

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB NO. 1004-0137  
Expires March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

S

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

SEP - 8 2008

2. Name of Operator

PARALLEL PETROLEUM CORPORATION

OCD-ARTESIA

3a. Address

1004 N BIG SPRING, SUITE 400, MIDLAND, TX 79702

3b. Phone No. (include area code)

432-685-6563

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SL: 760 FNL & 190 FEL, SEC 5, T15S-R25E

5. Lease Serial No.

NM-112249

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

REAL QUIET 1525-4 FED COM

8. Well Name and No

1H

9. API Well No.

30-005-63947

10. Field and Pool, or Exploratory Area

WALNUT CREEK-WOLFCAMP

GAS POOL - 97631

11. County or Parish, State

CHAVES

NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- |                                               |                                           |                                                    |                                                            |
|-----------------------------------------------|-------------------------------------------|----------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off                    |
| <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity                    |
| <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input checked="" type="checkbox"/> Other <u>PROD CSG.</u> |
| <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       | <u>SURVEYS, LOGS</u>                                       |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |                                                            |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

08-10-08 TD @ 9175 MD, 4872 TVD

08-11-08 RUN 5.5" CSG, 7.875" HOLE, 17# SET @ 9170

LEAD: CMT W/600 SX HALLIBURTON INTERFILL C-SEM+1/4# POLY-E-FLAKE, 11.9, 2.47 YLD

TAIL: CMT W/450 SX HALLIBURTON ACID SOLUBLE 10# SILICALITE 50/50 POZMIX + 0.7%

HALAD(R) + 1/4# D-AIR 3000 + 0.7% HR-601, 15.02 PPG, 2.62 YLD

117 CENTRALIZERS

TOC: CIRCULATED 148 SX TO SURFACE

WOC: 14 HRS, TEST CASING TO 1500 PSI, 30 MINUTES

GYRODATA GYRO SURVEY, PATHFINDER MWD SURVEY, LOG COPIES ATTACHED

ACCEPTED FOR RECORD

SEP 8 - 2008

Gerry Guye, Deputy Field Inspector  
NMOCD-District II ARTESIA

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

KAYE MC CORMICK

Title

SR PROD & REG TECH

Date

08-21-2008

ACCEPTED FOR RECORD THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/S/ DAVID R. GLASS

Title

Date

Office

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DAVID R. GLASS  
PETROLEUM ENGINEER

**A Gyrodata Directional Survey**

Field Copy Only, not definitive

for

**PARALLEL**

Location: PATRIOT #1, CHAVES COUNTY, NEW MEXICO  
Lease: REAL QUIET      Well: #1, 4-1/2" DRILLPIPE

---

Job Number: MD0708GW309

Run Date: 7/31/2008 5:52:21 AM

Surveyor: THOMAS BOWDEN

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 33.049167 deg. N    Longitude: 104.456111 deg. W

Azimuth Correction:

Gyro: 0.07000 deg East to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

# A Gyrodata Directional Survey

PARALLEL

Location: PATRIOT #1, CHAVES COUNTY, NEW MEXICO

Lease: REAL QUIET Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0708GW309

| MEASURED<br>DEPTH<br>feet                                                  | INCL<br>deg. | AZIMUTH<br>deg. | VERTICAL<br>SECTION<br>feet | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. feet | AZIMUTH<br>deg. | HORIZONTAL<br>COORDINATES<br>feet |         |
|----------------------------------------------------------------------------|--------------|-----------------|-----------------------------|----------------------------------------|---------------------------|-----------------------|-----------------|-----------------------------------|---------|
| 0.00                                                                       | 0.00         | 0.00            | 0.0                         | 0.00                                   | 0.00                      | 0.0                   | 0.0             | 0.00 N                            | 0.00 E  |
| -----                                                                      |              |                 |                             |                                        |                           |                       |                 |                                   |         |
| 0 TO 4891 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE |              |                 |                             |                                        |                           |                       |                 |                                   |         |
| ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO PATRIOT #1 R.K.B.        |              |                 |                             |                                        |                           |                       |                 |                                   |         |
| -----                                                                      |              |                 |                             |                                        |                           |                       |                 |                                   |         |
| 100.00                                                                     | 0.59         | 258.56          | -0.1                        | 0.59                                   | 100.00                    | 0.5                   | 258.6           | 0.10 S                            | 0.50 W  |
| 200.00                                                                     | 0.88         | 271.48          | -0.2                        | 0.33                                   | 199.99                    | 1.8                   | 264.1           | 0.18 S                            | 1.77 W  |
| 300.00                                                                     | 0.84         | 279.67          | -0.0                        | 0.13                                   | 299.98                    | 3.3                   | 269.3           | 0.04 S                            | 3.26 W  |
| 400.00                                                                     | 0.78         | 304.83          | 0.5                         | 0.36                                   | 399.97                    | 4.6                   | 275.9           | 0.47 N                            | 4.53 W  |
| 500.00                                                                     | 0.78         | 324.62          | 1.4                         | 0.27                                   | 499.96                    | 5.7                   | 284.4           | 1.41 N                            | 5.49 W  |
| 600.00                                                                     | 0.86         | 340.77          | 2.7                         | 0.24                                   | 599.95                    | 6.7                   | 293.6           | 2.67 N                            | 6.13 W  |
| 700.00                                                                     | 0.90         | 356.25          | 4.2                         | 0.24                                   | 699.94                    | 7.7                   | 303.0           | 4.17 N                            | 6.42 W  |
| 800.00                                                                     | 0.74         | 37.10           | 5.5                         | 0.59                                   | 799.93                    | 8.2                   | 311.9           | 5.47 N                            | 6.09 W  |
| 900.00                                                                     | 0.80         | 54.88           | 6.4                         | 0.25                                   | 899.92                    | 8.2                   | 321.3           | 6.39 N                            | 5.12 W  |
| 1000.00                                                                    | 0.95         | 56.09           | 7.3                         | 0.15                                   | 999.91                    | 8.2                   | 332.0           | 7.25 N                            | 3.86 W  |
| 1100.00                                                                    | 0.79         | 68.35           | 8.0                         | 0.25                                   | 1099.90                   | 8.4                   | 342.4           | 7.97 N                            | 2.53 W  |
| 1200.00                                                                    | 0.90         | 74.68           | 8.4                         | 0.14                                   | 1199.89                   | 8.5                   | 352.3           | 8.43 N                            | 1.13 W  |
| 1300.00                                                                    | 0.90         | 85.62           | 8.7                         | 0.17                                   | 1299.87                   | 8.7                   | 2.6             | 8.70 N                            | 0.40 E  |
| 1400.00                                                                    | 0.94         | 85.38           | 8.8                         | 0.04                                   | 1399.86                   | 9.0                   | 12.7            | 8.83 N                            | 2.00 E  |
| 1500.00                                                                    | 1.00         | 86.64           | 8.9                         | 0.07                                   | 1499.85                   | 9.7                   | 22.4            | 8.94 N                            | 3.68 E  |
| 1600.00                                                                    | 1.00         | 91.50           | 9.0                         | 0.08                                   | 1599.83                   | 10.5                  | 31.2            | 8.97 N                            | 5.43 E  |
| 1700.00                                                                    | 1.17         | 100.73          | 8.8                         | 0.24                                   | 1699.81                   | 11.4                  | 39.8            | 8.76 N                            | 7.30 E  |
| 1800.00                                                                    | 1.11         | 98.30           | 8.4                         | 0.08                                   | 1799.79                   | 12.5                  | 47.7            | 8.43 N                            | 9.26 E  |
| 1900.00                                                                    | 0.98         | 94.80           | 8.2                         | 0.15                                   | 1899.78                   | 13.8                  | 53.4            | 8.22 N                            | 11.07 E |
| 2000.00                                                                    | 0.72         | 75.44           | 8.3                         | 0.38                                   | 1999.77                   | 15.0                  | 56.4            | 8.30 N                            | 12.52 E |

