



# BOPCO, L.P.

Location: Eddy County, NM  
Field (JRU) Quahada Ridge, SE (Delaware)  
Facility James Ranch Unit No. 129H

Slot No. 129H SHL  
Well No. 129H  
Wellbore No. 129H PWB

BAKER  
HUGHES  
INTEQ

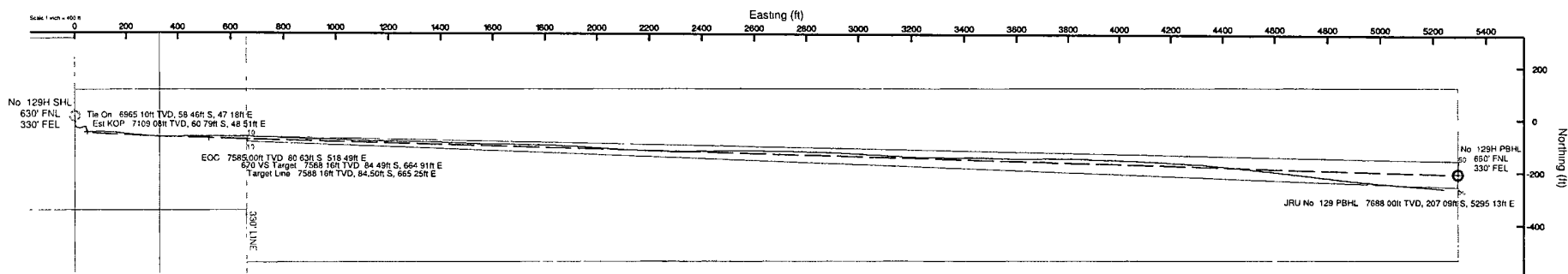
## Well Profile Data

| Design Comment  | MD (ft)  | Inc (°) | Az (°)  | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
|-----------------|----------|---------|---------|----------|--------------|--------------|---------------|---------|
| Tie On          | 6966.00  | 1.069   | 150.383 | 6965.10  | -58.46       | 47.18        | 0.00          | 49.43   |
| End of Tangent  | 7060.00  | 1.069   | 150.383 | 7059.09  | -59.98       | 48.04        | 0.00          | 50.35   |
| Est KOP         | 7110.00  | 1.069   | 150.383 | 7109.08  | -60.79       | 48.51        | 0.00          | 50.84   |
| EOC             | 7850.13  | 88.765  | 91.510  | 7585.00  | -80.63       | 518.49       | 11.92         | 521.25  |
| 670 VS Target   | 7996.63  | 88.765  | 91.510  | 7588.16  | -84.49       | 664.91       | 0.00          | 667.70  |
| Target Line     | 7996.97  | 88.765  | 91.517  | 7588.16  | -84.50       | 665.25       | 2.00          | 668.04  |
| JRU No. 129 PWB | 12629.55 | 88.765  | 91.517  | 7688.00  | -207.09      | 5295.13      | 0.00          | 5299.18 |

