

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NM Oil Cons. DIV-Dist. 2  
1501 W. Grand Avenue  
Artesia, NM 88210

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2004

5. Lease Serial No.  
NM-0354232

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other  
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.  
Other \_\_\_\_\_

2. Name of Operator

Mewbourne Oil Company 14744

3. Address

PO Box 5270 Hobbs, NM 88240

3a. Phone No. (include area code)

505-393-5905

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface 599' FNL & 2043' FEL, Unit B

At top prod. interval reported below 839' FNL & 1654' FWL

At total depth 869' FNL & 1518' FWL

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

33255

8. Lease Name and Well No.

Esperanza 19 Federal Com #2

9. API Well No.

30-015-33494 31

10. Field and Pool, or Exploratory

Burton Flat Morrow 73280

11. Sec., T., R., M., on Block and Survey  
or Area

Sec 19-T21S-R27E

12. County or Parish

Eddy County

13. State

NM

17. Elevations (DF, RKB, RT, GL)\*

3190' GL

14. Date Spudded

07/20/04

15. Date T.D. Reached

09/08/04

16. Date Completed

☐ D&A ☒ Ready to Prod.

18. Total Depth: MD 11890'  
TVD 11613'

19. Plug Back T.D.: MD 11838'  
TVD 11560'

20. Depth Bridge Plug Set: MD NA  
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

DLL w/Micro, DN w/GR & CBL

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit report)  
Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer<br>Depth | No. of Sk. &<br>Type of Cement | Slurry Vol.<br>(BBL) | Cement Top* | Amount Pulled |
|-----------|------------|-------------|----------|-------------|-------------------------|--------------------------------|----------------------|-------------|---------------|
| 17 1/2    | 13 3/8 H40 | 48          | 0        | 450         |                         | 613 H/C                        | 177                  | Surface     | NA            |
| 12 1/4    | 9 5/8 KJ55 | 40          | 0        | 2245        |                         | 2582 H/C                       | 610                  | 1730        | NA            |
| 8 3/4     | 5 1/2 N80  | 17          | 0        | 11890       | 6957                    | 1st 825 H                      | 213                  |             | NA            |
|           |            |             |          |             |                         | 2nd 1500 H                     | 496                  | 2225        |               |

24. Tubing Record

| Size  | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|-------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
| 2 7/8 | 11307'         | 11266'            |      |                |                   |      |                |                   |

25. Producing Intervals

| Formation | TOP       | Bottom    | Perforated Interval | Size | No. Holes | Perf. Status |
|-----------|-----------|-----------|---------------------|------|-----------|--------------|
| A) Morrow | 11458' MD | 11552' MD | 59'                 | 0.24 | 70        | open         |
| B)        |           |           |                     |      |           |              |
| C)        |           |           |                     |      |           |              |
| D)        |           |           |                     |      |           |              |

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

| Depth Interval   | Amount and Type of Material                                                                            |
|------------------|--------------------------------------------------------------------------------------------------------|
| 11458'-11552' MD | Frac with 2000 gals 7 1/2% NeFe acid and 70,000 gals 40# 70Q Binary Foam with 71,960# 20/40 Interprop. |
|                  |                                                                                                        |
|                  |                                                                                                        |

28. Production - Interval A

| Date First<br>Produced | Test<br>Date            | Hours<br>Tested | Test<br>Production<br>→ | Oil<br>BBL | Gas<br>MCF | Water<br>BBL | Oil Gravity<br>Corr. API | Gas<br>Gravity | Production Method |
|------------------------|-------------------------|-----------------|-------------------------|------------|------------|--------------|--------------------------|----------------|-------------------|
| 10/03/04               | 10/06/04                | 24              | →                       | 0          | 586        | 10           |                          | 0.669          | Flowing           |
| Choke<br>Size          | Tbg. Press.<br>Flwg. SI | Csg.<br>Press   | 24 Hr.<br>Rate          | Oil<br>BBL | Gas<br>MCF | Water<br>BBL | Gas: Oil<br>Ratio        | Well Status    |                   |
| 16/64                  | 900                     | 0               | →                       | 0          | 586        | 10           | 586000                   | Producing      |                   |

28a. Production - Interval B

| Date First<br>Produced | Test<br>Date            | Hours<br>Tested | Test<br>Production<br>→ | Oil<br>BBL | Gas<br>MCF | Water<br>BBL | Oil Gravity<br>Corr. API | Gas<br>Gravity | Production Method |
|------------------------|-------------------------|-----------------|-------------------------|------------|------------|--------------|--------------------------|----------------|-------------------|
|                        |                         |                 | →                       |            |            |              |                          |                |                   |
| Choke<br>Size          | Tbg. Press.<br>Flwg. SI | Call<br>Press   | 24 Hr.<br>Rate          | Oil<br>BBL | Gas<br>MCF | Water<br>BBL | Gas: Oil<br>Ratio        | Well Status    |                   |
|                        |                         |                 | →                       |            |            |              |                          |                |                   |