# A Gyrodata Directional Survey

PARALLEL

Location: PATRIOT #1, CHAVES COUNTY, NEW MEXICO

Lease: REAL QUIET Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0708GW309

| MEASURED<br>DEPTH<br>feet | INCL<br>deg. | AZIMUTH<br>deg. | VERTICAL<br>SECTION<br>feet | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. AZIMUTH<br>feet deg. | HORIZONTAL<br>COORDINATES<br>feet |
|---------------------------|--------------|-----------------|-----------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 2100.00                   | 0.65         | 52.95           | 8.8                         | 0.27                                   | 2099.76                   | 16.2 57.0                             | 8.80 N 13.58 E                    |
| 2200.00                   | 0.54         | 43.00           | 9.5                         | 0.15                                   | 2199.75                   | 17.2 56.5                             | 9.49 N 14.35 E                    |
| 2300.00                   | 0.56         | 32.18           | 10.3                        | 0.11                                   | 2299.75                   | 18.1 55.5                             | 10.25 N 14.93 E                   |
| 2400.00                   | 0.42         | 1.11            | 11.0                        | 0.30                                   | 2399.75                   | 18.8 54.0                             | 11.03 N 15.20 E                   |
| 2500.00                   | 0.53         | 1.32            | 11.9                        | 0.11                                   | 2499.74                   | 19.3 52.1                             | 11.85 N 15.22 E                   |
| 2600.00                   | 0.84         | 10.80           | 13.0                        | 0.33                                   | 2599.74                   | 20.1 49.7                             | 13.03 N 15.37 E                   |
| 2700.00                   | 0.98         | 14.00           | 14.6                        | 0.15                                   | 2699.72                   | 21.4 47.1                             | 14.58 N 15.71 E                   |
| 2800.00                   | 0.93         | 16.54           | 16.2                        | 0.06                                   | 2799.71                   | 22.9 44.9                             | 16.19 N 16.15 E                   |
| 2900.00                   | 0.82         | 10.62           | 17.7                        | 0.14                                   | 2899.70                   | 24.2 43.0                             | 17.68 N 16.51 E                   |
| 3000.00                   | 0.87         | 12.58           | 19.1                        | 0.06                                   | 2999.69                   | 25.5 41.3                             | 19.13 N 16.81 E                   |
| 3100.00                   | 0.82         | 12.96           | 20.6                        | 0.05                                   | 3099.68                   | 26.8 39.8                             | 20.57 N 17.14 E                   |
| 3200.00                   | 1.02         | 11.36           | 22.1                        | 0.20                                   | 3199.66                   | 28.2 38.3                             | 22.14 N 17.47 E                   |
| 3300.00                   | 1.00         | 12.73           | 23.9                        | 0.03                                   | 3299.65                   | 29.8 36.8                             | 23.87 N 17.84 E                   |
| 3400.00                   | 0.97         | 14.48           | 25.5                        | 0.05                                   | 3399.63                   | 31.4 35.5                             | 25.54 N 18.25 E                   |
| 3500.00                   | 0.86         | 21.35           | 27.1                        | 0.15                                   | 3499.62                   | 32.9 34.7                             | 27.05 N 18.73 E                   |
| 3600.00                   | 0.76         | 33.91           | 28.3                        | 0.20                                   | 3599.61                   | 34.3 34.4                             | 28.30 N 19.37 E                   |
| 3700.00                   | 1.07         | 45.51           | 29.5                        | 0.36                                   | 3699.60                   | 35.9 34.7                             | 29.50 N 20.40 E                   |
| 3800.00                   | 1.30         | 50.96           | 30.9                        | 0.26                                   | 3799.58                   | 37.9 35.4                             | 30.87 N 21.95 E                   |
| 3900.00                   | 1.91         | 63.96           | 32.3                        | 0.71                                   | 3899.54                   | 40.4 37.0                             | 32.31 N 24.33 E                   |
| 4000.00                   | 2.33         | 69.36           | 33.8                        | 0.47                                   | 3999.47                   | 43.7 39.4                             | 33.76 N 27.73 E                   |
| 4100.00                   | 2.29         | 69.64           | 35.2                        | 0.05                                   | 4099.39                   | 47.2 41.9                             | 35.17 N 31.51 E                   |
| 4200.00                   | 1.99         | 65.18           | 36.6                        | 0.34                                   | 4199.32                   | 50.6 43.7                             | 36.59 N 34.95 E                   |
| 4300.00                   | 2.02         | 67.90           | 38.0                        | 0.10                                   | 4299.26                   | 53.8 45.1                             | 37.99 N 38.16 E                   |
| 4400.00                   | 2.18         | 66.30           | 39.4                        | 0.17                                   | 4399.19                   | 57.3 46.5                             | 39.41 N 41.54 E                   |

