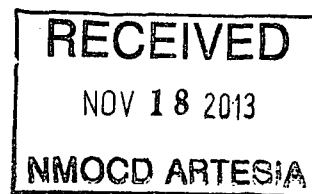




November 13, 2013

Oil Conservation Division  
State of New Mexico  
811 S. First St.  
Artesia, New Mexico 88210



Dear District 2 – Artesia

Re: Bopco, LP  
PLU Big Sinks 24-25-30 USA #1Y (WB2)  
Eddy County, NM  
API #30-015-41693  
Job No. 1311370

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced well by Phoenix Technology Services, Inc. (P-5 No. 606018). Other information required by your office is as follows:

| Name & Title of Surveyor | Drain Hole Number | Surveyed Depths |        | Dates Performed |          | Type of Survey |
|--------------------------|-------------------|-----------------|--------|-----------------|----------|----------------|
|                          |                   | From            | To     | Start           | End      |                |
| Mike Layfield            | 1Y                | 9,225           | 11,069 | 10/15/13        | 10/31/13 | MWD            |

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

*Dolly Bush*

Dolly Bush  
Operations Administrator

Certified mail receipt number: 7011 1570 0001 4364 8844

RECEIVED

NOV 18 2013

PHOENIX TECHNOLOGY SERVICES INC. TESIA  
SURVEY DATA CERTIFICATION



PHOENIX  
TECHNOLOGY SERVICES

PHOENIX JOB NUMBER 1311370

OPERATOR Bopco, LP

WELL NAME PLU Big Sinks 24-25-30 USA #1Y (WB2)

COUNTY & STATE Eddy County, NM

API WELL NUMBER 30-015-41693

PROPOSED DIRECTION 181.03

| TIE-IN DATA       |                   |        |         |              |              |                |
|-------------------|-------------------|--------|---------|--------------|--------------|----------------|
| MEASURED<br>DEPTH | VERTICAL<br>DEPTH | INCLIN | AZIMUTH | N-S<br>COORD | E-W<br>COORD | DATA<br>SOURCE |
| 9,195 ft          | 9,112.36 ft       | 53.89  | 178.94  | 248 S        | 13.64 E      | Gyro Data MWD  |

| FIRST<br>SURVEY<br>DATE | FIRST<br>SURVEY<br>DEPTH | INCLIN | AZIMUTH |
|-------------------------|--------------------------|--------|---------|
| 15-Oct-13               | 9,225 ft                 | 56.4   | 179     |

| SURVEY INSTRUMENT<br>TYPE |
|---------------------------|
| Phoenix P360              |

| LAST<br>SURVEY<br>DATE | LAST<br>SURVEY<br>DEPTH | INCLIN | AZIMUTH |
|------------------------|-------------------------|--------|---------|
| 31-Oct-13              | 11,069 ft               | 90.2   | 180.3   |

TO THE BEST OF MY KNOWLEDGE I  
CERTIFY THIS SURVEY DATA TO BE  
TRUE AND CORRECT.

| PROJECTED<br>TD SURVEY<br>DATE | PROJECTED<br>TD SURVEY<br>DEPTH | INCLIN | AZIMUTH |
|--------------------------------|---------------------------------|--------|---------|
| 31-Oct-13                      | 11,121 ft                       | 90.2   | 180.3   |

Mike Layfield

PRINT YOUR NAME ABOVE

Mike Layfield

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

|                       |      |
|-----------------------|------|
| TOTAL CORRECTION USED | 7.16 |
| DECLINATION OR GRID   | Grid |

10/31/2013

TODAY'S DATE

MWD SUPERVISOR 1 Mike Layfield  
MWD SUPERVISOR 2 Justin Amari

DIRECTIONAL DRILLER 1 Casey Hendrix  
DIRECTIONAL DRILLER 2 Jim Tabola

1805 Brittmore Road Houston, Texas 77043 (713)3370609 (Voice), (713)337-0599(Fax)



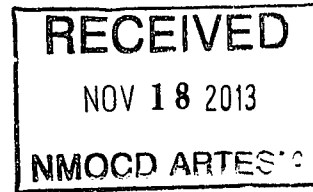
## **BOPCO, L P**

Eddy County, NM (NAD27 NME)

PLU Big Sinks 24-25-30 USA

#1Y

WB2/Job #1311370



Survey: Phoenix WB2 MWD Survey

## **Phoenix Final Survey Report**

12 November, 2013





# Phoenix Technology Services

## Phoenix Final Survey Report



|                  |                             |                                     |                               |
|------------------|-----------------------------|-------------------------------------|-------------------------------|
| <b>Company:</b>  | BOPCO, L.P.                 | <b>Local Co-ordinate Reference:</b> | Well: #1Y                     |
| <b>Project:</b>  | Eddy County, NM (NAD27 NME) | <b>TVD Reference:</b>               | KB @ 3323.00usft (Latshaw 14) |
| <b>Site:</b>     | PLU Big Sinks 24-25-30 USA  | <b>MD Reference:</b>                | KB @ 3323.00usft (Latshaw 14) |
| <b>Well:</b>     | #1Y                         | <b>North Reference:</b>             | Grid                          |
| <b>Wellbore:</b> | WB2/Job #1311370            | <b>Survey Calculation Method:</b>   | Minimum Curvature             |
| <b>Design:</b>   | Surveys (Latshaw 14)        | <b>Database:</b>                    | GCR DB                        |

