

copy 1

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
**RECEIVED**  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
JUN 25 2010  
220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-101  
June 16, 2008

Submit to appropriate District Office  
☐ AMENDED REPORT

**HOBBSOCD**  
**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

|                                                                                                                    |                           |                             |
|--------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------------|
| Operator Name and Address<br>Aspen Operating, L.L.C.<br>801 Cherry St., Suite 810, Unit 23,<br>Fort Worth TX 76102 |                           | OGRID Number<br>217598      |
| Property Code<br>38224                                                                                             | Property Name<br>STATE CA | API Number<br>30 -025-03639 |
| Proposed Pool 1<br>SOUTH CROSSROADS DEVONIAN                                                                       |                           | Well No.<br>1               |
| Proposed Pool 2                                                                                                    |                           |                             |

| Surface Location  |              |                  |               |                |                      |                           |                      |                        |               |
|-------------------|--------------|------------------|---------------|----------------|----------------------|---------------------------|----------------------|------------------------|---------------|
| UL or lot no<br>P | Section<br>9 | Township<br>10 S | Range<br>36 E | Lot Idn<br>N/A | Feet from the<br>652 | North/South line<br>SOUTH | Feet from the<br>680 | East/West line<br>EAST | County<br>LEA |

| Proposed Bottom Hole Location If Different From Surface |              |                  |               |                |                      |                           |                      |                        |               |
|---------------------------------------------------------|--------------|------------------|---------------|----------------|----------------------|---------------------------|----------------------|------------------------|---------------|
| UL or lot no<br>P                                       | Section<br>9 | Township<br>10 S | Range<br>36 E | Lot Idn<br>N/A | Feet from the<br>422 | North/South line<br>SOUTH | Feet from the<br>330 | East/West line<br>EAST | County<br>LEA |

|                                     |                           |                        |                      |                                     |
|-------------------------------------|---------------------------|------------------------|----------------------|-------------------------------------|
| Work Type Code<br>REENTRY SIDETRACK | Well Type Code<br>OIL     | Cable/Rotary<br>ROTARY | Lease Type Code<br>S | Ground Level Elevation<br>4022'     |
| Multiple                            | Proposed Depth<br>14,000' | Formation<br>DEVONIAN  | Contractor<br>TBA    | Spud Date<br>07-15-2010 - TENTATIVE |

| Proposed Casing and Cement Program |             |                    |               |                 |               |
|------------------------------------|-------------|--------------------|---------------|-----------------|---------------|
| Hole Size                          | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
| EXISTING                           | 13 3/8 "    | 54.5               | 300'          | 200             | SURFACE       |
| EXISTING                           | 8 5/8 "     | 32 & 36            | 4186'         | 500             | 2200'         |
| 7 7/8 "                            | 5 1/2 "     | 17                 | 13,123        | 1000            | 9500'         |
|                                    |             |                    |               |                 |               |
|                                    |             |                    |               |                 |               |

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any. Use additional sheets if necessary

1) Reenter & Drill 11" to top of cut of the 8 5/8" at 2,186 Ft. Tie back to 8 5/8" and test patch. NU 5,000 psi. BOPE Double Ram Stack with 3,000 psi annular preventer.

2) Clean 7 5/8" hole to KOP at 9,500 feet. Kick-off to BHL (see above) to TVD of 14,000 feet.

3) Set 5 1/2" casing cemented from Total Depth to 9,500 feet. Cement from 6,000 feet into intermediate casing with cementing tool (DV Tool).

See attached well bore diagram.