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Job Number: MD0708GW309

| MEASURED<br>DEPTH<br>feet | INCL<br>deg. | AZIMUTH<br>deg. | VERTICAL<br>SECTION<br>feet | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. AZIMUTH<br>feet deg. |      | HORIZONTAL<br>COORDINATES<br>feet |         |
|---------------------------|--------------|-----------------|-----------------------------|----------------------------------------|---------------------------|---------------------------------------|------|-----------------------------------|---------|
| 4500.00                   | 2.30         | 70.05           | 40.9                        | 0.19                                   | 4499.11                   | 60.9                                  | 47.9 | 40.86 N                           | 45.16 E |
| 4600.00                   | 2.25         | 69.18           | 42.2                        | 0.06                                   | 4599.03                   | 64.6                                  | 49.2 | 42.24 N                           | 48.88 E |
| 4700.00                   | 2.06         | 65.39           | 43.7                        | 0.24                                   | 4698.96                   | 68.2                                  | 50.2 | 43.69 N                           | 52.35 E |
| 4800.00                   | 2.08         | 62.86           | 45.3                        | 0.09                                   | 4798.90                   | 71.7                                  | 50.9 | 45.27 N                           | 55.60 E |
| 4891.00                   | 1.97         | 71.20           | 46.5                        | 0.34                                   | 4889.84                   | 74.8                                  | 51.5 | 46.52 N                           | 58.55 E |

Final Station Closure: Distance: 74.78 ft Az: 51.53 deg.

# **Parallel Petroleum Corp.**

**Chaves County**

**Real Quiet**

**Real Quiet 1525-4 Fed Com #1**

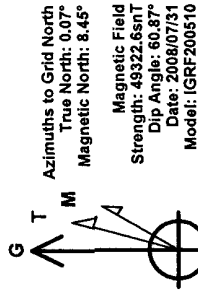
**OH**

**Survey: MWD #1**

## **Pathfinder X & Y Survey Report**

**12 August, 2008**

**PATHFINDER**  
**ENERGY SERVICES**



### EOW

Project: Chaves County  
Site: Real Quiet  
Well: Real Quiet 1525-4 Fed Com #1  
Wellbore: OH  
Plan: Plan #1 (Real Quiet 1525-4 Fed Com #1/OH)

|                                            |      |                                                     |            |                 |                   |      |
|--------------------------------------------|------|-----------------------------------------------------|------------|-----------------|-------------------|------|
| WELL DETAILS: Real Quiet 1525-4 Fed Com #1 |      |                                                     |            |                 |                   |      |
| Ground Elevation:: 3552.00                 |      | RKB Elevation: WELL @ 3570.00ft (Patrol #1 18' RKB) |            |                 |                   |      |
| Rig Name: Patrol #1 18' RKB                |      |                                                     |            |                 |                   |      |
| +N/S                                       | +E/W | Northing                                            | Eastings   | Latitude        | Longitude         | Slot |
| 0.00                                       | 0.00 | 745945.500                                          | 482153.600 | 33° 2' 59.209 N | 104° 27' 24.654 W |      |

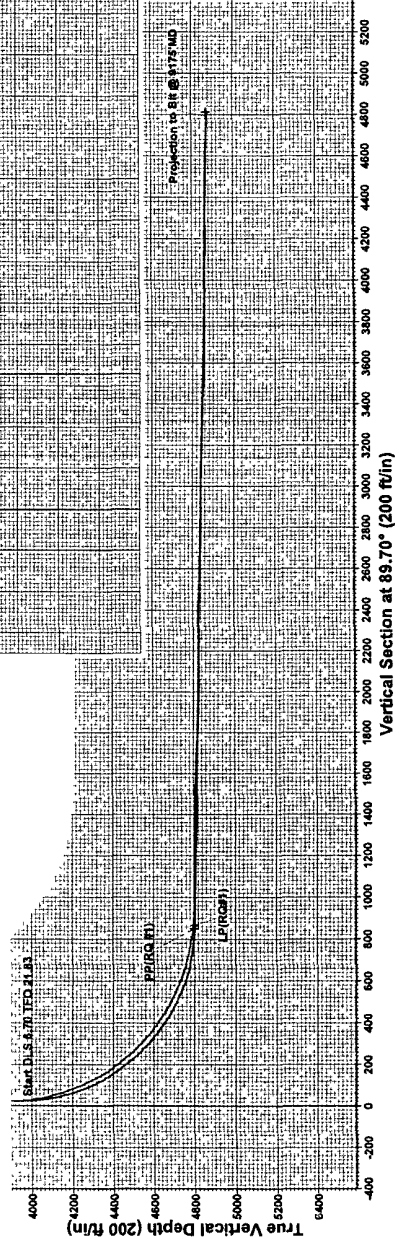
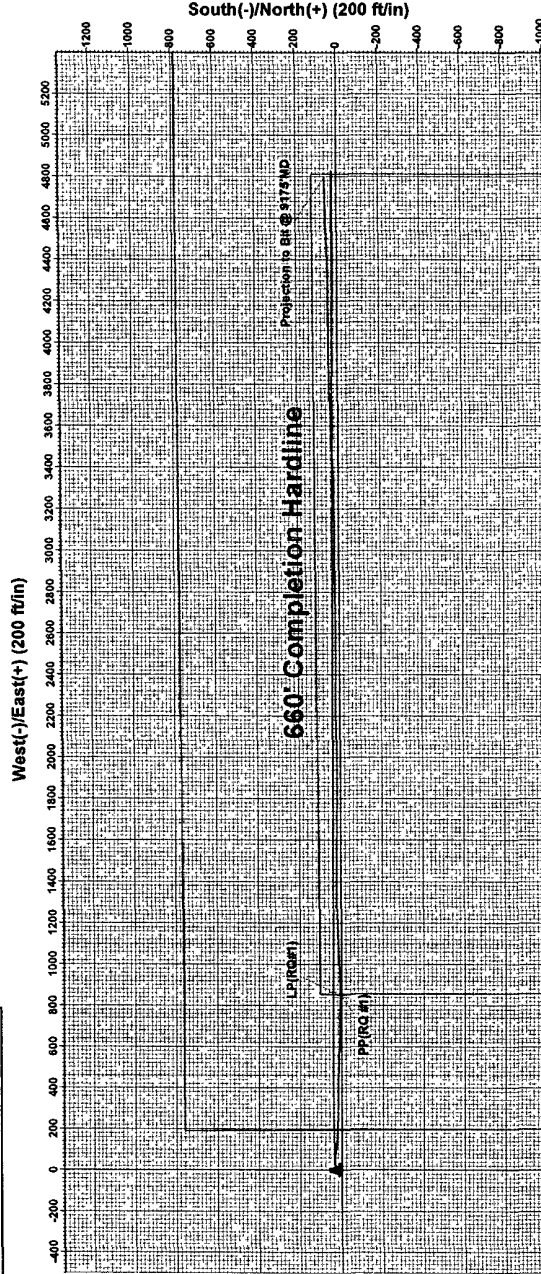
SECTION DETAILS

