

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
1301 W. Grand Ave., 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

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

|                                                                                                     |
|-----------------------------------------------------------------------------------------------------|
| WELL API NO.<br>30-005-63839                                                                        |
| 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.                                                                        |

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

|                                                                                                                                                                                                                           |                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| 1. Type of Well:<br>Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other                                                                                                                  | 7. Lease Name or Unit Agreement Name:<br>ALYSHERA 1426-34 |
| 2. Name of Operator<br>PARALLEL PETROLEUM CORPORATION                                                                                                                                                                     | 8. Well Number<br>1                                       |
| 3. Address of Operator<br>1004 N. BIG SPRING STREET, SUITE 400, MIDLAND, TEXAS 79701                                                                                                                                      | 9. OGRID Number<br>230387                                 |
| 4. Well Location<br>Unit Letter <u>D</u> : <u>300'</u> feet from the <u>WEST</u> line and <u>760'</u> feet from the <u>NORTH</u> line<br>Section <u>34</u> Township <u>14S</u> Range <u>26E</u> NMPM County <u>CHAVEZ</u> | 10. Pool name or Wildcat<br>WILDCAT; WOLF CAMP            |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>3414'                                                                                                                                                               |                                                           |

|                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|
| Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>                                 |
| Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____ |
| Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____                                  |

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data  
**NOTICE OF INTENTION TO:**

|                                                |                                              |
|------------------------------------------------|----------------------------------------------|
| PERFORM REMEDIAL WORK <input type="checkbox"/> | PLUG AND ABANDON <input type="checkbox"/>    |
| TEMPORARILY ABANDON <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>        |
| PULL OR ALTER CASING <input type="checkbox"/>  | MULTIPLE COMPLETION <input type="checkbox"/> |
| OTHER: <input type="checkbox"/>                |                                              |

|                                                           |                                               |
|-----------------------------------------------------------|-----------------------------------------------|
| <b>SUBSEQUENT REPORT OF:</b>                              |                                               |
| REMEDIAL WORK <input type="checkbox"/>                    | ALTERING CASING <input type="checkbox"/>      |
| COMMENCE DRILLING OPNS. <input type="checkbox"/>          | PLUG AND ABANDONMENT <input type="checkbox"/> |
| CASING TEST AND CEMENT JOB <input type="checkbox"/>       |                                               |
| OTHER: SPUD & RUN CSG <input checked="" type="checkbox"/> |                                               |

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

09-01-06 - RUN 5.5" CSG IN 7.875" HOLE, 17#, SET @ 9389', CMT W/583 SX 50/50/10 'C' + 2% FL52A+.2%SMS  
11.6 PPG, 2.43 YIELD.  
TAIL W/800 SX H+20#CAC03+.6%BA10A+.4%CD32+1%FL62+.1%ASA301+.4%SMS  
15.6 PPG, 1.42 YIELD, 20 STANDARD & 100 TURBOLIZER CENTRALIZERS  
TOC: 1362' BY TEMP SURVEY (ATTACHED)  
WOC: 12.5 HRS, TEST CSG TO 500 PSI FOR 30 MIN.

ATTACHED: ROTARY WIRELINE TEMPERATURE SURVEY; GYRODATA-GYRO SURVEY; SCHLUMBERGER MWD & OPEN HOLE LOG

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☒ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

|                                          |                                      |                                            |
|------------------------------------------|--------------------------------------|--------------------------------------------|
| SIGNATURE <u>Kyle McCormick</u>          | TITLE <u>SR. PROD &amp; REG TECH</u> | DATE <u>09-25-2006</u>                     |
| Type or print name <u>Kyle McCormick</u> |                                      | E-mail address: <u>kmccormick@plll.com</u> |
|                                          |                                      | Telephone No. <u>432-685-6563</u>          |

|                                                       |                                     |                     |
|-------------------------------------------------------|-------------------------------------|---------------------|
| For State Use Only<br>APPROVED BY <u>Jim W. Green</u> | TITLE <u>District II Supervisor</u> | DATE <u>9/29/06</u> |
| Conditions of Approval, if any:                       |                                     |                     |