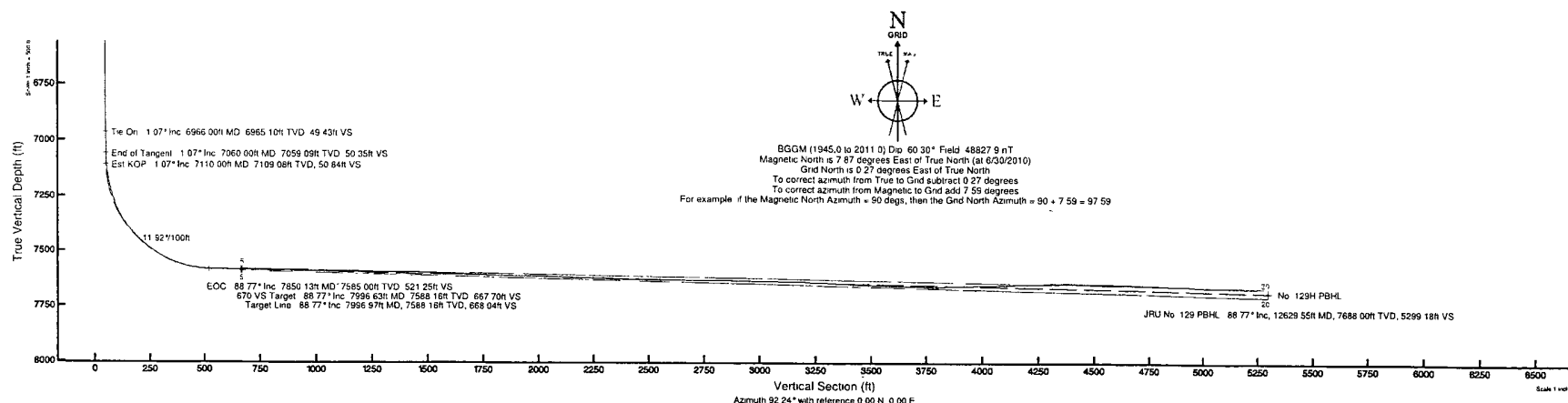
RECEIVED

JUN 06 2011

NMOCD ARTESIA



|                                                                            |                                                                             |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Plot reference wellpath is Plan #1                                         |                                                                             |
| True vertical depths are referenced to Rig on No. 129H SHL (RT)            | Gnd System NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet |
| Measured depths are referenced to Rig on No. 129H SHL (RT)                 | North Reference Gnd north                                                   |
| Rig on No. 129H SHL (RT) to Mean Sea Level 3343 feet                       | Scale True distance                                                         |
| Mean Sea Level to Mud line (Facility James Ranch Unit No. 129H) -3324 feet | Depths are in feet                                                          |
| Coordinates are in feet referenced to SL                                   | Created by gentbry on 3/11/2011                                             |



SUR: A-36-22s-30e, 630/N & 330/E  
BHL: A-31-22s-31e, 716/N & 381/E  
API # 30-015-38288



# Actual Wellpath Report

No. 129H AWP

Page 1 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                    |          |              |
|----------|------------------------------------|----------|--------------|
| Operator | BOPCO, L.P.                        | Slot     | No. 129H SHL |
| Area     | Eddy County, NM                    | Well     | No. 129H     |
| Field    | (JRU) Quahada Ridge, SE (Delaware) | Wellbore | No. 129H AWB |
| Facility | James Ranch Unit No. 129H          |          |              |

## REPORT SETUP INFORMATION

|                     |                                                                  |                      |                             |
|---------------------|------------------------------------------------------------------|----------------------|-----------------------------|
| Projection System   | NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet | Software System      | WellArchitect® 2.0          |
| North Reference     | Grid                                                             | User                 | Gentbry                     |
| Scale               | 0.999937                                                         | Report Generated     | 3/28/2011 at 8:18:58 AM     |
| Convergence at slot | 0.27° East                                                       | Database/Source file | WA Midland/No._129H_AWB.xml |

## WELLPATH LOCATION

|                       | Local coordinates |          | Grid coordinates |                | Geographic coordinates |                 |
|-----------------------|-------------------|----------|------------------|----------------|------------------------|-----------------|
|                       | North[ft]         | East[ft] | Easting[USft]    | Northing[USft] | Latitude               | Longitude       |
| Slot Location         | 0.00              | 0.00     | 697787.92        | 492919.58      | 32°21'14.720"N         | 103°49'36.052"W |
| Facility Reference Pt |                   |          | 697787.92        | 492919.58      | 32°21'14.720"N         | 103°49'36.052"W |
| Field Reference Pt    |                   |          | 696627.35        | 492798.47      | 32°21'13.576"N         | 103°49'49.589"W |

## WELLPATH DATUM

|                          |                          |                                            |                   |
|--------------------------|--------------------------|--------------------------------------------|-------------------|
| Calculation method       | Minimum curvature        | Rig on No. 129H SHL (RT) to GL             | 19.00ft           |
| Horizontal Reference Pt  | SL                       | Rig on No. 129H SHL (RT) to Mean Sea Level | 3343.00ft         |
| Vertical Reference Pt    | Rig on No. 129H SHL (RT) | GL to Mud Line (Facility)                  | 0.00ft            |
| MD Reference Pt          | Rig on No. 129H SHL (RT) | Section Origin                             | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level           | Section Azimuth                            | 92.24°            |



