (60:40) Poz (Fly Ash):Premium Plus H  
Cement + 1% bwow Sodium Chloride + 0.75%  
bwoc BA-10 + 0.15% bwoc R-3 + 0.25 lbs/sack  
Cello Flake + 2 lbs/sack Kol Seal + 4% bwoc MPA-  
1 + 61.2% Fresh Water

Displacement 186.0 bbls Displacement Fluid

**CEMENT PROPERTIES**

**SLURRY  
NO. 1**

Slurry Weight (ppg)	13.80
Slurry Yield (cf/sack)	1.35
Amount of Mix Water (gps)	6.02
Estimated Pumping Time - 70 BC (HH:MM)	3:30
Free Water (mls) @ 125 ° F @ 90 ° angle	0.0
Fluid Loss (cc/30min) at 1000 psi and 125 ° F	300.0

**COMPRESSIVE STRENGTH**

12 hrs @ 146 ° F (psi)	1200
24 hrs @ 146 ° F (psi)	2000
72 hrs @ 146 ° F (psi)	3000

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



**Proposal No:** 215852806A

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**FLUID SPECIFICATIONS (Continued)**

**STAGE NO.: 3**

Spacer 10.0 bbls Fresh Water @ 8.34 ppg

Lead Slurry 731 / 2.0 = 359 sacks (35:65) Poz (Fly Ash):Class C Cement +  
5% bwow Sodium Chloride + 0.25 lbs/sack Cello  
Flake + 6% bwoc Bentonite + 107.8% Fresh Water

Tail Slurry 206 / 1.3 = 150 sacks (60:40) Poz (Fly Ash):Class C Cement +  
5% bwow Sodium Chloride + 0.25 lbs/sack Cello  
Flake + 0.4% bwoc Sodium Metasilicate + 4%  
bwoc MPA-1 + 64.7% Fresh Water

Displacement 104.6 bbls Displacement Fluid

**CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	12.50	13.80
Slurry Yield (cf/sack)	2.04	1.37
Amount of Mix Water (gps)	11.24	6.36
Estimated Pumping Time - 70 BC (HH:MM)	3:30	2:30
Free Water (mls) @ ° F @ 90 ° angle		
Fluid Loss (cc/30min) at 1000 psi and ° F		

**COMPRESSIVE STRENGTH**

12 hrs @ 115 ° F (psi)	250	800
24 hrs @ 115 ° F (psi)	400	2000
72 hrs @ 115 ° F (psi)	800	3000



**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



**Proposal No:** 215852806A

### PRICE ESTIMATE

#### Product Material

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
845	94lbs	Class C Cement	8,123.66
1043	lbs	Potassium Chloride	302.26
1874	lbs	Bentonite	283.35
50	lbs	Sodium Metasilicate	61.53
249	lbs	R-3	275.05
4250	lbs	LCM-1	1,535.10
619	lbs	Cello Flake	951.53
1059	74lbs	Poz (Fly Ash)	4,105.32
2639	lbs	Sodium Chloride	387.93
1000	gals	Mud Clean II	504.00
1000	gals	Surebond III Spacer	1,478.40
40	bbis	Turbo Flow III, 11.5 - 11.9 ppg	1,495.20
444	lbs	FL-52A	3,589.74
1057	lbs	BA-10	6,503.72
518	lbs	CD-32	2,055.94
555	lbs	EC-1	1,258.74
444	lbs	FL-25	3,020.98
4156	lbs	MPA-1	2,775.38
9350	lbs	CSE-2	4,712.40
2234	lbs	Kol Seal	788.16
447	94lbs	Premium Plus H Cement	4,226.03
Product Material Subtotal:			\$48,434.42

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.

This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Job Description:** 3 Stage Long String  
**Date:** May 3, 2006



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### PRICE ESTIMATE

#### Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc	53.97
1	4hrs	Batch Mix Truck, 100-150 bbl, 1st 4 Hrs	863.10
4	hrs	Batch Mix Truck, 100-150 bbl, Loc. Time	209.58
3077	cu ft	Bulk Materials Service Charge	3,696.09
Service Charges Subtotal:			\$4,822.74

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	8hrs	Cement Pump Casing, 11001 - 12000 ft	4,389.00
1	job	Cement Head	189.84
1	job	Data Acquisition, Cement, Standard	493.50
480	miles	Mileage, Heavy Vehicle	1,249.92
80	miles	Mileage, Auto, Pick-Up or Treating Van	118.61
2	stage	Multiple Stage Cementing	2,310.00
1	6hrs	Cement Pump, Reserve, 1st 6 hrs	1,176.00
7	hrs	Cement Pump, Reserve, After 6 hours	1,058.40
2	job	Field Storage Bin	768.60
1	job	Centrifugal Transfer Pump, Trailer	361.20
Equipment Subtotal:			\$12,115.07

#### Freight/Delivery Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
8	hrs	Bulk Delivery, Trans., Over 3000 gals	468.72
4585	tonmi	Bulk Delivery, Dry Products	4,005.46
Freight/Delivery Charges Subtotal:			\$4,474.18
<b>TOTAL:</b>			<b>\$69,846.41</b>

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.  
 The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.  
 This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.