| Sec | MD      | Inc   | Azi   | TVD     | +N/S  | +E/W    | DLeg | TFace   | VSec    | Target  |
|-----|---------|-------|-------|---------|-------|---------|------|---------|---------|---------|
| 1   | 3980.00 | 2.24  | 68.44 | 3979.46 | 33.77 | 25.99   | 6.70 | 21.83   | 27.17   |         |
| 2   | 5277.19 | 89.01 | 30.24 | 4803.20 | 41.74 | 856.72  | 2.00 | -135.19 | 856.93  |         |
| 3   | 5277.51 | 89.01 | 30.24 | 4803.21 | 41.74 | 857.06  | 2.00 | -135.19 | 857.25  |         |
| 4   | 5223.10 | 89.01 | 30.24 | 4871.70 | 25.50 | 4812.00 | 0.00 | 0.00    | 4812.07 | PBHL OH |

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

| Name           | TVD     | +N/S  | +E/W    | Northing   | Eastings   | Shape |
|----------------|---------|-------|---------|------------|------------|-------|
| LP(RQ) #803.20 | 4803.20 | 41.74 | 856.72  | 745667.640 | 463020.320 | Point |
| PP(RQ) #803.20 | 4803.20 | 41.74 | 856.72  | 745667.640 | 463020.320 | Point |
| PBHL OH #71.70 | 4871.70 | 25.50 | 4812.00 | 745671.400 | 466545.600 | Point |

PROJECT DETAILS: Chaves County  
Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level  
Local North: Grid



**Pathfinder Energy Services**  
Pathfinder X & Y Survey Report



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Parallel Petroleum Corp.     | <b>Local Co-ordinate Reference:</b> | Well Real Quiet 1525-4 Fed Com #1     |
| <b>Project:</b>  | Chaves County                | <b>TVD Reference:</b>               | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Site:</b>     | Real Quiet                   | <b>MD Reference:</b>                | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Well:</b>     | Real Quiet 1525-4 Fed Com #1 | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                           | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                           | <b>Database:</b>                    | EDM 2003.16 Single User Db            |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | Chaves County, New Mexico            |               |                |
| Map System: | US State Plane 1927 (Exact solution) | System Datum: | Mean Sea Level |
| Geo Datum:  | NAD 1927 (NADCON CONUS)              |               |                |
| Map Zone:   | New Mexico East 3001                 |               |                |

|                       |         |              |                |                   |                   |
|-----------------------|---------|--------------|----------------|-------------------|-------------------|
| Site                  |         | Real Quiet   |                |                   |                   |
| Site Position:        |         | Northing:    | 745,645.900 ft | Latitude:         | 33° 2' 59.209 N   |
| From:                 | Map     | Easting:     | 462,153.600 ft | Longitude:        | 104° 27' 24.654 W |
| Position Uncertainty: | 0.00 ft | Slot Radius: | "              | Grid Convergence: | -0.07 °           |

|                             |                              |         |                            |                |                      |                   |
|-----------------------------|------------------------------|---------|----------------------------|----------------|----------------------|-------------------|
| <b>Well</b>                 | Real Quiet 1525-4 Fed Com #1 |         |                            |                |                      |                   |
| <b>Well Position</b>        | <b>+N/-S</b>                 | 0.00 ft | <b>Northing:</b>           | 745,645.900 ft | <b>Latitude:</b>     | 33° 2' 59.209 N   |
|                             | <b>+E/-W</b>                 | 0.00 ft | <b>Easting:</b>            | 462,153.600 ft | <b>Longitude:</b>    | 104° 27' 24.654 W |
| <b>Position Uncertainty</b> |                              | 0.00 ft | <b>Wellhead Elevation:</b> | ft             | <b>Ground Level:</b> | 3,552.00 ft       |

|                 |    |
|-----------------|----|
| <b>Wellbore</b> | OH |
|-----------------|----|

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|-----------|------------|-------------|-----------------|---------------|---------------------|
|           | IGRF200510 | 2008/07/31  | 8.39            | 60.87         | 49,323              |

|               |    |
|---------------|----|
| <b>Design</b> | OH |
|---------------|----|

|                   |                  |        |        |               |      |
|-------------------|------------------|--------|--------|---------------|------|
| Audit Notes:      |                  |        |        |               |      |
| Version:          | 1.0              | Phase: | ACTUAL | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) | +N/-S  | +E/-W  | Direction     |      |
|                   | (ft)             | (ft)   | (ft)   | (°)           |      |
|                   | 0.00             | 0.00   | 0.00   | 89.70         |      |