## SLB MWD Survey Survey Report

|                                                                              |                                                               |
|------------------------------------------------------------------------------|---------------------------------------------------------------|
| Report Date: September 5, 2008                                               | Survey / DLS Computation Method: Minimum Curvature / Lubinski |
| Client: Parallel Petroleum                                                   | Vertical Section Azimuth: 89.740°                             |
| Field: Chaves County, New Mexico                                             | Vertical Section Origin: N 0.000 ft, E 0.000 ft               |
| Structure / Slot: Parallel, Sec, 34 T14S R26E / Aly Sheba 1426-34 D#1        | TVD Reference Datum: KB                                       |
| Well: Aly Sheba 1426-34 D#1                                                  | TVD Reference Elevation: 3414.0 ft relative to MSL            |
| Borehole: Aly Sheba 1426-34 D #1                                             | Sea Bed / Ground Level Elevation: 3414.000 ft relative to MSL |
| UW/API#:                                                                     | Magnetic Declination: 8.610°                                  |
| Survey Name / Date: SLB MWD Survey / August 15, 2006                         | Total Field Strength: 49566.725 nT                            |
| Tort / AHD / DDI / ERD ratio: 137.617° / 4388.58 ft / 6.029 / 0.827          | Magnetic Dip: 60.974°                                         |
| Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet | Declination Date: August 15, 2006                             |
| Location Lat/Long: N 33 3 52.348, W 104 20 3.697                             | Magnetic Declination Model: BGGM 2006                         |
| Location Grid N/E Y/X: N 750993.900 ftUS, E 499685.400 ftUS                  | North Reference: Grid North                                   |
| Grid Convergence Angle: -0.00056026°                                         | Total Corr Mag North -> Grid North: +8.611°                   |
| Grid Scale Factor: 0.99990909                                                | Local Coordinates Referenced To: Well Head                    |