|             |                                      |               |                |
|-------------|--------------------------------------|---------------|----------------|
| Project     | Eddy County, NM (NAD27 NME)          |               |                |
| 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                  |  |           |           |              |                 | PLU Big Sinks 24-25-30 USA |           |                   |                   |                     |  |
| Site Position:        |  |           | Northing: |              | 408,912.40 usft |                            | Latitude: |                   | 32° 7' 23.72628 N |                     |  |
| From:                 |  | Map       |           | Easting:     |                 | 652,583.20 usft            |           | Longitude:        |                   | 103° 50' 25.66760 W |  |
| Position Uncertainty: |  | 0.00 usft |           | Slot Radius: |                 | 13-3/16"                   |           | Grid Convergence: |                   | 0.26 °              |  |

|                      |       |           |                     |                 |               |                     |
|----------------------|-------|-----------|---------------------|-----------------|---------------|---------------------|
| Well:                | #1Y   |           |                     |                 |               |                     |
| Well Position        | +N/-S | 0.00 usft | Northing:           | 408,914.60 usft | Latitude:     | 32° 7' 23.74572 N   |
|                      | +E/-W | 0.00 usft | Easting:            | 652,634.80 usft | Longitude:    | 103° 50' 25.06747 W |
| Position Uncertainty |       | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,301.00 usft       |

|           |                  |             |                    |                  |                        |
|-----------|------------------|-------------|--------------------|------------------|------------------------|
| Wellbore: | WB2/Job #1311370 |             |                    |                  |                        |
| Magnetics | Model Name       | Sample Date | Declination<br>(°) | Dip Angle<br>(°) | Field Strength<br>(nT) |
|           | IGRF2010_14      | 10/10/13    | 7.42               | 59.99            | 48,295                 |

|                   |                  |                      |        |               |          |
|-------------------|------------------|----------------------|--------|---------------|----------|
| Design            |                  | Surveys (Latshaw 14) |        |               |          |
| Audit Notes:      |                  |                      |        |               |          |
| Version:          | 1.0              | Phase:               | ACTUAL | Tie On Depth: | 9,195.00 |
| Vertical Section: | Depth From (TVD) | +N/-S                | +E/-W  | Direction     |          |
|                   | (usft)           | (usft)               | (usft) | (°)           |          |
|                   | 0.00             | 0.00                 | 0.00   | 180.79        |          |

| Survey Program |              | Date                                | 11/06/13   |                                  |  |
|----------------|--------------|-------------------------------------|------------|----------------------------------|--|
| From<br>(usft) | To<br>(usft) | Survey (Wellbore)                   | Tool Name  | Description                      |  |
| 118.77         | 5,987.00     | Gyrodata (WB1/Job #1311370)         | NS-GYRO-MS | North sensing gyrocompassing m/s |  |
| 6,172.00       | 9,195.00     | Survey 2 (WB1/Job #1311370)         | MWD        | MWD - Standard                   |  |
| 9,195.00       | 11,121.00    | Phoenix WB2 MWD Survey (WB2/Job #13 | MWD        | MWD - Standard                   |  |

|                                 |           |            |                      |            |            |            |               |             |
|---------------------------------|-----------|------------|----------------------|------------|------------|------------|---------------|-------------|
| <b>Survey</b>                   | <b>MD</b> | <b>Inc</b> | <b>Azi (azimuth)</b> | <b>TVD</b> | <b>N/S</b> | <b>E/W</b> | <b>V. Sec</b> | <b>DLeg</b> |
|                                 | (usft)    | (°)        | (°)                  | (usft)     | (usft)     | (usft)     | (usft)        | (°/100usft) |
|                                 | 9,195.00  | 53.89      | 178.94               | 9,112.36   | -248.00    | 13.64      | 247.79        | 0.00        |
| <b>Tie-on to Gyrodata</b>       |           |            |                      |            |            |            |               |             |
|                                 | 9,225.00  | 56.40      | 179.00               | 9,129.51   | -272.61    | 14.09      | 272.39        | 8.37        |
| <b>First Phoenix MWD Survey</b> |           |            |                      |            |            |            |               |             |
|                                 | 9,257.00  | 55.60      | 176.30               | 9,147.40   | -299.11    | 15.17      | 298.88        | 7.43        |
|                                 | 9,289.00  | 54.30      | 173.10               | 9,165.78   | -325.19    | 17.58      | 324.92        | 9.14        |
|                                 | 9,321.00  | 58.50      | 173.40               | 9,183.49   | -351.66    | 20.71      | 351.34        | 13.15       |
|                                 | 9,352.00  | 62.50      | 171.60               | 9,198.75   | -378.40    | 24.24      | 378.03        | 13.86       |
|                                 | 9,384.00  | 66.40      | 170.60               | 9,212.55   | -406.92    | 28.71      | 406.48        | 12.51       |
|                                 | 9,414.00  | 70.20      | 172.20               | 9,223.64   | -434.47    | 32.88      | 433.98        | 13.60       |