**Pathfinder Energy Services**  
Pathfinder X & Y Survey Report



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Parallel Petroleum Corp.     | <b>Local Co-ordinate Reference:</b> | Well Real Quiet 1525-4 Fed Com #1     |
| <b>Project:</b>  | Chaves County                | <b>TVD Reference:</b>               | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Site:</b>     | Real Quiet                   | <b>MD Reference:</b>                | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Well:</b>     | Real Quiet 1525-4 Fed Com #1 | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                           | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                           | <b>Database:</b>                    | EDM 2003.16 Single User Db            |

|                       |                |                          |                  |                    |  |
|-----------------------|----------------|--------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>    | 2008/08/12               |                  |                    |  |
| <b>From (ft)</b>      | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 100.00                | 3,900.00       | Gyro (OH)                | MWD              | MWD - Standard     |  |
| 3,925.00              | 9,175.00       | MWD #1 (OH)              | MWD              | MWD - Standard     |  |

| Survey     |            |            |             |               |             |             |                |                   |                  |                 |  |
|------------|------------|------------|-------------|---------------|-------------|-------------|----------------|-------------------|------------------|-----------------|--|
| MD<br>(ft) | Inc<br>(°) | Azi<br>(°) | TVD<br>(ft) | TVDSS<br>(ft) | N/S<br>(ft) | E/W<br>(ft) | V. Sec<br>(ft) | DLeg<br>(°/100ft) | Northing<br>(ft) | Easting<br>(ft) |  |
| 3,900.00   | 1.91       | 63.96      | 3,899.54    | 329.54        | 32.31       | 24.34       | 24.51          | 0.00              | 745,678.21       | 462,177.94      |  |
| 3,925.00   | 2.46       | 69.43      | 3,924.52    | 354.52        | 32.68       | 25.22       | 25.39          | 2.35              | 745,678.58       | 462,178.82      |  |
| 3,957.00   | 4.48       | 72.96      | 3,956.46    | 386.46        | 33.29       | 27.05       | 27.23          | 6.34              | 745,679.19       | 462,180.65      |  |
| 3,989.00   | 7.12       | 79.49      | 3,988.29    | 418.29        | 34.02       | 30.20       | 30.38          | 8.49              | 745,679.92       | 462,183.80      |  |
| 4,021.00   | 9.23       | 82.97      | 4,019.96    | 449.96        | 34.69       | 34.70       | 34.88          | 6.77              | 745,680.59       | 462,188.30      |  |
| 4,052.00   | 10.90      | 86.21      | 4,050.49    | 480.49        | 35.19       | 40.09       | 40.27          | 5.69              | 745,681.09       | 462,193.69      |  |
| 4,084.00   | 13.28      | 89.35      | 4,081.77    | 511.77        | 35.43       | 46.78       | 46.97          | 7.71              | 745,681.33       | 462,200.38      |  |
| 4,116.00   | 16.09      | 92.98      | 4,112.73    | 542.73        | 35.24       | 54.89       | 55.07          | 9.24              | 745,681.14       | 462,208.49      |  |
| 4,148.00   | 18.38      | 97.06      | 4,143.29    | 573.29        | 34.39       | 64.33       | 64.51          | 8.09              | 745,680.29       | 462,217.93      |  |
| 4,180.00   | 19.52      | 98.24      | 4,173.55    | 603.55        | 33.01       | 74.63       | 74.80          | 3.76              | 745,678.91       | 462,228.23      |  |
| 4,211.00   | 21.19      | 98.01      | 4,202.62    | 632.62        | 31.48       | 85.30       | 85.46          | 5.39              | 745,677.38       | 462,238.90      |  |
| 4,243.00   | 22.51      | 97.59      | 4,232.32    | 662.32        | 29.87       | 97.10       | 97.25          | 4.15              | 745,675.77       | 462,250.70      |  |
| 4,275.00   | 23.92      | 97.02      | 4,261.73    | 691.73        | 28.27       | 109.61      | 109.76         | 4.46              | 745,674.17       | 462,263.21      |  |
| 4,307.00   | 25.50      | 95.34      | 4,290.80    | 720.80        | 26.83       | 122.91      | 123.05         | 5.40              | 745,672.73       | 462,276.51      |  |
| 4,338.00   | 27.26      | 94.75      | 4,318.57    | 748.57        | 25.62       | 136.63      | 136.76         | 5.74              | 745,671.52       | 462,290.23      |  |
| 4,370.00   | 29.28      | 94.03      | 4,346.75    | 776.75        | 24.47       | 151.74      | 151.87         | 6.40              | 745,670.37       | 462,305.34      |  |
| 4,402.00   | 31.83      | 93.26      | 4,374.30    | 804.30        | 23.44       | 167.97      | 168.09         | 8.06              | 745,669.34       | 462,321.57      |  |
| 4,434.00   | 34.56      | 93.01      | 4,401.08    | 831.08        | 22.48       | 185.46      | 185.58         | 8.54              | 745,668.38       | 462,339.06      |  |
| 4,465.00   | 36.49      | 92.49      | 4,426.31    | 856.31        | 21.62       | 203.46      | 203.57         | 6.30              | 745,667.52       | 462,357.06      |  |
| 4,497.00   | 38.08      | 92.19      | 4,451.77    | 881.77        | 20.83       | 222.82      | 222.93         | 5.00              | 745,666.73       | 462,376.42      |  |
| 4,529.00   | 40.10      | 91.97      | 4,476.60    | 906.60        | 20.09       | 242.99      | 243.09         | 6.33              | 745,665.99       | 462,396.59      |  |

# Pathfinder Energy Services

## Pathfinder X & Y Survey Report



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Parallel Petroleum Corp.     | <b>Local Co-ordinate Reference:</b> | Well Real Quiet 1525-4 Fed Com #1     |
| <b>Project:</b>  | Chaves County                | <b>TVD Reference:</b>               | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Site:</b>     | Real Quiet                   | <b>MD Reference:</b>                | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Well:</b>     | Real Quiet 1525-4 Fed Com #1 | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                           | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                           | <b>Database:</b>                    | EDM 2003.16 Single User Db            |