| Comments | Measured Depth (ft) | Inclination (deg) | Azimuth (deg) | TVD (ft) | Vertical Section (ft) | NS (ft) | EW (ft) | Closure (ft) | Closure Azimuth (deg) | DLS (deg/100 ft) | Mag / Grav Tool Face (deg) |
|----------|---------------------|-------------------|---------------|----------|-----------------------|---------|---------|--------------|-----------------------|------------------|----------------------------|
| Tie-In   | 4782.50             | 0.43              | 19.90         | 4782.06  | -25.65                | -12.49  | -25.59  | 28.48        | 243.99                | 0.03             | 63.69M                     |
|          | 4812.00             | 1.85              | 63.69         | 4811.56  | -25.18                | -12.17  | -25.13  | 27.92        | 244.15                | 5.32             | 76.23M                     |
|          | 4844.00             | 4.60              | 76.23         | 4843.50  | -23.47                | -11.64  | -23.42  | 26.15        | 243.57                | 8.82             | 75.90M                     |
|          | 4876.00             | 8.11              | 75.90         | 4875.30  | -20.03                | -10.78  | -19.98  | 22.70        | 241.64                | 10.97            | 0.53L                      |
|          | 4906.00             | 11.89             | 75.73         | 4904.84  | -14.97                | -9.51   | -14.93  | 17.70        | 237.52                | 12.60            | 1.94R                      |
|          | 4938.00             | 16.17             | 76.25         | 4935.88  | -7.44                 | -7.63   | -7.40   | 10.63        | 224.13                | 13.38            | 4.89R                      |
|          | 4970.00             | 20.68             | 77.34         | 4966.23  | 2.42                  | -5.33   | 2.44    | 5.87         | 155.40                | 14.13            | 13.92R                     |
|          | 5002.00             | 25.40             | 80.05         | 4995.67  | 14.71                 | -2.91   | 14.72   | 15.01        | 101.18                | 15.11            | 17.90R                     |
|          | 5033.00             | 29.93             | 82.96         | 5023.12  | 28.95                 | -0.81   | 28.95   | 28.97        | 91.61                 | 15.25            | 19.51R                     |
|          | 5065.00             | 34.18             | 85.62         | 5050.24  | 45.85                 | 0.85    | 45.85   | 45.86        | 88.93                 | 13.99            | 23.09R                     |
|          | 5097.00             | 37.98             | 88.23         | 5076.10  | 64.67                 | 1.85    | 64.66   | 64.69        | 88.37                 | 12.81            | 14.56R                     |
|          | 5129.00             | 41.65             | 89.66         | 5100.67  | 85.15                 | 2.21    | 85.14   | 85.17        | 88.51                 | 11.82            | 3.52R                      |
|          | 5160.00             | 45.23             | 89.97         | 5123.18  | 106.46                | 2.28    | 106.45  | 106.48       | 88.77                 | 11.57            | 8.15L                      |
|          | 5192.00             | 48.42             | 89.36         | 5145.07  | 129.80                | 2.42    | 129.79  | 129.81       | 88.93                 | 10.07            | 9.44L                      |
|          | 5224.00             | 51.83             | 88.64         | 5165.58  | 154.35                | 2.85    | 154.34  | 154.36       | 88.94                 | 10.80            | 2.12R                      |
|          | 5256.00             | 55.39             | 88.80         | 5184.57  | 180.10                | 3.43    | 180.09  | 180.12       | 88.91                 | 11.13            | 3.75R                      |
|          | 5288.00             | 59.33             | 89.10         | 5201.82  | 207.04                | 3.92    | 207.02  | 207.06       | 88.92                 | 12.34            | 6.08R                      |
|          | 5320.00             | 63.71             | 89.62         | 5217.08  | 235.16                | 4.23    | 235.14  | 235.18       | 88.97                 | 13.76            | 5.37R                      |