# Actual Wellpath Report

No. 129H AWP

Page 2 of 6



## REFERENCE WELLPATH IDENTIFICATION

|          |                                    |          |              |
|----------|------------------------------------|----------|--------------|
| Operator | BOPCO, L.P.                        | Slot     | No. 129H SHL |
| Area     | Eddy County, NM                    | Well     | No. 129H     |
| Field    | (JRU) Quahada Ridge, SE (Delaware) | Wellbore | No. 129H AWB |
| Facility | James Ranch Unit No. 129H          |          |              |

## WELLPATH DATA (156 stations)

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|----------|
| 0.00       | 0.000              | 218.760        | 0.00        | 0.00              | 0.00          | 0.00         | 697787.92             | 492919.58              | 32°21'14.720"N | 103°49'36.052"W | 0.00             |          |
| 100.00     | 0.340              | 218.760        | 100.00      | -0.18             | -0.23         | -0.19        | 697787.73             | 492919.35              | 32°21'14.718"N | 103°49'36.055"W | 0.34             |          |
| 200.00     | 0.420              | 183.590        | 200.00      | -0.36             | -0.83         | -0.39        | 697787.52             | 492918.75              | 32°21'14.712"N | 103°49'36.057"W | 0.24             |          |
| 300.00     | 0.480              | 186.540        | 299.99      | -0.40             | -1.61         | -0.47        | 697787.45             | 492917.97              | 32°21'14.704"N | 103°49'36.058"W | 0.06             |          |
| 400.00     | 0.810              | 182.170        | 399.99      | -0.43             | -2.73         | -0.54        | 697787.38             | 492916.85              | 32°21'14.693"N | 103°49'36.059"W | 0.33             |          |
| 500.00     | 1.020              | 177.040        | 499.97      | -0.35             | -4.33         | -0.52        | 697787.39             | 492915.25              | 32°21'14.677"N | 103°49'36.059"W | 0.23             |          |
| 541.50     | 1.150              | 171.390        | 541.47      | -0.24             | -5.11         | -0.44        | 697787.48             | 492914.47              | 32°21'14.670"N | 103°49'36.058"W | 0.41             |          |
| 636.00     | 1.230              | 177.120        | 635.95      | 0.03              | -7.06         | -0.25        | 697787.67             | 492912.52              | 32°21'14.650"N | 103°49'36.056"W | 0.15             |          |
| 730.50     | 1.150              | 170.670        | 730.43      | 0.31              | -9.01         | -0.04        | 697787.87             | 492910.57              | 32°21'14.631"N | 103°49'36.053"W | 0.16             |          |
| 825.00     | 1.180              | 187.010        | 824.91      | 0.42              | -10.91        | -0.01        | 697787.91             | 492908.67              | 32°21'14.612"N | 103°49'36.053"W | 0.35             |          |
| 919.40     | 1.110              | 191.700        | 919.29      | 0.19              | -12.77        | -0.31        | 697787.60             | 492906.81              | 32°21'14.594"N | 103°49'36.057"W | 0.12             |          |
| 1013.90    | 0.870              | 186.070        | 1013.77     | -0.01             | -14.38        | -0.57        | 697787.34             | 492905.20              | 32°21'14.578"N | 103°49'36.060"W | 0.27             |          |
| 1108.40    | 0.800              | 168.260        | 1108.26     | 0.10              | -15.74        | -0.51        | 697787.40             | 492903.84              | 32°21'14.565"N | 103°49'36.059"W | 0.28             |          |