| Survey     |            |            |             |               |             |             |                |                   |                  |                 |  |
|------------|------------|------------|-------------|---------------|-------------|-------------|----------------|-------------------|------------------|-----------------|--|
| MD<br>(ft) | Inc<br>(°) | Azi<br>(°) | TVD<br>(ft) | TVDSS<br>(ft) | N/S<br>(ft) | E/W<br>(ft) | V. Sec<br>(ft) | DLeg<br>(°/100ft) | Northing<br>(ft) | Easting<br>(ft) |  |
| 4,561.00   | 42.56      | 91.74      | 4,500.63    | 930.63        | 19.41       | 264.11      | 264.20         | 7.70              | 745,665.31       | 462,417.71      |  |
| 4,593.00   | 44.93      | 91.24      | 4,523.75    | 953.75        | 18.84       | 286.22      | 286.32         | 7.48              | 745,664.74       | 462,439.82      |  |
| 4,625.00   | 47.04      | 90.66      | 4,545.98    | 975.98        | 18.46       | 309.23      | 309.32         | 6.72              | 745,664.36       | 462,462.83      |  |
| 4,656.00   | 48.80      | 90.18      | 4,566.75    | 996.75        | 18.29       | 332.24      | 332.33         | 5.79              | 745,664.19       | 462,485.84      |  |
| 4,688.00   | 50.47      | 90.12      | 4,587.48    | 1,017.48      | 18.23       | 356.62      | 356.71         | 5.22              | 745,664.13       | 462,510.22      |  |
| 4,720.00   | 52.76      | 90.39      | 4,607.35    | 1,037.35      | 18.12       | 381.70      | 381.79         | 7.19              | 745,664.02       | 462,535.30      |  |
| 4,752.00   | 54.87      | 90.92      | 4,626.24    | 1,056.24      | 17.82       | 407.53      | 407.61         | 6.73              | 745,663.72       | 462,561.13      |  |
| 4,784.00   | 56.63      | 92.07      | 4,644.25    | 1,074.25      | 17.13       | 433.97      | 434.05         | 6.25              | 745,663.03       | 462,587.57      |  |
| 4,815.00   | 58.83      | 92.32      | 4,660.80    | 1,090.80      | 16.12       | 460.16      | 460.23         | 7.13              | 745,662.02       | 462,613.76      |  |
| 4,847.00   | 60.94      | 92.18      | 4,676.85    | 1,106.85      | 15.03       | 487.81      | 487.89         | 6.60              | 745,660.93       | 462,641.41      |  |
| 4,879.00   | 63.05      | 92.01      | 4,691.88    | 1,121.88      | 14.00       | 516.05      | 516.11         | 6.61              | 745,659.90       | 462,669.65      |  |
| 4,911.00   | 64.89      | 92.03      | 4,705.92    | 1,135.92      | 12.99       | 544.78      | 544.84         | 5.75              | 745,658.89       | 462,698.38      |  |
| 4,943.00   | 66.65      | 91.55      | 4,719.05    | 1,149.05      | 12.08       | 573.95      | 574.00         | 5.67              | 745,657.98       | 462,727.55      |  |
| 4,974.00   | 68.59      | 91.20      | 4,730.85    | 1,160.85      | 11.39       | 602.60      | 602.65         | 6.34              | 745,657.29       | 462,756.20      |  |
| 5,006.00   | 70.35      | 91.17      | 4,742.08    | 1,172.08      | 10.77       | 632.56      | 632.61         | 5.50              | 745,656.67       | 462,786.16      |  |
| 5,038.00   | 72.11      | 91.05      | 4,752.37    | 1,182.37      | 10.18       | 662.85      | 662.90         | 5.51              | 745,656.08       | 462,816.45      |  |
| 5,070.00   | 73.86      | 91.30      | 4,761.74    | 1,191.74      | 9.56        | 693.45      | 693.49         | 5.52              | 745,655.46       | 462,847.05      |  |
| 5,102.00   | 75.18      | 90.85      | 4,770.28    | 1,200.28      | 8.98        | 724.28      | 724.32         | 4.34              | 745,654.88       | 462,877.88      |  |
| 5,133.00   | 77.21      | 91.15      | 4,777.67    | 1,207.67      | 8.45        | 754.38      | 754.41         | 6.62              | 745,654.35       | 462,907.98      |  |
| 5,165.00   | 78.52      | 91.22      | 4,784.40    | 1,214.40      | 7.81        | 785.65      | 785.68         | 4.10              | 745,653.71       | 462,939.25      |  |
| 5,197.00   | 81.16      | 90.25      | 4,790.04    | 1,220.04      | 7.40        | 817.15      | 817.17         | 8.77              | 745,653.30       | 462,970.75      |  |
| 5,229.00   | 83.27      | 89.52      | 4,794.38    | 1,224.38      | 7.47        | 848.85      | 848.88         | 6.97              | 745,653.37       | 463,002.45      |  |
| 5,261.00   | 85.65      | 89.05      | 4,797.47    | 1,227.47      | 7.86        | 880.70      | 880.72         | 7.58              | 745,653.76       | 463,034.30      |  |
| 5,323.00   | 88.72      | 87.89      | 4,800.51    | 1,230.51      | 9.52        | 942.59      | 942.63         | 5.29              | 745,655.42       | 463,096.19      |  |
| 5,387.00   | 89.87      | 87.15      | 4,801.30    | 1,231.30      | 12.29       | 1,006.52    | 1,006.57       | 2.14              | 745,658.19       | 463,160.12      |  |
| 5,480.00   | 89.87      | 87.75      | 4,801.51    | 1,231.51      | 16.43       | 1,099.43    | 1,099.50       | 0.65              | 745,662.33       | 463,253.03      |  |
| 5,572.00   | 88.37      | 88.12      | 4,802.92    | 1,232.92      | 19.74       | 1,191.36    | 1,191.44       | 1.68              | 745,665.64       | 463,344.96      |  |

**Pathfinder Energy Services**  
Pathfinder X & Y Survey Report



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Parallel Petroleum Corp.     | <b>Local Co-ordinate Reference:</b> | Well Real Quiet 1525-4 Fed Com #1     |
| <b>Project:</b>  | Chaves County                | <b>TVD Reference:</b>               | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Site:</b>     | Real Quiet                   | <b>MD Reference:</b>                | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Well:</b>     | Real Quiet 1525-4 Fed Com #1 | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                           | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                           | <b>Database:</b>                    | EDM 2003.16 Single User Db            |