|          | 5352.00             | 67.85             | 90.04         | 5230.20  | 264.34                | 4.31    | 264.32  | 264.35       | 89.06                 | 12.99            | 1.49L                      |
|          | 5383.00             | 71.13             | 89.95         | 5241.06  | 293.37                | 4.32    | 293.35  | 293.38       | 89.16                 | 10.58            | HS                         |
|          | 5415.00             | 74.33             | 89.95         | 5250.56  | 323.92                | 4.34    | 323.90  | 323.93       | 89.23                 | 10.00            | 3.82L                      |
|          | 5447.00             | 77.70             | 89.72         | 5258.29  | 354.97                | 4.43    | 354.95  | 354.98       | 89.28                 | 10.55            | 1.13L                      |
|          | 5479.00             | 81.71             | 89.64         | 5264.01  | 386.44                | 4.61    | 386.43  | 386.46       | 89.32                 | 12.53            | 10.71L                     |
|          | 5511.00             | 85.35             | 88.95         | 5267.62  | 418.23                | 5.00    | 418.22  | 418.25       | 89.31                 | 11.57            | 1.33R                      |
|          | 5543.00             | 88.80             | 89.03         | 5269.25  | 450.19                | 5.56    | 450.16  | 450.20       | 89.29                 | 10.78            | 33.50R                     |
|          | 5576.00             | 89.48             | 89.48         | 5269.74  | 483.18                | 5.99    | 483.16  | 483.19       | 89.29                 | 2.47             | 39.43R                     |
|          | 5638.00             | 90.38             | 90.22         | 5269.82  | 545.18                | 6.16    | 545.16  | 545.19       | 89.35                 | 1.88             | 173.40L                    |
|          | 5702.00             | 89.17             | 90.08         | 5270.07  | 609.18                | 5.99    | 609.15  | 609.18       | 89.44                 | 1.90             | 98.95L                     |
|          | 5765.00             | 89.00             | 89.00         | 5271.08  | 672.17                | 6.49    | 672.14  | 672.17       | 89.45                 | 1.74             | 102.68L                    |
|          | 5829.00             | 88.80             | 88.11         | 5272.31  | 736.14                | 8.11    | 736.11  | 736.16       | 89.37                 | 1.43             | 62.56L                     |
|          | 5893.00             | 89.07             | 87.59         | 5273.50  | 800.09                | 10.51   | 800.05  | 800.12       | 89.25                 | 0.92             | 64.49R                     |
|          | 5957.00             | 89.28             | 88.03         | 5274.42  | 864.05                | 12.95   | 864.00  | 864.10       | 89.14                 | 0.76             | 93.70L                     |
|          | 6053.00             | 89.24             | 87.41         | 5275.66  | 959.98                | 16.77   | 959.92  | 960.06       | 89.00                 | 0.65             | 62.59R                     |
|          | 6116.00             | 89.52             | 87.95         | 5276.34  | 1022.94               | 19.32   | 1022.86 | 1023.04      | 88.92                 | 0.97             | 45.69R                     |
|          | 6179.00             | 89.93             | 88.37         | 5276.64  | 1085.91               | 21.35   | 1085.83 | 1086.04      | 88.87                 | 0.93             | ---                        |
|          | 6275.00             | 89.93             | 88.37         | 5276.76  | 1181.89               | 24.08   | 1181.79 | 1182.03      | 88.83                 | 0.00             | 161.57R                    |
|          | 6369.00             | 89.45             | 88.53         | 5277.27  | 1275.86               | 26.62   | 1275.75 | 1276.03      | 88.80                 | 0.54             | 72.69R                     |
|          | 6432.00             | 89.69             | 89.30         | 5277.74  | 1338.85               | 27.81   | 1338.74 | 1339.03      | 88.81                 | 1.28             | 93.37R                     |