**Permit Expires 2 Years From Approval  
Date Unless Drilling Underway  
Re-Entry**

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief

Signature: *Michael B. Wilson*

Printed name: Michael B. Wilson

Title: Production Manager

E-mail Address: mwilson@aspen-oil.com

Date: 6-24-2010

Phone: (817) 455-2311

| OIL CONSERVATION DIVISION                                                                                                                                    |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Approved by:                                                                                                                                                 | <i>[Signature]</i> |
| Title:                                                                                                                                                       | PETROLEUM ENGINEER |
| Approval Date:                                                                                                                                               | JUL 21 2010        |
| Expiration Date:                                                                                                                                             |                    |
| OCD CONDITION OF APPROVAL of Drilling<br>Intent to drill ONLY --- CANNOT produce until the Non-Standard<br>Location has been approved by OCD Santa Fe office |                    |

# RECEIVED

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

JUN 25 2010

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 15, 2009

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

Submit one copy to appropriate  
District Office

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

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

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

|                               |                                             |                                                |
|-------------------------------|---------------------------------------------|------------------------------------------------|
| API Number                    | Pool Code<br><b>135617</b>                  | Pool Name<br><b>Crossroads Devonian, South</b> |
| Property Code<br><b>38224</b> | Property Name<br><b>STATE CA</b>            | Well Number<br><b>1</b>                        |
| GRID No.<br><b>217598</b>     | Operator Name<br><b>ASPEN OPERATING CO.</b> | Elevation<br><b>4022'</b>                      |

### 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             | 9       | 10 S     | 36 E  |         | 652           | SOUTH            | 680           | EAST           | LEA    |

### 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P             | 9       | 10 S     | 36 E  |         | 422           | SOUTH            | 330           | EAST           | LEA    |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|-----------------|-----------------|--------------------|-----------|
| <b>80</b>       |                 |                    |           |

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>N 899805 4780<br/>E 865487 1760</p>                                                                                                                   | <p>N 899858 7760<br/>E 870763 9700</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 or has a right to drill this well at this 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><i>Vernon D. Dyer</i> 6-24-2010<br/>Signature Date</p> <p><b>VERNON D. DYER</b><br/>Printed Name</p> |
| <p><b>PROPOSED BOTTOM HOLE LOCATION</b></p> <p>Lat - N 33°27'20.03"<br/>Long - W 103°15'14.86"<br/>NMSPC- N 894998.104<br/>E 870493.751<br/>(NAD-83)</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>FEBRUARY 25 2010<br/>Date Surveyed</p> <p><i>Gary L. Jones</i><br/>Signature and Seal of Professional Surveyor 7977</p> <p>Certificate No. Gary L. Jones 7977</p>                                                                                                                                                                                                                              |
| <p><b>SURFACE LOCATION</b></p> <p>Lat - N 33°27'22.36"<br/>Long - W 103°15'18.80"<br/>NMSPC- N 895229.351<br/>E 870156.973<br/>(NAD-83)</p>              |                                        | <p><b>BASIN SURVEYS</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Per mw

# Allis-Chalmers Energy, Inc.

## Planning Report

Company: ASPEN OPERATING COMPANY, LLC  
 Field: Lea, County, NM  
 Site: State CA #1  
 Well: #1  
 Wellpath: Sidetrack

Date: 06/17/2010 Time: 15:57:11 Page: 1  
 Co-ordinate(NE) Reference: Well: #1, Grid North  
 Vertical (TVD) Reference: SITE 0.0  
 Section (VS) Reference: Well (0.00N,0.00E,124.48Azi)  
 Plan: Plan #2

Field: Lea, County, NM

Map System: US State Plane Coordinate System 1983  
 Geo Datum: GRS 1980  
 Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone  
 Coordinate System: Well Centre  
 Geomagnetic Model: IGRF2010

Site: State CA #1

Site Position: Northing: 895229.35 ft Latitude: 33 27 22.340 N  
 From: Map Easting: 870156.97 ft Longitude: 103 15 18.824 W  
 Position Uncertainty: 0.00 ft North Reference: Grid  
 Ground Level: 4022.00 ft Grid Convergence: 0.59 deg

Well: #1

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 895229.35 ft Latitude: 33 27 22.340 N  
 +E/-W 0.00 ft Easting: 870156.97 ft Longitude: 103 15 18.824 W  
 Position Uncertainty: 0.00 ft