| Survey     |            |            |             |               |             |             |                |                   |                  |                 |  |
|------------|------------|------------|-------------|---------------|-------------|-------------|----------------|-------------------|------------------|-----------------|--|
| MD<br>(ft) | Inc<br>(°) | Azi<br>(°) | TVD<br>(ft) | TVDSS<br>(ft) | N/S<br>(ft) | E/W<br>(ft) | V. Sec<br>(ft) | DLeg<br>(°/100ft) | Northing<br>(ft) | Easting<br>(ft) |  |
| 5,665.00   | 89.43      | 89.19      | 4,804.71    | 1,234.71      | 21.92       | 1,284.31    | 1,284.41       | 1.62              | 745,667.82       | 463,437.91      |  |
| 5,758.00   | 88.55      | 90.31      | 4,806.35    | 1,236.35      | 22.33       | 1,377.29    | 1,377.39       | 1.53              | 745,668.23       | 463,530.89      |  |
| 5,850.00   | 90.22      | 90.91      | 4,807.34    | 1,237.34      | 21.35       | 1,469.28    | 1,469.37       | 1.93              | 745,667.25       | 463,622.88      |  |
| 5,943.00   | 87.41      | 90.07      | 4,809.26    | 1,239.26      | 20.55       | 1,562.25    | 1,562.33       | 3.15              | 745,666.45       | 463,715.85      |  |
| 6,036.00   | 87.32      | 90.64      | 4,813.54    | 1,243.54      | 19.98       | 1,655.15    | 1,655.23       | 0.62              | 745,665.88       | 463,808.75      |  |
| 6,128.00   | 87.49      | 90.57      | 4,817.70    | 1,247.70      | 19.01       | 1,747.05    | 1,747.12       | 0.20              | 745,664.91       | 463,900.65      |  |
| 6,221.00   | 88.02      | 90.38      | 4,821.34    | 1,251.34      | 18.24       | 1,839.97    | 1,840.04       | 0.61              | 745,664.14       | 463,993.57      |  |
| 6,314.00   | 88.64      | 90.07      | 4,824.05    | 1,254.05      | 17.87       | 1,932.93    | 1,933.00       | 0.75              | 745,663.77       | 464,086.53      |  |
| 6,409.00   | 88.99      | 89.61      | 4,826.02    | 1,256.02      | 18.14       | 2,027.91    | 2,027.98       | 0.61              | 745,664.04       | 464,181.51      |  |
| 6,504.00   | 89.78      | 89.02      | 4,827.04    | 1,257.04      | 19.27       | 2,122.90    | 2,122.97       | 1.04              | 745,665.17       | 464,276.50      |  |
| 6,600.00   | 91.19      | 89.42      | 4,826.23    | 1,256.23      | 20.58       | 2,218.88    | 2,218.96       | 1.53              | 745,666.48       | 464,372.48      |  |
| 6,695.00   | 88.64      | 90.54      | 4,826.37    | 1,256.37      | 20.61       | 2,313.87    | 2,313.95       | 2.93              | 745,666.51       | 464,467.47      |  |
| 6,790.00   | 88.90      | 90.51      | 4,828.41    | 1,258.41      | 19.74       | 2,408.85    | 2,408.92       | 0.28              | 745,665.64       | 464,562.45      |  |
| 6,885.00   | 88.46      | 90.27      | 4,830.59    | 1,260.59      | 19.10       | 2,503.82    | 2,503.88       | 0.53              | 745,665.00       | 464,657.42      |  |
| 7,013.00   | 88.11      | 89.35      | 4,834.43    | 1,264.43      | 19.52       | 2,631.76    | 2,631.83       | 0.77              | 745,665.42       | 464,785.36      |  |
| 7,076.00   | 87.48      | 88.68      | 4,836.85    | 1,266.85      | 20.60       | 2,694.70    | 2,694.77       | 1.46              | 745,666.50       | 464,848.30      |  |
| 7,172.00   | 89.34      | 89.57      | 4,839.51    | 1,269.51      | 22.07       | 2,790.65    | 2,790.73       | 2.15              | 745,667.97       | 464,944.25      |  |
| 7,267.00   | 89.87      | 90.33      | 4,840.17    | 1,270.17      | 22.15       | 2,885.65    | 2,885.72       | 0.98              | 745,668.05       | 465,039.25      |  |
| 7,362.00   | 89.69      | 89.94      | 4,840.53    | 1,270.53      | 21.93       | 2,980.64    | 2,980.72       | 0.45              | 745,667.83       | 465,134.24      |  |
| 7,457.00   | 90.31      | 89.64      | 4,840.53    | 1,270.53      | 22.27       | 3,075.64    | 3,075.72       | 0.73              | 745,668.17       | 465,229.24      |  |
| 7,553.00   | 88.29      | 88.18      | 4,841.71    | 1,271.71      | 24.10       | 3,171.61    | 3,171.69       | 2.60              | 745,670.00       | 465,325.21      |  |
| 7,648.00   | 88.64      | 88.41      | 4,844.25    | 1,274.25      | 26.93       | 3,266.54    | 3,266.63       | 0.44              | 745,672.83       | 465,420.14      |  |
| 7,744.00   | 88.90      | 88.78      | 4,846.31    | 1,276.31      | 29.28       | 3,362.48    | 3,362.59       | 0.47              | 745,675.18       | 465,516.08      |  |
| 7,839.00   | 87.49      | 87.93      | 4,849.30    | 1,279.30      | 32.00       | 3,457.39    | 3,457.51       | 1.73              | 745,677.90       | 465,610.99      |  |
| 7,934.00   | 89.60      | 88.48      | 4,851.72    | 1,281.72      | 34.98       | 3,552.31    | 3,552.45       | 2.30              | 745,680.88       | 465,705.91      |  |
| 8,029.00   | 88.81      | 88.46      | 4,853.03    | 1,283.03      | 37.52       | 3,647.27    | 3,647.41       | 0.83              | 745,683.42       | 465,800.87      |  |
| 8,125.00   | 89.08      | 88.32      | 4,854.80    | 1,284.80      | 40.21       | 3,743.21    | 3,743.37       | 0.32              | 745,686.11       | 465,896.81      |  |