|         |       |       |         |         |       |         |         |       |      |         |
|---------|-------|-------|---------|---------|-------|---------|---------|-------|------|---------|
| 6496.00 | 89.66 | 89.81 | 5278.10 | 1402.85 | 28.31 | 1402.74 | 1403.02 | 88.84 | 0.80 | 129.81R |
| 6560.00 | 89.31 | 90.23 | 5278.68 | 1466.85 | 28.29 | 1466.73 | 1467.01 | 88.90 | 0.85 | 177.36R |
| 6630.00 | 88.66 | 90.26 | 5279.92 | 1536.83 | 27.99 | 1536.72 | 1536.98 | 88.96 | 0.93 | 36.98L  |
| 6694.00 | 89.55 | 89.59 | 5280.92 | 1600.82 | 28.07 | 1600.71 | 1600.96 | 89.00 | 1.74 | 54.10R  |
| 6757.00 | 90.31 | 90.64 | 5281.00 | 1663.82 | 27.94 | 1663.71 | 1663.94 | 89.04 | 2.06 | 167.28R |
| 6822.00 | 89.69 | 90.78 | 5281.00 | 1728.81 | 27.14 | 1728.70 | 1728.92 | 89.10 | 0.98 | 174.91L |
| 6918.00 | 87.56 | 90.59 | 5283.30 | 1824.76 | 25.99 | 1824.66 | 1824.85 | 89.18 | 2.23 | 16.82R  |
| 6982.00 | 88.42 | 90.85 | 5285.54 | 1888.71 | 25.19 | 1888.62 | 1888.79 | 89.24 | 1.40 | 8.42L   |
| 7045.00 | 88.69 | 90.81 | 5287.13 | 1951.68 | 24.28 | 1951.59 | 1951.74 | 89.29 | 0.43 | 57.97L  |
| 7134.00 | 89.66 | 89.26 | 5288.41 | 2040.67 | 24.22 | 2040.58 | 2040.72 | 89.32 | 2.05 | 126.87L |
| 7198.00 | 89.48 | 89.02 | 5288.89 | 2104.66 | 25.18 | 2104.57 | 2104.72 | 89.31 | 0.47 | 154.80R |
| 7230.00 | 89.31 | 89.10 | 5289.23 | 2136.66 | 25.71 | 2136.56 | 2136.72 | 89.31 | 0.59 | 71.00R  |
| 7263.00 | 89.62 | 90.00 | 5289.54 | 2169.66 | 25.97 | 2169.56 | 2169.72 | 89.31 | 2.88 | 31.64R  |
| 7326.00 | 90.48 | 90.53 | 5289.48 | 2232.65 | 25.67 | 2232.56 | 2232.71 | 89.34 | 1.60 | 146.98R |
| 7390.00 | 90.28 | 90.66 | 5289.06 | 2296.65 | 25.01 | 2296.56 | 2296.69 | 89.38 | 0.37 | 179.36R |
| 7486.00 | 89.38 | 90.67 | 5289.35 | 2392.63 | 23.90 | 2392.55 | 2392.67 | 89.43 | 0.94 | 5.12L   |
| 7580.00 | 90.72 | 90.55 | 5289.26 | 2486.62 | 22.90 | 2486.54 | 2486.65 | 89.47 | 1.43 | 28.11R  |
| 7676.00 | 91.45 | 90.94 | 5287.45 | 2582.59 | 21.65 | 2582.51 | 2582.60 | 89.52 | 0.86 | 142.18R |
| 7772.00 | 90.69 | 91.53 | 5285.65 | 2678.54 | 19.58 | 2678.47 | 2678.55 | 89.58 | 1.00 | 158.06L |
| 7868.00 | 89.97 | 91.24 | 5285.10 | 2774.49 | 17.26 | 2774.44 | 2774.50 | 89.64 | 0.81 | 169.33L |
| 7932.00 | 89.28 | 91.11 | 5285.52 | 2838.47 | 15.95 | 2838.43 | 2838.47 | 89.68 | 1.10 | 119.17R |
| 7995.00 | 89.04 | 91.54 | 5286.44 | 2901.44 | 14.49 | 2901.40 | 2901.44 | 89.71 | 0.78 | LS      |
| 8059.00 | 88.35 | 91.54 | 5287.90 | 2965.39 | 12.77 | 2965.36 | 2965.39 | 89.75 | 1.08 | 1.59R   |
| 8154.00 | 89.07 | 91.56 | 5290.04 | 3060.32 | 10.20 | 3060.30 | 3060.32 | 89.81 | 0.76 | 91.61L  |
| 8248.00 | 89.04 | 90.49 | 5291.59 | 3154.28 | 8.52  | 3154.28 | 3154.29 | 89.85 | 1.14 | 144.59L |
| 8343.00 | 88.07 | 89.80 | 5293.98 | 3249.25 | 8.28  | 3249.24 | 3249.25 | 89.85 | 1.25 | 160.58L |
| 8407.00 | 87.56 | 89.62 | 5296.42 | 3313.20 | 8.60  | 3313.20 | 3313.21 | 89.85 | 0.84 | 155.92L |
| 8502.00 | 87.18 | 89.45 | 5300.78 | 3408.10 | 9.37  | 3408.09 | 3408.11 | 89.84 | 0.44 | 6.39L   |
| 8597.00 | 88.52 | 89.30 | 5304.35 | 3503.03 | 10.41 | 3503.02 | 3503.03 | 89.83 | 1.42 | 6.42L   |
| 8692.00 | 90.03 | 89.13 | 5305.55 | 3598.01 | 11.71 | 3598.00 | 3598.02 | 89.81 | 1.60 | 173.29R |
| 8788.00 | 89.69 | 89.17 | 5305.78 | 3694.01 | 13.13 | 3693.99 | 3694.01 | 89.80 | 0.36 | 65.29R  |
| 8884.00 | 90.21 | 90.30 | 5305.87 | 3790.01 | 13.58 | 3789.98 | 3790.01 | 89.79 | 1.30 | 1.85R   |
| 8979.00 | 90.52 | 90.31 | 5305.26 | 3885.00 | 13.07 | 3884.98 | 3885.00 | 89.81 | 0.33 | 129.55L |
| 9075.00 | 89.24 | 88.76 | 5305.46 | 3980.99 | 13.85 | 3980.97 | 3981.00 | 89.80 | 2.09 | 4.08R   |
| 9170.00 | 89.52 | 88.78 | 5306.49 | 4075.98 | 15.89 | 4075.95 | 4075.98 | 89.78 | 0.30 | 78.37R  |
| 9266.00 | 89.59 | 89.12 | 5307.24 | 4171.96 | 17.65 | 4171.93 | 4171.96 | 89.76 | 0.36 | 169.22R |
| 9330.00 | 89.38 | 89.16 | 5307.81 | 4235.96 | 18.61 | 4235.92 | 4235.96 | 89.75 | 0.33 | ---     |
| 9399.00 | 89.38 | 89.16 | 5308.56 | 4304.95 | 19.62 | 4304.90 | 4304.95 | 89.74 | 0.00 | ---     |