Wellpath: Sidetrack

Current Datum: SITE Height 0.00 ft Drilled From: Surface  
 Magnetic Data: 06/17/2010 Tie-on Depth: 0.00 ft  
 Field Strength: 49519 nT Above System Datum: Mean Sea Level  
 Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 7.65 deg  
 ft ft +E/-W Direction  
 deg  
 0.00 0.00 0.00 124.48

Plan: Plan #2  
 Move BH 330' FESection Line  
 Principal: No

Date Composed: 06/17/2010  
 Version: 1  
 Tied-to: From Surface

### Plan Section Information

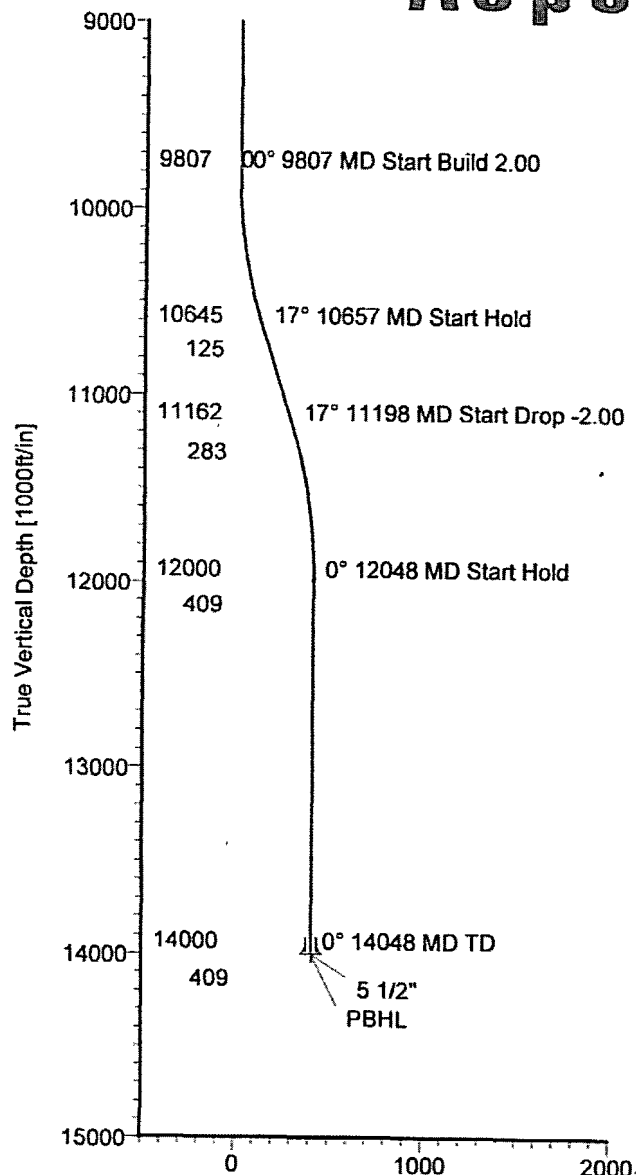
| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg | Target |
|----------|-------------|-------------|-----------|-------------|-------------|------------------|--------------------|-------------------|------------|--------|
| 0.00     | 0.00        | 124.48      | 0.00      | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |        |
| 9807.47  | 0.00        | 124.48      | 9807.47   | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |        |
| 10657.47 | 17.00       | 124.48      | 10645.05  | -70.87      | 103.19      | 2.00             | 2.00               | 0.00              | 124.48     |        |
| 11198.47 | 17.00       | 124.48      | 11162.42  | -160.41     | 233.57      | 0.00             | 0.00               | 0.00              | 0.00       |        |
| 12048.47 | 0.00        | 124.48      | 12000.00  | -231.28     | 336.76      | 2.00             | -2.00              | 0.00              | 180.00     |        |
| 14048.47 | 0.00        | 124.48      | 14000.00  | -231.28     | 336.76      | 0.00             | 0.00               | 0.00              | 0.00       | PBHL   |