| 1202.90    | 0.690              | 175.800        | 1202.76     | 0.33              | -16.95        | -0.34        | 697787.58             | 492902.63              | 32°21'14.553"N | 103°49'36.057"W | 0.16             |          |
| 1297.40    | 0.670              | 168.940        | 1297.25     | 0.52              | -18.06        | -0.19        | 697787.73             | 492901.52              | 32°21'14.542"N | 103°49'36.056"W | 0.09             |          |
| 1391.90    | 0.920              | 161.350        | 1391.74     | 0.91              | -19.32        | 0.16         | 697788.07             | 492900.26              | 32°21'14.529"N | 103°49'36.052"W | 0.29             |          |
| 1486.40    | 0.920              | 153.090        | 1486.23     | 1.55              | -20.72        | 0.74         | 697788.66             | 492898.86              | 32°21'14.515"N | 103°49'36.045"W | 0.14             |          |
| 1580.90    | 0.920              | 156.070        | 1580.72     | 2.26              | -22.09        | 1.40         | 697789.31             | 492897.49              | 32°21'14.502"N | 103°49'36.037"W | 0.05             |          |
| 1675.40    | 0.860              | 162.980        | 1675.21     | 2.83              | -23.46        | 1.91         | 697789.83             | 492896.12              | 32°21'14.488"N | 103°49'36.031"W | 0.13             |          |
| 1769.80    | 0.760              | 168.400        | 1769.60     | 3.21              | -24.75        | 2.24         | 697790.16             | 492894.83              | 32°21'14.475"N | 103°49'36.028"W | 0.13             |          |
| 1864.30    | 0.640              | 176.990        | 1864.09     | 3.41              | -25.89        | 2.40         | 697790.31             | 492893.69              | 32°21'14.464"N | 103°49'36.026"W | 0.17             |          |
| 1958.80    | 0.600              | 171.360        | 1958.58     | 3.55              | -26.91        | 2.50         | 697790.41             | 492892.67              | 32°21'14.454"N | 103°49'36.025"W | 0.08             |          |
| 2053.30    | 0.580              | 198.500        | 2053.08     | 3.51              | -27.85        | 2.42         | 697790.34             | 492891.73              | 32°21'14.445"N | 103°49'36.026"W | 0.29             |          |
| 2147.80    | 0.540              | 170.730        | 2147.57     | 3.46              | -28.74        | 2.34         | 697790.26             | 492890.84              | 32°21'14.436"N | 103°49'36.027"W | 0.29             |          |
| 2242.30    | 0.460              | 170.730        | 2242.07     | 3.63              | -29.56        | 2.48         | 697790.39             | 492890.02              | 32°21'14.428"N | 103°49'36.025"W | 0.08             |          |
| 2336.80    | 0.390              | 209.270        | 2336.57     | 3.56              | -30.21        | 2.38         | 697790.29             | 492889.37              | 32°21'14.421"N | 103°49'36.026"W | 0.30             |          |
| 2431.30    | 0.380              | 165.240        | 2431.07     | 3.50              | -30.80        | 2.30         | 697790.22             | 492888.78              | 32°21'14.415"N | 103°49'36.027"W | 0.31             |          |
| 2525.80    | 0.330              | 167.800        | 2525.56     | 3.66              | -31.37        | 2.44         | 697790.35             | 492888.21              | 32°21'14.410"N | 103°49'36.026"W | 0.06             |          |
| 2620.30    | 0.310              | 164.580        | 2620.06     | 3.81              | -31.88        | 2.56         | 697790.48             | 492887.70              | 32°21'14.405"N | 103°49'36.024"W | 0.03             |          |