**Survey Type:** Non-Def Survey

**Survey Error Model:** SLB ISCWSA version 24 \*\*\* 3-D 95.00% Confidence 2.7955 sigma

**Surveying Prog:**

**MD From ( ft )**

**MD To ( ft )**

**EOU Freq Survey Tool Type**

**Borehole -> Survey**

0.00

4782.50

Act-Stns SLB\_UNKNOWN (default tool used) Original Hole -> Gyro Data Gyro Survey

4782.50

4812.00

Act-Stns SLB\_MWD-STD Aly Sheba 1426-34 D #1 -> SLB MWD Survey

4812.00

9399.00

Act-Stns SLB\_UNKNOWN (default tool used) Aly Sheba 1426-34 D #1 -> SLB MWD Survey

*\*Italicized stations are NOT used in position calculations.*

## **A Gyrodata Directional Survey**

for

### **PARALLEL PETROLEUM**

Location: JW RIG # 44, CHAVES COUNTY, NEW MEXICO  
Lease: ALYSHEABA 1426-34D Well: # 1, 4-1/2 DRILLPIPE

Job Number: MD0806G\_246

Run Date: 8/9/2006 8:44:50 AM

Surveyor: JAMES KING

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 33.080167 deg. N Longitude: 104.332908 deg. E

Azimuth Correction:

Gyro: Bearings are Relative to True North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

# A Gyrodatta Directional Survey

## PARALLEL PETROLEUM

Location: JW RIG # 44, CHAVES COUNTY, NEW MEXICO

Lease: ALYSHEABA 1426-34D Well: # 1, 4-1/2 DRILLPIPE

Job Number: MDD0806G\_246

| MEASURED<br>DEPTH<br>feet | INCL<br>deg. | AZMUTH<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 |
|---------------------------|--------------|----------------|-----------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 0.00                      | 0.00         | 0.00           | 0.0                         | 0.00                                   | 0.00                      | 0.0 0.0                               | 0.00 N 0.00 E                     |

0 - 5483 FT RATE GYROSCOPIC DROP MULTISHOT SURVEY RUN INSIDE 4-1/2 DRILLPIPE  
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO JW RIG #44 RKB (+12FT.)

|         |      |        |       |      |         |            |                 |
|---------|------|--------|-------|------|---------|------------|-----------------|
| 100.00  | 0.18 | 106.37 | -0.0  | 0.18 | 100.00  | 0.2 106.4  | 0.04 S 0.15 E   |
| 200.00  | 0.42 | 120.78 | -0.3  | 0.26 | 200.00  | 0.7 114.2  | 0.28 S 0.62 E   |
| 300.00  | 0.44 | 149.18 | -0.8  | 0.21 | 300.00  | 1.4 125.1  | 0.80 S 1.13 E   |
| 400.00  | 0.40 | 166.49 | -1.5  | 0.13 | 399.99  | 2.0 136.2  | 1.47 S 1.41 E   |
| 500.00  | 0.51 | 213.95 | -2.2  | 0.38 | 499.99  | 2.5 150.4  | 2.18 S 1.24 E   |
| 600.00  | 1.40 | 229.12 | -3.4  | 0.91 | 599.98  | 3.4 178.8  | 3.35 S 0.07 E   |
| 700.00  | 1.44 | 227.94 | -5.0  | 0.05 | 699.94  | 5.3 199.7  | 4.99 S 1.78 W   |
| 771.50  | 1.43 | 236.80 | -6.1  | 0.31 | 771.42  | 6.9 207.7  | 6.08 S 3.20 W   |
| 867.00  | 1.43 | 236.93 | -7.4  | 0.01 | 866.89  | 9.0 215.1  | 7.38 S 5.19 W   |
| 962.50  | 1.08 | 233.37 | -8.6  | 0.38 | 962.37  | 11.0 218.9 | 8.56 S 6.91 W   |
| 1058.00 | 1.08 | 240.37 | -9.5  | 0.14 | 1057.85 | 12.7 221.4 | 9.54 S 8.41 W   |
| 1153.50 | 1.13 | 223.16 | -10.7 | 0.35 | 1153.34 | 14.5 222.7 | 10.67 S 9.84 W  |
| 1249.00 | 1.20 | 226.98 | -12.0 | 0.11 | 1248.82 | 16.4 223.0 | 12.04 S 11.21 W |
| 1344.50 | 1.14 | 231.76 | -13.3 | 0.12 | 1344.30 | 18.4 223.6 | 13.31 S 12.69 W |
| 1440.00 | 0.98 | 233.18 | -14.4 | 0.17 | 1439.78 | 20.1 224.4 | 14.39 S 14.09 W |
| 1535.50 | 0.98 | 231.70 | -15.4 | 0.03 | 1535.27 | 21.8 225.0 | 15.39 S 15.38 W |
| 1631.00 | 1.05 | 235.86 | -16.4 | 0.10 | 1630.75 | 23.4 225.6 | 16.38 S 16.75 W |
| 1726.50 | 1.12 | 239.50 | -17.4 | 0.10 | 1726.23 | 25.2 226.5 | 17.35 S 18.28 W |
| 1822.00 | 1.19 | 241.02 | -18.3 | 0.08 | 1821.71 | 27.1 227.5 | 18.30 S 19.95 W |
| 1917.50 | 1.18 | 245.43 | -19.2 | 0.10 | 1917.19 | 29.0 228.5 | 19.19 S 21.71 W |