(See instructions and spaces for additional data on next page)

RECEIVED

OCT 28 2004

OCDA-ARTESIA

ACCEPTED FOR RECORD

OCT 27 2004

ALEXIS C. SWOBODA  
PETROLEUM ENGINEER

## 28b. Production - Interval C

| Date First Produced | Test Date          | Hours Tested | Test Production<br>→ | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|--------------------|--------------|----------------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| Choke Size          | Tbg Press Flwg. SI | Csg. Press   | 24 Hr. Rate<br>→     | Oil BBL | Gas MCF | Water BBL | Gas: Oil Ratio        | Well Status |                   |

## 28c. Production - Interval D

| Date First Produced | Test Date          | Hours Tested | Test Production<br>→ | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|--------------------|--------------|----------------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| Choke Size          | Tbg Press Flwg. SI | Csg. Press   | 24 Hr. Rate<br>→     | Oil BBL | Gas MCF | Water BBL | Gas: Oil Ratio        | Well Status |                   |

## 29. Disposition of Gas (Sold used for fuel, vented, etc.)

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

| Formation    | Top   | Bottom | Descriptions, Contents, etc. | Name | Top         |
|--------------|-------|--------|------------------------------|------|-------------|
|              |       |        |                              |      | Meas. Depth |
| Capitan Reef | 520   |        |                              |      |             |
| Delaware     | 2549  |        |                              |      |             |
| Bone Spring  | 4900  |        |                              |      |             |
| Wolfcamp     | 8852  |        |                              |      |             |
| Canyon       | 9934  |        |                              |      |             |
| Strawn       | 10245 |        |                              |      |             |
| Atoka        | 10736 |        |                              |      |             |
| Morrow       | 11299 |        |                              |      |             |
| Barnett      | 11717 |        |                              |      |             |
| TD           | 11890 |        |                              |      |             |
| All in TVD   |       |        |                              |      |             |

## 32. Additional remarks (include plugging procedure):

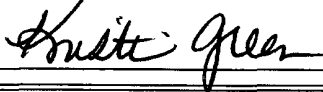
## 33. Circle enclosed attachments:

- ☒ 1 Electrical/Mechanical Logs (1 full set req'd.)   
 ☐ 2 Geologic Report   
 ☐ 3 DST Report   
 ☒ 4 Directional Survey  
☐ 5 Sundry Notice for plugging and cement verification   
☐ 6 Core Analysis   
☒ 7 Other: Deviation Report and C104

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Kristi GreenTitle Hobbs Regulatory

Signature

Date 10/25/04

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212 make 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.



Scientific Drilling International  
Survey Report

Company: MEWBOURNE  
Field: Burton Flat  
Site: Eddy Co., NM  
Well: Esperanza 19 Fed. Com. #2