| 2714.80    | 0.290              | 192.280        | 2714.56     | 3.84              | -32.36        | 2.58         | 697790.50             | 492887.22              | 32°21'14.400"N | 103°49'36.024"W | 0.15             |          |
| 2809.20    | 0.380              | 206.330        | 2808.96     | 3.67              | -32.87        | 2.39         | 697790.31             | 492886.71              | 32°21'14.395"N | 103°49'36.026"W | 0.13             |          |
| 2903.70    | 0.420              | 219.400        | 2903.46     | 3.34              | -33.42        | 2.03         | 697789.95             | 492886.16              | 32°21'14.389"N | 103°49'36.030"W | 0.11             |          |
| 2998.20    | 0.520              | 203.990        | 2997.95     | 2.97              | -34.08        | 1.64         | 697789.55             | 492885.50              | 32°21'14.383"N | 103°49'36.035"W | 0.17             |          |
| 3092.70    | 0.610              | 178.330        | 3092.45     | 2.85              | -34.97        | 1.48         | 697789.39             | 492884.61              | 32°21'14.374"N | 103°49'36.037"W | 0.28             |          |
| 3187.20    | 0.840              | 157.750        | 3186.94     | 3.17              | -36.12        | 1.76         | 697789.67             | 492883.46              | 32°21'14.363"N | 103°49'36.034"W | 0.36             |          |
| 3281.70    | 1.050              | 143.710        | 3281.43     | 3.99              | -37.46        | 2.53         | 697790.45             | 492882.12              | 32°21'14.350"N | 103°49'36.025"W | 0.33             |          |
| 3376.20    | 1.370              | 142.150        | 3375.91     | 5.26              | -39.05        | 3.74         | 697791.65             | 492880.53              | 32°21'14.334"N | 103°49'36.011"W | 0.34             |          |
| 3470.70    | 1.790              | 131.930        | 3470.37     | 7.12              | -40.93        | 5.53         | 697793.44             | 492878.66              | 32°21'14.315"N | 103°49'35.990"W | 0.53             |          |
| 3565.20    | 2.590              | 118.690        | 3564.80     | 10.17             | -42.94        | 8.50         | 697796.41             | 492876.64              | 32°21'14.295"N | 103°49'35.956"W | 1.00             |          |
| 3659.70    | 1.680              | 104.070        | 3659.24     | 13.44             | -44.30        | 11.72        | 697799.63             | 492875.28              | 32°21'14.281"N | 103°49'35.918"W | 1.11             |          |
| 3754.10    | 1.390              | 102.870        | 3753.60     | 15.92             | -44.89        | 14.17        | 697802.09             | 492874.69              | 32°21'14.275"N | 103°49'35.890"W | 0.31             |          |
| 3848.60    | 0.850              | 93.070         | 3848.09     | 17.75             | -45.18        | 15.99        | 697803.91             | 492874.40              | 32°21'14.272"N | 103°49'35.868"W | 0.60             |          |
| 3943.10    | 0.690              | 93.920         | 3942.58     | 19.01             | -45.26        | 17.26        | 697805.17             | 492874.32              | 32°21'14.272"N | 103°49'35.854"W | 0.17             |          |
| 4037.60    | 0.730              | 97.520         | 4037.07     | 20.18             | -45.38        | 18.42        | 697806.34             | 492874.20              | 32°21'14.270"N | 103°49'35.840"W | 0.06             |          |
| 4132.10    | 0.710              | 90.840         | 4131.56     | 21.37             | -45.46        | 19.61        | 697807.52             | 492874.12              | 32°21'14.269"N | 103°49'35.826"W | 0.09             |          |