Phoenix Technology Services  
Phoenix Final Survey Report



|           |                             |                              |                               |
|-----------|-----------------------------|------------------------------|-------------------------------|
| Company:  | BOPCO, L.P.                 | Local Co-ordinate Reference: | Well #1Y                      |
| Project:  | Eddy County, NM (NAD27 NME) | TVD Reference:               | KB @ 3323.00usft (Latshaw 14) |
| Site:     | PLU Big Sinks 24-25-30 USA  | MD Reference:                | KB @ 3323.00usft (Latshaw 14) |
| Well:     | #1Y                         | North Reference:             | Grid                          |
| Wellbore: | WB2/Job #1311370            | Survey Calculation Method:   | Minimum Curvature             |
| Design:   | Surveys (Latshaw 14)        | Database:                    | GCR.DB                        |

| Survey       |            |                      |               |               |               |                  |                     |  |
|--------------|------------|----------------------|---------------|---------------|---------------|------------------|---------------------|--|
| MD<br>(usft) | Inc<br>(°) | Azi (azimuth)<br>(°) | TVD<br>(usft) | N/S<br>(usft) | E/W<br>(usft) | V. Sec<br>(usft) | DLeg<br>(°/100usft) |  |
| 9,445.00     | 74.60      | 172.10               | 9,233.01      | -463.74       | 36.91         | 463.18           | 14.20               |  |
| 9,477.00     | 79.60      | 172.00               | 9,240.16      | -494.62       | 41.22         | 494.00           | 15.63               |  |
| 9,509.00     | 84.40      | 171.30               | 9,244.61      | -525.96       | 45.82         | 525.28           | 15.16               |  |
| 9,540.00     | 89.60      | 171.80               | 9,246.23      | -556.57       | 50.37         | 555.82           | 16.85               |  |
| 9,643.00     | 90.80      | 180.70               | 9,245.87      | -659.25       | 57.10         | 658.40           | 8.72                |  |
| 9,738.00     | 90.50      | 182.80               | 9,244.79      | -754.19       | 54.20         | 753.37           | 2.23                |  |
| 9,833.00     | 90.20      | 182.50               | 9,244.21      | -849.09       | 49.81         | 848.32           | 0.45                |  |
| 9,928.00     | 89.50      | 182.30               | 9,244.46      | -944.00       | 45.83         | 943.28           | 0.77                |  |
| 10,023.00    | 91.00      | 181.70               | 9,244.05      | -1,038.94     | 42.52         | 1,038.26         | 1.70                |  |
| 10,118.00    | 91.00      | 181.40               | 9,242.39      | -1,133.89     | 39.95         | 1,133.23         | 0.32                |  |
| 10,213.00    | 91.60      | 180.90               | 9,240.23      | -1,228.85     | 38.04         | 1,228.21         | 0.82                |  |
| 10,308.00    | 90.00      | 182.10               | 9,238.91      | -1,323.80     | 35.55         | 1,323.18         | 2.11                |  |
| 10,403.00    | 89.10      | 181.80               | 9,239.65      | -1,418.74     | 32.32         | 1,418.16         | 1.00                |  |
| 10,498.00    | 89.30      | 182.60               | 9,240.98      | -1,513.66     | 28.67         | 1,513.12         | 0.87                |  |
| 10,594.00    | 91.00      | 182.90               | 9,240.73      | -1,609.55     | 24.07         | 1,609.06         | 1.80                |  |
| 10,688.00    | 90.60      | 182.50               | 9,239.41      | -1,703.43     | 19.64         | 1,703.00         | 0.60                |  |
| 10,783.00    | 89.30      | 182.40               | 9,239.50      | -1,798.34     | 15.58         | 1,797.96         | 1.37                |  |
| 10,878.00    | 90.20      | 180.90               | 9,239.91      | -1,893.30     | 12.84         | 1,892.94         | 1.84                |  |
| 10,973.00    | 90.70      | 180.90               | 9,239.17      | -1,988.28     | 11.35         | 1,987.94         | 0.53                |  |
| 11,069.00    | 90.20      | 180.30               | 9,238.41      | -2,084.28     | 10.35         | 2,083.93         | 0.81                |  |
| 11,121.00    | 90.20      | 180.30               | 9,238.23      | -2,136.27     | 10.08         | 2,135.93         | 0.00                |  |
| PTB, WB2     |            |                      |               |               |               |                  |                     |  |

| Survey Annotations          |                             |                   |                 |                          |
|-----------------------------|-----------------------------|-------------------|-----------------|--------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                  |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                          |
| 9,195.00                    | 9,112.36                    | -248.00           | 13.64           | Tie-on to Gyrodata       |
| 9,225.00                    | 9,129.51                    | -272.61           | 14.09           | First Phoenix MWD Survey |
| 11,121.00                   | 9,238.23                    | -2,136.27         | 10.08           | PTB, WB2                 |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_