| Survey<br>MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | VS<br>ft | N/S<br>ft | E/W<br>ft | DLS<br>deg/100ft | ClsD<br>ft | ClsA<br>deg |
|--------------------|-------------|-------------|-----------|----------|-----------|-----------|------------------|------------|-------------|
| 0                  | 0           | 0           | 0         | 0        | 0         | 0         | 0                | 0          | 0           |
| 100                | 0.9         | 333.43      | 100       | 0.2      | 0.7       | -0.4      | 0.9              | 0.8        | 333.43      |
| 200                | 1.39        | 329.99      | 200       | 0.9      | 2.5       | -1.3      | 0.49             | 2.8        | 331.94      |
| 300                | 1.38        | 341.16      | 299.9     | 1.6      | 4.6       | -2.3      | 0.27             | 5.2        | 333.62      |
| 400                | 1.3         | 1.71        | 399.9     | 1.7      | 6.9       | -2.7      | 0.48             | 7.4        | 338.98      |
| 500                | 1.19        | 4.91        | 499.9     | 1.2      | 9.1       | -2.5      | 0.13             | 9.4        | 344.41      |
| 600                | 1.29        | 355         | 599.9     | 0.9      | 11.2      | -2.5      | 0.24             | 11.5       | 347.25      |
| 700                | 1.47        | 328.7       | 699.8     | 1.4      | 13.5      | -3.3      | 0.65             | 13.9       | 346.2       |
| 800                | 1.35        | 324.24      | 799.8     | 2.4      | 15.5      | -4.7      | 0.16             | 16.2       | 343.27      |
| 900                | 2.25        | 339.09      | 899.8     | 3.4      | 18.3      | -6        | 1.01             | 19.3       | 341.71      |
| 1000               | 4.44        | 348.94      | 999.6     | 4        | 23.9      | -7.5      | 2.26             | 25.1       | 342.62      |
| 1100               | 4.26        | 355.98      | 1099.3    | 4        | 31.4      | -8.5      | 0.56             | 32.6       | 344.88      |
| 1200               | 3.82        | 4.97        | 1199.1    | 2.9      | 38.5      | -8.5      | 0.77             | 39.4       | 347.59      |
| 1300               | 3.67        | 5.22        | 1298.8    | 1.5      | 45        | -7.9      | 0.15             | 45.7       | 350.05      |
| 1400               | 3.54        | 358.03      | 1398.6    | 0.4      | 51.3      | -7.7      | 0.47             | 51.8       | 351.45      |
| 1500               | 3.4         | 354.61      | 1498.5    | -0.1     | 57.3      | -8.1      | 0.25             | 57.9       | 351.96      |
| 1600               | 3.15        | 0.65        | 1598.3    | -0.6     | 63        | -8.3      | 0.43             | 63.5       | 352.46      |
| 1700               | 3.24        | 3.05        | 1698.1    | -1.6     | 68.6      | -8.2      | 0.16             | 69         | 353.22      |
| 1800               | 3.15        | 3           | 1798      | -2.7     | 74.1      | -7.9      | 0.09             | 74.6       | 353.95      |
| 1900               | 2.93        | 11.44       | 1897.8    | -4.1     | 79.4      | -7.2      | 0.5              | 79.7       | 354.81      |
| 2000               | 3.06        | 11.55       | 1997.7    | -5.8     | 84.5      | -6.2      | 0.12             | 84.7       | 355.83      |
| 2100               | 2.91        | 16.84       | 2097.6    | -7.8     | 89.6      | -4.9      | 0.31             | 89.7       | 356.87      |
| 2200               | 3.25        | 33.4        | 2197.4    | -10.8    | 94.4      | -2.6      | 0.95             | 94.4       | 358.42      |
| 2300               | 3.6         | 34.92       | 2297.2    | -14.8    | 99.3      | 0.8       | 0.36             | 99.3       | 0.44        |
| 2400               | 3.22        | 34.24       | 2397.1    | -18.8    | 104.2     | 4.1       | 0.39             | 104.3      | 2.27        |
| 2500               | 2.99        | 42.27       | 2496.9    | -22.7    | 108.4     | 7.5       | 0.49             | 108.7      | 3.94        |
| 2600               | 2.74        | 41.31       | 2596.8    | -26.5    | 112.2     | 10.8      | 0.26             | 112.7      | 5.5         |
| 2700               | 2.15        | 46.44       | 2696.7    | -29.9    | 115.2     | 13.7      | 0.63             | 116.1      | 6.79        |
| 2800               | 1.78        | 48.9        | 2796.7    | -32.7    | 117.6     | 16.3      | 0.37             | 118.7      | 7.87        |
| 2900               | 1.62        | 46.38       | 2896.6    | -35.2    | 119.6     | 18.5      | 0.17             | 121        | 8.77        |
| 3000               | 1.44        | 34.03       | 2996.6    | -37.2    | 121.6     | 20.2      | 0.38             | 123.2      | 9.43        |
| 3100               | 0.97        | 14.5        | 3096.6    | -38.3    | 123.4     | 21.1      | 0.62             | 125.2      | 9.7         |
| 3200               | 0.7         | 340.25      | 3196.5    | -38.5    | 124.8     | 21.1      | 0.56             | 126.6      | 9.59        |
| 3300               | 0.96        | 294.17      | 3296.5    | -37.7    | 125.8     | 20.1      | 0.69             | 127.4      | 9.09        |
| 3400               | 1.07        | 289.19      | 3396.5    | -36.2    | 126.4     | 18.5      | 0.14             | 127.8      | 8.32        |
| 3500               | 1.31        | 302.97      | 3496.5    | -34.5    | 127.3     | 16.6      | 0.37             | 128.4      | 7.45        |
| 3600               | 1.25        | 305.83      | 3596.5    | -32.8    | 128.6     | 14.8      | 0.09             | 129.4      | 6.57        |
| 3700               | 1.21        | 318.56      | 3696.4    | -31.5    | 130       | 13.2      | 0.28             | 130.7      | 5.8         |
| 3800               | 1.2         | 336.68      | 3796.4    | -30.6    | 131.8     | 12.1      | 0.38             | 132.3      | 5.25        |
| 3900               | 1.39        | 348.49      | 3896.4    | -30.3    | 133.9     | 11.4      | 0.33             | 134.4      | 4.89        |
| 4000               | 1.57        | 349.22      | 3996.4    | -30.1    | 136.5     | 11        | 0.18             | 136.9      | 4.59        |