## A Gyrodatta Directional Survey

## PARALLEL PETROLEUM

Location: JW RIG # 44, CHAVES COUNTY, NEW MEXICO

Lease: ALYSHEABA 1426-34D Well: # 1, 4-1/2 DRILLPIPE

Job Number: MD0806G\_246

| 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 |
|---------------------------|--------------|-----------------|-----------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 2013.00                   | 1.16         | 246.96          | -20.0                       | 0.04                                   | 2012.67                   | 30.8 229.6                            | 19.98 S 23.50 W                   |
| 2108.50                   | 1.11         | 255.40          | -20.6                       | 0.18                                   | 2108.15                   | 32.6 230.8                            | 20.59 S 25.28 W                   |
| 2204.00                   | 0.95         | 259.32          | -21.0                       | 0.18                                   | 2203.64                   | 34.2 232.1                            | 20.97 S 26.95 W                   |
| 2299.50                   | 0.76         | 262.60          | -21.2                       | 0.21                                   | 2299.13                   | 35.4 233.2                            | 21.20 S 28.36 W                   |
| 2395.00                   | 0.58         | 270.69          | -21.3                       | 0.21                                   | 2394.62                   | 36.3 234.2                            | 21.27 S 29.47 W                   |
| 2490.50                   | 0.37         | 278.02          | -21.2                       | 0.23                                   | 2490.12                   | 37.0 235.0                            | 21.23 S 30.26 W                   |
| 2586.00                   | 0.43         | 303.55          | -21.0                       | 0.19                                   | 2585.62                   | 37.3 235.8                            | 20.99 S 30.86 W                   |
| 2681.50                   | 0.40         | 306.50          | -20.6                       | 0.03                                   | 2681.11                   | 37.6 236.8                            | 20.59 S 31.43 W                   |
| 2777.00                   | 0.42         | 322.58          | -20.1                       | 0.12                                   | 2776.61                   | 37.7 237.8                            | 20.11 S 31.91 W                   |
| 2872.50                   | 0.46         | 334.37          | -19.5                       | 0.10                                   | 2872.11                   | 37.7 238.9                            | 19.49 S 32.29 W                   |
| 2968.00                   | 0.38         | 332.65          | -18.9                       | 0.08                                   | 2967.61                   | 37.7 240.0                            | 18.86 S 32.60 W                   |
| 3063.50                   | 0.36         | 329.80          | -18.3                       | 0.03                                   | 3063.10                   | 37.7 240.9                            | 18.31 S 32.90 W                   |
| 3159.00                   | 0.37         | 341.17          | -17.8                       | 0.08                                   | 3158.60                   | 37.6 241.8                            | 17.76 S 33.15 W                   |
| 3254.50                   | 0.30         | 341.50          | -17.2                       | 0.08                                   | 3254.10                   | 37.5 242.7                            | 17.24 S 33.33 W                   |
| 3350.00                   | 0.37         | 32.62           | -16.7                       | 0.31                                   | 3349.60                   | 37.2 243.3                            | 16.74 S 33.24 W                   |
| 3445.50                   | 0.22         | 64.50           | -16.4                       | 0.23                                   | 3445.10                   | 36.8 243.5                            | 16.40 S 32.90 W                   |
| 3541.00                   | 0.18         | 73.78           | -16.3                       | 0.05                                   | 3540.60                   | 36.4 243.5                            | 16.28 S 32.59 W                   |
| 3636.50                   | 0.35         | 83.98           | -16.2                       | 0.18                                   | 3636.10                   | 36.0 243.2                            | 16.20 S 32.15 W                   |
| 3732.00                   | 0.34         | 83.86           | -16.1                       | 0.01                                   | 3731.59                   | 35.5 242.9                            | 16.14 S 31.57 W                   |
| 3827.50                   | 0.27         | 118.68          | -16.2                       | 0.21                                   | 3827.09                   | 35.1 242.4                            | 16.22 S 31.09 W                   |
| 3923.00                   | 0.27         | 99.47           | -16.4                       | 0.09                                   | 3922.59                   | 34.8 241.9                            | 16.36 S 30.67 W                   |
| 4018.50                   | 0.44         | 83.72           | -16.4                       | 0.20                                   | 4018.09                   | 34.2 241.5                            | 16.36 S 30.08 W                   |
| 4114.00                   | 0.45         | 80.87           | -16.3                       | 0.03                                   | 4113.59                   | 33.6 241.0                            | 16.26 S 29.35 W                   |
| 4209.50                   | 0.40         | 72.25           | -16.1                       | 0.09                                   | 4209.09                   | 32.9 240.7                            | 16.10 S 28.66 W                   |