## CONDITIONS

**BJ Services' performance of services and sale of materials is expressly conditioned upon the applicability of the Terms and Conditions contained in the current BJ Services Price Book. The Terms and Conditions include, among other things, an indemnity in favor of BJ Services from Customer for damage to the well bore, reservoir damage, loss of the hole, blowouts and loss of control of the well, even if caused by the negligence or other fault of BJ Services. The Terms and Conditions also limit the warranties provided by the BJ Services and the remedies to which Customer may be entitled in the event of a breach of warranty by BJ Services. For these reasons, we strongly recommend that you carefully review a copy of the Terms and Conditions. If you do not have a copy of the BJ Services Price Book, you can view the Terms and Conditions on BJ Services Web Site, [www.bjservices.com](http://www.bjservices.com). By requesting that BJ Services perform the services described herein, Customer acknowledges that such Terms and Conditions are applicable to the services. Further, by requesting the services, Customer warrants that its representative on the well location or other service site will be fully authorized to acknowledge such Terms and Conditions by executing a Field Receipt or other document presented by BJ Services containing such Terms and Conditions.**

**In the event that Customer and BJ Services have executed a Master Services Agreement covering the work to be performed, such Master Services Agreement shall govern in place of the Terms and Conditions. If you are interested in entering into Master Services Agreement with BJ Services, please contact us through the "Go BJ" button on the BJ Services Web Site.**

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## **PRODUCT DESCRIPTIONS**

### **BA-10**

Improves cement bonding and acts as a matrix flow control agent. It can be used in lightweight, standard and densified slurries at moderate temperatures.

### **Bentonite**

Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.

### **CD-32**

A patented, free-flowing, water soluble polymer that is an efficient and effective dispersant for primary and remedial cementing.

### **CSE-2**

An additive which contributes to low density, high compressive strength development of cement slurries at all temperature ranges. This material also controls free water without the need for standard extenders.

### **Calcium Chloride**

A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

### **Cello Flake**

Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

### **Class C Cement**

Intended for use from surface to 6000 ft., and for conditions requiring high early strength and/or sulfate resistance.

### **EC-1**

A proprietary product that provides expansive properties and improves bonding at low to moderate temperatures.

### **FL-25**

An all purpose salt-tolerant fluid loss additive that provides exceptional fluid loss control across a wide range of temperatures and salinity conditions and remedial cementing applications.

### **FL-52A**

A water soluble, high molecular weight fluid loss additive used in medium to low density slurries. It is functional from low to high temperature ranges.

### **Kol Seal**

A granular, lightweight material (specific gravity of 1.3) used to control lost circulation in zones of natural and induced fractures, cavities and high permeability.

### **LCM-1**

A graded (8 to 60 mesh) naturally occurring hydrocarbon, asphaltite. It is used as a lost circulation material at low to moderate temperatures and will act as a slurry extender. Cement compressive strength is reduced.

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Date:** May 3, 2006



**Proposal No:** 215852806A

## **PRODUCT DESCRIPTIONS (Continued)**

### **MPA-1**

MPA-1 is a fine white pozzolanic type powder used to enhance various cement properties. These properties include: Enhanced Compressive Strength Development, Improved Sulfate Resistance, Increased Tensile and Flexural Strength, and Gas Control. MPA-1 is functional over a broad temperature range, and can be used in foamed lightweight, normal, and heavyweight cement designs. Concentrations range from 1 to 30% BWOC.

### **Mud Clean II**

A water-base mud wash designed for use ahead of cement slurries to aid in mud and drilling debris removal and to prevent contamination of the cement slurry. It should be used only when water-base mud is used.

### **Potassium Chloride**

A granular salt used to reduce clay swelling caused by water-base cementing fluids.

### **Poz (Fly Ash)**

A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

### **Premium Plus H Cement**

Class H cement is an API type, all purpose oil well cement which is used without modification in wells up to 8,000 ft. It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

### **R-3**

A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.

### **Sodium Chloride**

At low concentrations, it is used as an accelerator for cement slurries. At high concentrations, it is used for formation compatibility.

### **Sodium Metasilicate**

An accelerator used to decrease the thickening time of cement slurries.

### **Sodium Metasilicate**

An extender used to produce an economical, low density cement slurry.

### **Surebond III Spacer**

A blend of liquid components which when run as a preflush ahead of cement, will leave both the formation and pipe water wet, thus enhancing bonding. Surebond is also effective in combating slurry loss to fractured formations due to its coating action. A fresh water spacer should always be run between the Surebond and cement slurries.

### **Turbo Flow III**

A water-based weighted cement spacer designed for water based drilling muds. Turbo Flow III easily achieves turbulence in most hole geometries and is compatible with cements and most drilling muds.

**Operator Name:** Devon Energy Corporation  
**Well Name:** Perfecto 2 State #2  
**Date:** May 3, 2006



**Proposal No:** 215852806A

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**End of Report**



Devon Energy Production Company  
Operations Engineering  
20 North Broadway  
Oklahoma City, Oklahoma 73102-8260  
Phone: (405)-552-7802  
Fax (405)-552-8113  
[Stephanie.Ysasaga@dvn.com](mailto:Stephanie.Ysasaga@dvn.com)

October 10<sup>th</sup>, 2006

Bryan Arrant  
Oil Conservation Division  
1301 W. Grand Avenue  
Artesia, New Mexico 88210

**Re: APD – Perfecto 2 State Com 2**  
**BOP Procedure Testing: Additional APD Requirements**  
**SL: Lot P Sec 3-T22S-R26E 270' FSL & 826' FEL**  
**BHL: Lot L Sec 2-T22S-R26E 1650' FSL & 660' FWL**

Dear Mr. Arrant:

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. The functional tests will be documented on the daily drillers log.

Should we need to provide additional information, please call me at (405)-552-7802.

Very truly yours,

**DEVON ENERGY PRODUCTION COMPANY, L.P.**

Stephanie A. Ysasaga  
Sr. Staff Engineering Technician ☺