|      |      |        |        |       |       |       |      |       |        |
|------|------|--------|--------|-------|-------|-------|------|-------|--------|
| 4100 | 1.53 | 343.01 | 4096.3 | -29.8 | 139.1 | 10.3  | 0.17 | 139.5 | 4.24   |
| 4200 | 1.6  | 344.41 | 4196.3 | -29.5 | 141.7 | 9.5   | 0.08 | 142   | 3.85   |
| 4300 | 1.79 | 350.03 | 4296.2 | -29.2 | 144.6 | 8.9   | 0.25 | 144.9 | 3.52   |
| 4400 | 1.7  | 349.89 | 4396.2 | -29.1 | 147.6 | 8.4   | 0.09 | 147.8 | 3.24   |
| 4500 | 1.49 | 348.92 | 4496.2 | -29   | 150.3 | 7.9   | 0.21 | 150.5 | 2.99   |
| 4600 | 1.35 | 348.28 | 4596.1 | -28.9 | 152.8 | 7.4   | 0.15 | 152.9 | 2.76   |
| 4700 | 1.28 | 344.43 | 4696.1 | -28.6 | 155   | 6.8   | 0.11 | 155.1 | 2.52   |
| 4800 | 1.27 | 354.6  | 4796.1 | -28.6 | 157.2 | 6.4   | 0.23 | 157.3 | 2.34   |
| 4900 | 0.73 | 348.85 | 4896.1 | -28.6 | 158.9 | 6.2   | 0.55 | 159   | 2.23   |
| 5000 | 0.77 | 313.75 | 4996.1 | -28.1 | 160   | 5.6   | 0.45 | 160.1 | 2      |
| 5100 | 1.04 | 274.66 | 5096   | -26.8 | 160.5 | 4.2   | 0.66 | 160.6 | 1.5    |
| 5200 | 1.18 | 256.07 | 5196   | -24.9 | 160.3 | 2.3   | 0.39 | 160.4 | 0.82   |
| 5300 | 1.52 | 245.64 | 5296   | -22.6 | 159.6 | 0.1   | 0.42 | 159.6 | 0.03   |
| 5400 | 1.83 | 237.65 | 5396   | -19.9 | 158.2 | -2.5  | 0.39 | 158.2 | 359.1  |
| 5500 | 1.87 | 234.58 | 5495.9 | -17   | 156.4 | -5.2  | 0.11 | 156.4 | 358.11 |
| 5600 | 2.08 | 237.03 | 5595.8 | -13.9 | 154.4 | -8    | 0.23 | 154.6 | 357.03 |
| 5700 | 1.87 | 242.57 | 5695.8 | -10.7 | 152.7 | -11   | 0.28 | 153.1 | 355.89 |
| 5793 | 1.14 | 272.35 | 5788.8 | -8.4  | 152   | -13.2 | 1.12 | 152.6 | 355.02 |

Client : MEWBOURNE OIL CO.  
 Well : ESPERANZA 19 #2  
 Location : EDY CO. NEW MEXICO  
 License :  
 Comment : True North

Page: 1  
 Date : 2004/09/08  
 File : 4002075

UWI #:

**Vertical Section Calculated Along Azimuth 260.88°**

**KB Elevation = 18.50ft GR. Elevation = 3190.00ft**

|                           | MD<br>ft | Inc<br>deg | Azi<br>deg | TVD<br>ft | North<br>ft | East<br>ft | V'Sect<br>ft | D'Leg<br>°/100 | Build<br>°/100 | Turn<br>°/100 |
|---------------------------|----------|------------|------------|-----------|-------------|------------|--------------|----------------|----------------|---------------|
| <b>Gyro Tie-In Survey</b> |          |            |            |           |             |            |              |                |                |               |
| 0                         | 5793.00  | 1.14       | 272.35     | 5788.74   | 152.02      | -13.24     | -11.02       | 0.00           | 0.00           | 0.00          |
| <b>MWD Surveys</b>        |          |            |            |           |             |            |              |                |                |               |
| 1                         | 5814.00  | 2.40       | 268.90     | 5809.73   | 152.02      | -13.89     | -10.38       | 6.02           | 6.00           | -16.43        |
| 2                         | 5846.00  | 3.20       | 265.00     | 5841.69   | 151.93      | -15.45     | -8.83        | 2.57           | 2.50           | -12.19        |
| 3                         | 5877.00  | 3.60       | 264.60     | 5872.64   | 151.76      | -17.28     | -6.99        | 1.29           | 1.29           | -1.29         |
| 4                         | 5909.00  | 4.20       | 262.30     | 5904.56   | 151.51      | -19.44     | -4.82        | 1.94           | 1.88           | -7.19         |
| 5                         | 5972.00  | 5.40       | 248.30     | 5967.34   | 150.11      | -24.48     | 0.38         | 2.65           | 1.90           | -22.22        |
| 6                         | 6036.00  | 6.80       | 241.50     | 6030.98   | 147.18      | -30.61     | 6.89         | 2.46           | 2.19           | -10.62        |
| 7                         | 6099.00  | 8.10       | 236.50     | 6093.45   | 142.95      | -37.59     | 14.45        | 2.30           | 2.06           | -7.94         |
| 8                         | 6162.00  | 9.00       | 241.50     | 6155.75   | 138.15      | -45.62     | 23.15        | 1.85           | 1.43           | 7.94          |
| 9                         | 6225.00  | 8.50       | 240.90     | 6218.01   | 133.54      | -54.02     | 32.17        | 0.81           | -0.79          | -0.95         |
| 10                        | 6288.00  | 9.30       | 247.80     | 6280.26   | 129.35      | -62.80     | 41.51        | 2.12           | 1.27           | 10.95         |
| 11                        | 6351.00  | 10.30      | 250.50     | 6342.34   | 125.55      | -72.82     | 52.00        | 1.75           | 1.59           | 4.29          |
| 12                        | 6414.00  | 11.20      | 252.10     | 6404.23   | 121.79      | -83.96     | 63.59        | 1.50           | 1.43           | 2.54          |
| 13                        | 6478.00  | 12.10      | 245.10     | 6466.91   | 117.05      | -95.96     | 76.19        | 2.62           | 1.41           | -10.94        |
| 14                        | 6518.00  | 13.50      | 242.50     | 6505.92   | 113.13      | -103.90    | 84.66        | 3.78           | 3.50           | -6.50         |
| 15                        | 6541.00  | 14.00      | 242.90     | 6528.26   | 110.62      | -108.76    | 89.85        | 2.21           | 2.17           | 1.74          |
| 16                        | 6604.00  | 14.90      | 244.20     | 6589.27   | 103.63      | -122.83    | 104.86       | 1.52           | 1.43           | 2.06          |
| 17                        | 6668.00  | 14.70      | 249.00     | 6651.15   | 97.13       | -137.82    | 120.69       | 1.94           | -0.31          | 7.50          |
| 18                        | 6731.00  | 14.80      | 254.80     | 6712.07   | 92.16       | -153.05    | 136.51       | 2.35           | 0.16           | 9.21          |
| 19                        | 6795.00  | 15.70      | 258.80     | 6773.82   | 88.33       | -169.44    | 153.29       | 2.16           | 1.41           | 6.25          |
| 20                        | 6858.00  | 16.90      | 259.60     | 6834.29   | 85.03       | -186.80    | 170.97       | 1.94           | 1.90           | 1.27          |
| 21                        | 6921.00  | 17.80      | 256.20     | 6894.42   | 81.07       | -205.16    | 189.72       | 2.15           | 1.43           | -5.40         |
| 22                        | 6985.00  | 18.50      | 254.60     | 6955.24   | 76.04       | -224.45    | 209.56       | 1.34           | 1.09           | -2.50         |
| 23                        | 7048.00  | 18.10      | 256.40     | 7015.05   | 71.09       | -243.60    | 229.25       | 1.10           | -0.63          | 2.86          |
| 24                        | 7112.00  | 17.00      | 257.50     | 7076.07   | 66.73       | -262.40    | 248.51       | 1.80           | -1.72          | 1.72          |
| 25                        | 7175.00  | 17.00      | 258.70     | 7136.32   | 62.93       | -280.42    | 266.90       | 0.56           | 0.00           | 1.90          |
| 26                        | 7238.00  | 18.50      | 256.80     | 7196.32   | 58.84       | -299.19    | 286.08       | 2.55           | 2.38           | -3.02         |
| 27                        | 7302.00  | 19.60      | 254.30     | 7256.81   | 53.62       | -319.41    | 306.87       | 2.14           | 1.72           | -3.91         |
| 28                        | 7366.00  | 20.00      | 253.60     | 7317.03   | 47.62       | -340.24    | 328.39       | 0.73           | 0.63           | -1.09         |
| 29                        | 7429.00  | 19.20      | 253.30     | 7376.38   | 41.60       | -360.50    | 349.35       | 1.28           | -1.27          | -0.48         |
| 30                        | 7493.00  | 18.20      | 252.40     | 7437.00   | 35.56       | -380.10    | 369.66       | 1.63           | -1.56          | -1.41         |
| 31                        | 7555.00  | 18.60      | 256.00     | 7495.83   | 30.24       | -398.93    | 389.09       | 1.94           | 0.65           | 5.81          |

**COMPUTALOG**

Drilling Services

Client : MEWBOURNE OIL CO.  
Well : ESPERANZA 19 #2  
Location : EDY CO. NEW MEXICO  
License :  
Comment : True North

Page: 2  
Date : 2004/09/08  
File : 4002075

UWI #:

**Vertical Section Calculated Along Azimuth 260.88°****KB Elevation = 18.50ft GR. Elevation = 3190.00ft**

|    | MD<br>ft | Inc<br>deg | Azi<br>deg | TVD<br>ft | North<br>ft | East<br>ft | V'Sect<br>ft | D'Leg<br>°/100 | Build<br>°/100 | Turn<br>°/100 |
|----|----------|------------|------------|-----------|-------------|------------|--------------|----------------|----------------|---------------|
| 32 | 7619.00  | 17.50      | 254.20     | 7556.68   | 25.15       | -418.09    | 408.82       | 1.93           | -1.72          | -2.81         |
| 33 | 7681.00  | 17.20      | 256.40     | 7615.86   | 20.45       | -435.97    | 427.22       | 1.16           | -0.48          | 3.55          |
| 34 | 7743.00  | 18.10      | 257.40     | 7674.94   | 16.20       | -454.28    | 445.97       | 1.53           | 1.45           | 1.61          |
| 35 | 7807.00  | 18.80      | 255.10     | 7735.65   | 11.38       | -473.95    | 466.15       | 1.58           | 1.09           | -3.59         |
| 36 | 7871.00  | 18.30      | 254.10     | 7796.33   | 5.97        | -493.58    | 486.39       | 0.93           | -0.78          | -1.56         |
| 37 | 7934.00  | 17.50      | 255.20     | 7856.28   | 0.84        | -512.25    | 505.64       | 1.38           | -1.27          | 1.75          |
| 38 | 7997.00  | 17.50      | 256.80     | 7916.36   | -3.74       | -530.63    | 524.51       | 0.76           | 0.00           | 2.54          |
| 39 | 8060.00  | 19.00      | 256.40     | 7976.19   | -8.31       | -549.82    | 544.19       | 2.39           | 2.38           | -0.63         |
| 40 | 8123.00  | 19.80      | 258.50     | 8035.62   | -12.85      | -570.24    | 565.07       | 1.68           | 1.27           | 3.33          |
| 41 | 8155.00  | 19.90      | 260.20     | 8065.72   | -14.86      | -580.92    | 575.93       | 1.83           | 0.31           | 5.31          |
| 42 | 8187.00  | 19.50      | 261.00     | 8095.84   | -16.62      | -591.56    | 586.72       | 1.51           | -1.25          | 2.50          |
| 43 | 8251.00  | 19.50      | 259.00     | 8156.17   | -20.33      | -612.60    | 608.08       | 1.04           | 0.00           | -3.12         |
| 44 | 8313.00  | 19.00      | 254.70     | 8214.71   | -24.97      | -632.49    | 628.46       | 2.42           | -0.81          | -6.94         |
| 45 | 8376.00  | 18.70      | 252.80     | 8274.33   | -30.66      | -652.03    | 648.65       | 1.08           | -0.48          | -3.02         |
| 46 | 8440.00  | 18.40      | 256.40     | 8335.01   | -36.07      | -671.65    | 668.88       | 1.85           | -0.47          | 5.62          |
| 47 | 8503.00  | 18.50      | 257.60     | 8394.77   | -40.56      | -691.08    | 688.77       | 0.62           | 0.16           | 1.90          |
| 48 | 8567.00  | 18.30      | 257.20     | 8455.50   | -44.96      | -710.79    | 708.94       | 0.37           | -0.31          | -0.62         |
| 49 | 8630.00  | 18.40      | 257.60     | 8515.29   | -49.29      | -730.15    | 728.73       | 0.26           | 0.16           | 0.63          |
| 50 | 8695.00  | 18.40      | 257.20     | 8576.97   | -53.76      | -750.17    | 749.21       | 0.19           | 0.00           | -0.62         |
| 51 | 8758.00  | 18.60      | 256.80     | 8636.71   | -58.26      | -769.65    | 769.16       | 0.38           | 0.32           | -0.63         |
| 52 | 8839.00  | 17.90      | 257.50     | 8713.64   | -63.91      | -794.38    | 794.47       | 0.91           | -0.86          | 0.86          |
| 53 | 8903.00  | 16.50      | 259.00     | 8774.78   | -67.77      | -812.91    | 813.37       | 2.29           | -2.19          | 2.34          |
| 54 | 8966.49  | 17.10      | 258.70     | 8835.56   | -71.32      | -830.91    | 831.71       | 0.95           | 0.95           | -0.47         |
| 55 | 9030.00  | 18.20      | 259.70     | 8896.08   | -74.92      | -849.82    | 850.96       | 1.80           | 1.73           | 1.57          |
| 56 | 9094.00  | 18.40      | 259.50     | 8956.84   | -78.55      | -869.59    | 871.05       | 0.33           | 0.31           | -0.31         |
| 57 | 9158.00  | 17.80      | 260.10     | 9017.67   | -82.07      | -889.16    | 890.93       | 0.98           | -0.94          | 0.94          |
| 58 | 9221.00  | 17.40      | 257.00     | 9077.72   | -85.85      | -907.82    | 909.95       | 1.62           | -0.63          | -4.92         |
| 59 | 9285.00  | 17.40      | 250.60     | 9138.80   | -91.18      | -926.17    | 928.92       | 2.99           | 0.00           | -10.00        |
| 60 | 9348.00  | 17.90      | 251.90     | 9198.84   | -97.31      | -944.26    | 947.75       | 1.01           | 0.79           | 2.06          |
| 61 | 9411.00  | 17.70      | 258.10     | 9258.83   | -102.30     | -962.84    | 966.88       | 3.02           | -0.32          | 9.84          |
| 62 | 9475.00  | 17.60      | 260.80     | 9319.81   | -105.85     | -981.91    | 986.27       | 1.29           | -0.16          | 4.22          |
| 63 | 9539.00  | 17.50      | 260.00     | 9380.84   | -109.07     | -1000.94   | 1005.57      | 0.41           | -0.16          | -1.25         |
| 64 | 9602.00  | 17.60      | 259.30     | 9440.90   | -112.48     | -1019.62   | 1024.56      | 0.37           | 0.16           | -1.11         |
| 65 | 9666.00  | 18.00      | 257.40     | 9501.84   | -116.44     | -1038.78   | 1044.11      | 1.10           | 0.63           | -2.97         |