### Survey

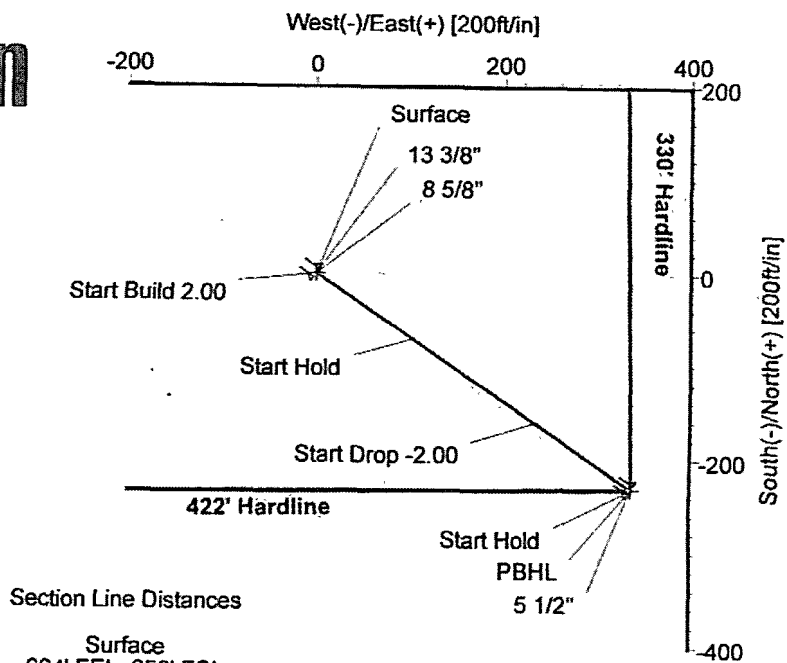
| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 9807.00  | 0.00        | 124.48      | 9807.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              |              |
| 9907.00  | 1.99        | 124.48      | 9906.98   | -0.98       | 1.43        | 1.73     | 1.99             | 1.99               | 0.00              |              |
| 10007.00 | 3.99        | 124.48      | 10006.84  | -3.93       | 5.73        | 6.95     | 2.00             | 2.00               | 0.00              |              |
| 10107.00 | 5.99        | 124.48      | 10106.45  | -8.86       | 12.90       | 15.64    | 2.00             | 2.00               | 0.00              |              |
| 10207.00 | 7.99        | 124.48      | 10205.71  | -15.75      | 22.93       | 27.81    | 2.00             | 2.00               | 0.00              |              |
| 10307.00 | 9.99        | 124.48      | 10304.47  | -24.59      | 35.81       | 43.44    | 2.00             | 2.00               | 0.00              |              |
| 10407.00 | 11.99       | 124.48      | 10402.63  | -35.39      | 51.52       | 62.51    | 2.00             | 2.00               | 0.00              |              |
| 10507.00 | 13.99       | 124.48      | 10500.07  | -48.11      | 70.05       | 84.98    | 2.00             | 2.00               | 0.00              |              |
| 10607.00 | 15.99       | 124.48      | 10596.66  | -62.75      | 91.37       | 110.85   | 2.00             | 2.00               | 0.00              |              |
| 10657.47 | 17.00       | 124.48      | 10645.05  | -70.87      | 103.19      | 125.18   | 2.00             | 2.00               | 0.00              |              |
| 10707.00 | 17.00       | 124.48      | 10692.42  | -79.06      | 115.12      | 139.66   | 0.00             | 0.00               | 0.00              |              |
| 10807.00 | 17.00       | 124.48      | 10788.05  | -95.62      | 139.23      | 168.90   | 0.00             | 0.00               | 0.00              |              |
| 10907.00 | 17.00       | 124.48      | 10883.68  | -112.17     | 163.33      | 198.13   | 0.00             | 0.00               | 0.00              |              |
| 11007.00 | 17.00       | 124.48      | 10979.31  | -128.72     | 187.43      | 227.37   | 0.00             | 0.00               | 0.00              |              |
| 11107.00 | 17.00       | 124.48      | 11074.94  | -145.27     | 211.53      | 256.61   | 0.00             | 0.00               | 0.00              |              |