**Pathfinder Energy Services**  
Pathfinder X & Y Survey Report



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Parallel Petroleum Corp.     | <b>Local Co-ordinate Reference:</b> | Well Real Quiet 1525-4 Fed Com #1     |
| <b>Project:</b>  | Chaves County                | <b>TVD Reference:</b>               | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Site:</b>     | Real Quiet                   | <b>MD Reference:</b>                | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Well:</b>     | Real Quiet 1525-4 Fed Com #1 | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                           | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                           | <b>Database:</b>                    | EDM 2003.16 Single User Db            |

| Survey     |            |            |             |               |             |             |                |                   |                  |                 |
|------------|------------|------------|-------------|---------------|-------------|-------------|----------------|-------------------|------------------|-----------------|
| MD<br>(ft) | Inc<br>(°) | Azi<br>(°) | TVD<br>(ft) | TVDSS<br>(ft) | N/S<br>(ft) | E/W<br>(ft) | V. Sec<br>(ft) | DLeg<br>(°/100ft) | Northing<br>(ft) | Easting<br>(ft) |
| 8,220.00   | 89.78      | 89.39      | 4,855.75    | 1,285.75      | 42.11       | 3,838.19    | 3,838.36       | 1.35              | 745,688.01       | 465,991.79      |
| 8,315.00   | 87.41      | 88.91      | 4,858.08    | 1,288.08      | 43.52       | 3,933.14    | 3,933.32       | 2.55              | 745,689.42       | 466,086.74      |
| 8,411.00   | 90.31      | 90.22      | 4,859.99    | 1,289.99      | 44.25       | 4,029.11    | 4,029.28       | 3.31              | 745,690.15       | 466,182.71      |
| 8,506.00   | 86.35      | 89.39      | 4,862.75    | 1,292.75      | 44.57       | 4,124.05    | 4,124.22       | 4.26              | 745,690.47       | 466,277.65      |
| 8,601.00   | 91.89      | 89.02      | 4,864.21    | 1,294.21      | 45.89       | 4,218.99    | 4,219.17       | 5.84              | 745,691.79       | 466,372.59      |
| 8,697.00   | 89.78      | 89.43      | 4,862.81    | 1,292.81      | 47.19       | 4,314.96    | 4,315.15       | 2.24              | 745,693.09       | 466,468.56      |
| 8,792.00   | 87.85      | 88.69      | 4,864.78    | 1,294.78      | 48.74       | 4,409.93    | 4,410.12       | 2.18              | 745,694.64       | 466,563.53      |
| 8,887.00   | 90.04      | 89.09      | 4,866.53    | 1,296.53      | 50.58       | 4,504.89    | 4,505.09       | 2.34              | 745,696.48       | 466,658.49      |
| 8,982.00   | 88.90      | 88.40      | 4,867.41    | 1,297.41      | 52.66       | 4,599.86    | 4,600.07       | 1.40              | 745,698.56       | 466,753.46      |
| 9,077.00   | 88.29      | 88.06      | 4,869.73    | 1,299.73      | 55.60       | 4,694.78    | 4,695.01       | 0.74              | 745,701.50       | 466,848.38      |
| 9,102.00   | 88.29      | 88.33      | 4,870.48    | 1,300.48      | 56.38       | 4,719.76    | 4,719.99       | 1.08              | 745,702.28       | 466,873.36      |
| 9,175.00   | 88.29      | 88.33      | 4,872.66    | 1,302.66      | 58.51       | 4,792.70    | 4,792.94       | 0.00              | 745,704.41       | 466,946.30      |

Projection to Bit @ 9175'MD

**Pathfinder Energy Services**  
Pathfinder X & Y Survey Report



|                  |                              |                                     |                                       |
|------------------|------------------------------|-------------------------------------|---------------------------------------|
| <b>Company:</b>  | Parallel Petroleum Corp.     | <b>Local Co-ordinate Reference:</b> | Well Real Quiet 1525-4 Fed Com #1     |
| <b>Project:</b>  | Chaves County                | <b>TVD Reference:</b>               | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Site:</b>     | Real Quiet                   | <b>MD Reference:</b>                | WELL @ 3570.00ft (Patriot #1 18' RKB) |
| <b>Well:</b>     | Real Quiet 1525-4 Fed Com #1 | <b>North Reference:</b>             | Grid                                  |
| <b>Wellbore:</b> | OH                           | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Design:</b>   | OH                           | <b>Database:</b>                    | EDM 2003.16 Single User Db            |

| Targets                                                                      |                 |           |          |          |       |          |             |             |                                   |
|------------------------------------------------------------------------------|-----------------|-----------|----------|----------|-------|----------|-------------|-------------|-----------------------------------|
| Target Name                                                                  | hit/miss target | Dip Angle | Dip Dir. | TVD      | +N/-S | +E/-W    | Northing    | Easting     |                                   |
| - Shape                                                                      |                 | (°)       | (°)      | (ft)     | (ft)  | (ft)     | (ft)        | (ft)        | Latitude Longitude                |
| PP(RQ #1)                                                                    |                 | 0.00      | 0.00     | 4,803.20 | 4.50  | 850.00   | 745,650.400 | 463,003.600 | 33° 2' 59.263 N 104° 27' 14.668 W |
| - survey misses by 9.13ft at 5230.96ft MD (4794.61 TVD, 7.48 N, 850.80 E)    |                 |           |          |          |       |          |             |             |                                   |
| - Point                                                                      |                 |           |          |          |       |          |             |             |                                   |
| LP(RQ#1)                                                                     |                 | 0.00      | 360.00   | 4,803.20 | 41.74 | 866.72   | 745,687.640 | 463,020.320 | 33° 2' 59.632 N 104° 27' 14.472 W |
| - survey misses by 34.76ft at 5248.06ft MD (4796.38 TVD, 7.67 N, 867.81 E)   |                 |           |          |          |       |          |             |             |                                   |
| - Point                                                                      |                 |           |          |          |       |          |             |             |                                   |
| PBHL OH                                                                      |                 | 0.00      | 360.00   | 4,871.70 | 25.50 | 4,812.00 | 745,671.400 | 466,965.600 | 33° 2' 59.514 N 104° 26' 28.119 W |
| - survey misses by 38.25ft at 9175.00ft MD (4872.66 TVD, 58.51 N, 4792.70 E) |                 |           |          |          |       |          |             |             |                                   |
| - Point                                                                      |                 |           |          |          |       |          |             |             |                                   |

| Survey Annotations |                |                   |          |                              |
|--------------------|----------------|-------------------|----------|------------------------------|
| Measured Depth     | Vertical Depth | Local Coordinates |          | Comment                      |
| (ft)               | (ft)           | +N/-S             | +E/-W    |                              |
| (ft)               | (ft)           | (ft)              | (ft)     |                              |
| 9,175.00           | 4,872.66       | 58.51             | 4,792.70 | Projection to Bit @ 9175' MD |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|