**COMPUTALOG**

Drilling Services

Client : MEWBOURNE OIL CO.  
Well : ESPERANZA 19 #2  
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Page: 3  
Date : 2004/09/08  
File : 4002075

UWI #:

**Vertical Section Calculated Along Azimuth 260.88°****KB Elevation = 18.50ft****GR. Elevation = 3190.00ft**

|    | MD<br>ft | Inc<br>deg | Azi<br>deg | TVD<br>ft | North<br>ft | East<br>ft | V'Sect<br>ft | D'Leg<br>°/100 | Build<br>°/100 | Turn<br>°/100 |
|----|----------|------------|------------|-----------|-------------|------------|--------------|----------------|----------------|---------------|
| 66 | 9730.00  | 18.00      | 259.40     | 9562.71   | -120.41     | -1058.15   | 1063.86      | 0.97           | 0.00           | 3.12          |
| 67 | 9792.00  | 18.00      | 260.60     | 9621.67   | -123.74     | -1077.02   | 1083.02      | 0.60           | 0.00           | 1.94          |
| 68 | 9856.00  | 18.50      | 259.60     | 9682.45   | -127.19     | -1096.76   | 1103.06      | 0.92           | 0.78           | -1.56         |
| 69 | 9920.00  | 17.70      | 259.00     | 9743.29   | -130.88     | -1116.30   | 1122.93      | 1.28           | -1.25          | -0.94         |
| 70 | 9984.00  | 17.00      | 259.00     | 9804.37   | -134.52     | -1135.04   | 1142.01      | 1.09           | -1.09          | 0.00          |
| 71 | 10047.00 | 17.90      | 256.30     | 9864.48   | -138.57     | -1153.48   | 1160.86      | 1.92           | 1.43           | -4.29         |
| 72 | 10111.00 | 19.90      | 254.10     | 9925.02   | -143.88     | -1173.52   | 1181.49      | 3.32           | 3.12           | -3.44         |
| 73 | 10175.00 | 19.50      | 256.30     | 9985.28   | -149.40     | -1194.37   | 1202.95      | 1.32           | -0.62          | 3.44          |
| 74 | 10239.00 | 18.30      | 258.80     | 10045.83  | -153.88     | -1214.61   | 1223.64      | 2.26           | -1.88          | 3.91          |
| 75 | 10302.00 | 18.60      | 257.00     | 10105.59  | -158.06     | -1234.10   | 1243.55      | 1.02           | 0.48           | -2.86         |
| 76 | 10363.00 | 18.80      | 256.10     | 10163.37  | -162.61     | -1253.12   | 1263.05      | 0.58           | 0.33           | -1.48         |
| 77 | 10426.00 | 18.50      | 257.50     | 10223.06  | -167.21     | -1272.73   | 1283.14      | 0.86           | -0.48          | 2.22          |
| 78 | 10487.00 | 17.70      | 257.40     | 10281.04  | -171.33     | -1291.23   | 1302.06      | 1.31           | -1.31          | -0.16         |
| 79 | 10549.00 | 17.00      | 259.10     | 10340.22  | -175.10     | -1309.33   | 1320.53      | 1.39           | -1.13          | 2.74          |
| 80 | 10611.00 | 18.40      | 258.40     | 10399.28  | -178.78     | -1327.81   | 1339.37      | 2.28           | 2.26           | -1.13         |
| 81 | 10673.00 | 18.30      | 258.10     | 10458.13  | -182.76     | -1346.92   | 1358.86      | 0.22           | -0.16          | -0.48         |
| 82 | 10735.00 | 17.70      | 257.20     | 10517.10  | -186.85     | -1365.64   | 1377.99      | 1.07           | -0.97          | -1.45         |
| 83 | 10798.00 | 17.20      | 254.90     | 10577.20  | -191.40     | -1383.97   | 1396.81      | 1.35           | -0.79          | -3.65         |
| 84 | 10860.00 | 18.50      | 253.10     | 10636.21  | -196.65     | -1402.23   | 1415.68      | 2.28           | 2.10           | -2.90         |