# A Gyrodata Directional Survey

## PARALLEL PETROLEUM

Location: JW RIG # 44, CHAVES COUNTY, NEW MEXICO

Lease: ALYSHEABA 1426-34D Well: # 1, 4-1/2 DRILLPIPE

Job Number: MDD0806G\_246

| 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 |
|---------------------------|--------------|-----------------|-----------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 4305.00                   | 0.54         | 49.73           | -15.7                       | 0.24                                   | 4304.58                   | 32.1 240.7                            | 15.71 S 28.00 W                   |
| 4400.50                   | 0.59         | 41.74           | -15.1                       | 0.10                                   | 4400.08                   | 31.2 241.2                            | 15.05 S 27.33 W                   |
| 4496.00                   | 0.54         | 44.57           | -14.4                       | 0.06                                   | 4495.57                   | 30.3 241.7                            | 14.36 S 26.68 W                   |
| 4591.50                   | 0.42         | 34.57           | -13.7                       | 0.15                                   | 4591.07                   | 29.6 242.3                            | 13.74 S 26.16 W                   |
| 4687.00                   | 0.41         | 21.83           | -13.1                       | 0.10                                   | 4686.57                   | 29.0 243.0                            | 13.14 S 25.84 W                   |
| 4782.50                   | 0.43         | 19.90           | -12.5                       | 0.03                                   | 4782.06                   | 28.5 244.0                            | 12.49 S 25.59 W                   |
| 4878.00                   | 0.50         | 21.09           | -11.8                       | 0.07                                   | 4877.56                   | 27.9 245.1                            | 11.76 S 25.32 W                   |
| 4973.50                   | 0.52         | 25.07           | -11.0                       | 0.04                                   | 4973.06                   | 27.3 246.3                            | 10.99 S 24.99 W                   |
| 5069.00                   | 0.50         | 7.74            | -10.2                       | 0.16                                   | 5068.55                   | 26.8 247.6                            | 10.18 S 24.75 W                   |
| 5164.50                   | 0.49         | 358.79          | -9.4                        | 0.08                                   | 5164.05                   | 26.4 249.3                            | 9.36 S 24.70 W                    |
| 5260.00                   | 0.46         | 357.83          | -8.6                        | 0.03                                   | 5259.55                   | 26.2 250.9                            | 8.56 S 24.72 W                    |
| 5355.50                   | 0.43         | 4.65            | -7.8                        | 0.06                                   | 5355.04                   | 25.9 252.4                            | 7.82 S 24.71 W                    |
| 5451.00                   | 0.48         | 14.15           | -7.1                        | 0.09                                   | 5450.54                   | 25.6 254.0                            | 7.07 S 24.58 W                    |
| 5483.00                   | 0.51         | 11.40           | -6.8                        | 0.10                                   | 5482.54                   | 25.4 254.5                            | 6.80 S 24.52 W                    |

Final Station Closure: Distance: 25.44 ft Azi: 254.51 deg.