# ASPEN OPERATING COMPANY, LLC

Field: Lea, County, NM  
Site: State CA #1  
Well: #1  
Wellpath: Sidetrack  
Plan: Plan #2



Vertical Section at 124.48° [1000ft/in]



## Section Line Distances

Surface  
664' FEL, 656' FSL

PBHL  
330' FEL, 422' FSL



Azimuths to Grid North  
True North: -0.59°  
Magnetic North: 7.06°

Magnetic Field  
Strength: 49519nT  
Dip Angle: 61.40°  
Date: 06/17/2010  
Model: IGRF2010

## CASING DETAILS

| No. | TVD      | MD       | Name    | Size  |
|-----|----------|----------|---------|-------|
| 1   | 300.00   | 300.00   | 13 3/8" | 13.37 |
| 2   | 4160.00  | 4160.00  | 8 5/8"  | 8.62  |
| 3   | 14000.00 | 14048.47 | 5 1/2"  | 5.50  |

## TARGET DETAILS

| Name    | TVD      | +N/-S   | +E/-W  | Northing  | Easting   | Shape |
|---------|----------|---------|--------|-----------|-----------|-------|
| Surface | 0.00     | 0.00    | 0.00   | 895229.35 | 870156.97 | Point |
| PBHL    | 14000.00 | -231.28 | 336.76 | 894998.07 | 870493.73 | Point |

## SECTION DETAILS

| Sec | MD       | Inc   | Azi    | TVD      | +N/-S   | +E/-W  | DLeg | TFace  | VSec   | Target |
|-----|----------|-------|--------|----------|---------|--------|------|--------|--------|--------|
| 1   | 0.00     | 0.00  | 124.48 | 0.00     | 0.00    | 0.00   | 0.00 | 0.00   | 0.00   |        |
| 2   | 9807.47  | 0.00  | 124.48 | 9807.47  | 0.00    | 0.00   | 0.00 | 0.00   | 0.00   |        |
| 3   | 10657.47 | 17.00 | 124.48 | 10645.05 | -70.87  | 103.19 | 2.00 | 124.48 | 125.18 |        |
| 4   | 11198.47 | 17.00 | 124.48 | 11162.42 | -160.41 | 233.57 | 0.00 | 0.00   | 283.35 |        |
| 5   | 12048.47 | 0.00  | 124.48 | 12000.00 | -231.28 | 336.76 | 2.00 | 180.00 | 408.53 |        |
| 6   | 14048.47 | 0.00  | 124.48 | 14000.00 | -231.28 | 336.76 | 0.00 | 0.00   | 408.53 | PBHL   |

ALLIS-CHALMERS DIRECTIONAL DRILLING SERVICES  
1034 Regional Park Drive Houston, Texas 77060  
Phone: 713-934-9600 Fax: 713-934-9067



DIRECTIONAL  
DRILLING SERVICES

Plan: Plan #2 (#1/Sidetrack)

Created By: Meika Williams

Date: 06/17/2010



Aspen Operating Co., L.L.C.

Wellbore Diagram

**Well Name:** State CA #1 (Sidetrack)

**County/State:** Lea, New Mexico

**Location:** 652' FSL, 680' FEL Congress Section

Section 9, Twp. 10 S, Range 36 E

Lat: 33°27'22.36", Long: 103°15'18.80" (NAD 83)

N 895229.351, E 870156.973 (NMSPCE)

**API:** 30-025-03639

**Field:** Crossroads South

**Elevation:** 4022' (GL)

**Spud:** 11/5/1948

**P&A:** 6/26/1949