| 85 | 10922.00 | 17.90      | 253.70     | 10695.11  | -202.18     | -1420.79   | 1434.88      | 1.01           | -0.97          | 0.97          |
| 86 | 10985.00 | 18.50      | 255.30     | 10754.96  | -207.43     | -1439.75   | 1454.43      | 1.24           | 0.95           | 2.54          |
| 87 | 11047.00 | 18.90      | 254.80     | 10813.69  | -212.56     | -1458.96   | 1474.21      | 0.70           | 0.65           | -0.81         |
| 88 | 11108.00 | 17.90      | 255.70     | 10871.57  | -217.47     | -1477.58   | 1493.37      | 1.70           | -1.64          | 1.48          |
| 89 | 11199.00 | 19.40      | 258.80     | 10957.79  | -223.86     | -1505.95   | 1522.40      | 1.98           | 1.65           | 3.41          |
| 90 | 11259.00 | 18.90      | 257.50     | 11014.47  | -227.90     | -1525.22   | 1542.06      | 1.10           | -0.83          | -2.17         |
| 91 | 11321.00 | 17.90      | 259.50     | 11073.30  | -231.81     | -1544.39   | 1561.61      | 1.91           | -1.61          | 3.23          |
| 92 | 11381.00 | 18.40      | 257.90     | 11130.31  | -235.47     | -1562.72   | 1580.28      | 1.18           | 0.83           | -2.67         |
| 93 | 11443.00 | 19.10      | 258.20     | 11189.02  | -239.60     | -1582.21   | 1600.19      | 1.14           | 1.13           | 0.48          |
| 94 | 11506.00 | 19.50      | 254.10     | 11248.48  | -244.59     | -1602.42   | 1620.93      | 2.24           | 0.63           | -6.51         |
| 95 | 11568.00 | 19.10      | 253.50     | 11307.00  | -250.30     | -1622.09   | 1641.26      | 0.72           | -0.65          | -0.97         |
| 96 | 11631.00 | 18.70      | 253.90     | 11366.60  | -256.03     | -1641.68   | 1661.51      | 0.67           | -0.63          | 0.63          |
| 97 | 11693.00 | 18.30      | 255.90     | 11425.40  | -261.16     | -1660.67   | 1681.07      | 1.21           | -0.65          | 3.23          |
| 98 | 11755.00 | 17.80      | 259.00     | 11484.35  | -265.34     | -1679.41   | 1700.24      | 1.75           | -0.81          | 5.00          |
| 99 | 11818.00 | 16.80      | 263.40     | 11544.50  | -268.22     | -1697.91   | 1718.96      | 2.61           | -1.59          | 6.98          |

**COMPUTALOG**

Drilling Services

Client : MEWBOURNE OIL CO.  
Well : ESPERANZA 19 #2  
Location : EDY CO. NEW MEXICO  
License :  
Comment : True North

Page: 4  
Date : 2004/09/08  
File : 4002075

UWI #:

**Vertical Section Calculated Along Azimuth 260.88°****KB Elevation = 18.50ft GR. Elevation = 3190.00ft**

|     | MD<br>ft | Inc<br>deg | Azi<br>deg | TVD<br>ft | North<br>ft | East<br>ft | V'Sect<br>ft | D'Leg<br>°/100 | Build<br>°/100 | Turn<br>°/100 |
|-----|----------|------------|------------|-----------|-------------|------------|--------------|----------------|----------------|---------------|
| 100 | 11850.00 | 16.90      | 265.90     | 11575.13  | -269.09     | -1707.14   | 1728.21      | 2.29           | 0.31           | 7.81          |

**Extrapolation to bit @ 11890' T.D**

|     |          |       |        |          |         |          |         |      |      |      |
|-----|----------|-------|--------|----------|---------|----------|---------|------|------|------|
| EXT | 11890.00 | 17.02 | 269.02 | 11613.39 | -269.60 | -1718.80 | 1739.80 | 2.30 | 0.31 | 7.81 |
|-----|----------|-------|--------|----------|---------|----------|---------|------|------|------|

**Bottom Hole Closure 1739.81ft Along Azimuth 261.09°**