# Actual Wellpath Report

No. 129H AWP

Page 3 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                    |          |              |
|----------|------------------------------------|----------|--------------|
| Operator | BOPCO, L.P.                        | Slot     | No. 129H SHL |
| Area     | Eddy County, NM                    | Well     | No. 129H     |
| Field    | (JRU) Quahada Ridge, SE (Delaware) | Wellbore | No. 129H AWB |
| Facility | James Ranch Unit No. 129H          |          |              |

## WELLPATH DATA (156 stations)

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|----------|
| 4226.60    | 0.730              | 86.920         | 4226.05     | 22.55             | -45.44        | 20.79        | 697808.71             | 492874.14              | 32°21'14.270"N | 103°49'35.812"W | 0.06             |          |
| 4321.10    | 0.810              | 79.650         | 4320.55     | 23.80             | -45.29        | 22.05        | 697809.96             | 492874.29              | 32°21'14.271"N | 103°49'35.798"W | 0.13             |          |
| 4415.60    | 0.740              | 63.820         | 4415.04     | 24.99             | -44.90        | 23.26        | 697811.17             | 492874.68              | 32°21'14.275"N | 103°49'35.784"W | 0.24             |          |
| 4510.10    | 0.950              | 67.390         | 4509.53     | 26.24             | -44.33        | 24.53        | 697812.44             | 492875.25              | 32°21'14.280"N | 103°49'35.769"W | 0.23             |          |
| 4604.60    | 0.950              | 68.060         | 4604.01     | 27.67             | -43.73        | 25.98        | 697813.89             | 492875.85              | 32°21'14.286"N | 103°49'35.752"W | 0.01             |          |
| 4699.00    | 0.950              | 71.380         | 4698.40     | 29.11             | -43.19        | 27.44        | 697815.36             | 492876.39              | 32°21'14.292"N | 103°49'35.735"W | 0.06             |          |
| 4793.50    | 1.070              | 69.920         | 4792.89     | 30.66             | -42.64        | 29.01        | 697816.93             | 492876.94              | 32°21'14.297"N | 103°49'35.716"W | 0.13             |          |
| 4888.00    | 0.930              | 70.850         | 4887.37     | 32.19             | -42.08        | 30.57        | 697818.48             | 492877.50              | 32°21'14.302"N | 103°49'35.698"W | 0.15             |          |
| 4982.50    | 0.800              | 71.120         | 4981.86     | 33.52             | -41.62        | 31.92        | 697819.83             | 492877.96              | 32°21'14.307"N | 103°49'35.683"W | 0.14             |          |
| 5077.00    | 0.760              | 69.680         | 5076.35     | 34.71             | -41.19        | 33.13        | 697821.04             | 492878.39              | 32°21'14.311"N | 103°49'35.668"W | 0.05             |          |
| 5171.50    | 0.880              | 69.690         | 5170.84     | 35.96             | -40.72        | 34.40        | 697822.31             | 492878.86              | 32°21'14.316"N | 103°49'35.654"W | 0.13             |          |
| 5266.00    | 0.840              | 69.540         | 5265.33     | 37.27             | -40.23        | 35.73        | 697823.64             | 492879.36              | 32°21'14.321"N | 103°49'35.638"W | 0.04             |          |
| 5360.50    | 0.790              | 68.390         | 5359.82     | 38.51             | -39.74        | 36.98        | 697824.89             | 492879.84              | 32°21'14.325"N | 103°49'35.623"W | 0.06             |          |
| 5455.00    | 0.740              | 69.180         | 5454.31     | 39.66             | -39.29        | 38.16        | 697826.07             | 492880.29              | 32°21'14.330"N | 103°49'35.610"W | 0.05             |          |
| 5549.40    | 0.510              | 75.920         | 5548.71     | 40.63             | -38.97        | 39.13        | 697827.05             | 492880.61              | 32°21'14.333"N | 103°49'35.598"W | 0.26             |          |
| 5643.90    | 0.400              | 88.850         | 5643.21     | 41.36             | -38.86        | 39.87        | 697827.78             | 492880.72              | 32°21'14.334"N | 103°49'35.590"W | 0.16             |          |
| 5738.40    | 0.460              | 105.440        | 5737.70     | 42.06             | -38.95        | 40.57        | 697828.48             | 492880.63              | 32°21'14.333"N | 103°49'35.582"W | 0.15             |          |
| 5832.90    | 0.540              | 120.870        | 5832.20     | 42.82             | -39.28        | 41.32        | 697829.23             | 492880.30              | 32°21'14.330"N | 103°49'35.573"W | 0.16             |          |
| 5927.40    | 0.590              | 135.070        | 5926.69     | 43.57             | -39.86        | 42.04        | 697829.95             | 492879.73              | 32°21'14.324"N | 103°49'35.564"W | 0.16             |          |
| 6021.90    | 0.740              | 146.630        | 6021.19     | 44.28             | -40.71        | 42.72        | 697830.63             | 492878.87              | 32°21'14.315"N | 103°49'35.557"W | 0.21             |          |
| 6116.40    | 0.930              | 158.800        | 6115.68     | 44.94             | -41.93        | 43.33        | 697831.25             | 492877.65              | 32°21'14.303"N | 103°49'35.550"W | 0.27             |          |
| 6210.90    | 1.150              | 169.190        | 6210.16     | 45.46             | -43.58        | 43.79        | 697831.70             | 492876.00              | 32°21'14.287"N | 103°49'35.544"W | 0.31             |          |
| 6305.40    | 1.340              | 173.400        | 6304.64     | 45.84             | -45.61        | 44.09        | 697832.01             | 492873.97              | 32°21'14.267"N | 103°49'35.541"W | 0.22             |          |
| 6399.90    | 1.320              | 172.950        | 6399.12     | 46.19             | -47.79        | 44.35        | 697832.27             | 492871.79              | 32°21'14.245"N | 103°49'35.538"W | 0.02             |          |
| 6494.40    | 1.220              | 176.630        | 6493.59     | 46.46             | -49.87        | 44.55        | 697832.46             | 492869.71              | 32°21'14.225"N | 103°49'35.536"W | 0.14             |          |
| 6588.80    | 1.150              | 172.510        | 6587.97     | 46.72             | -51.81        | 44.73        | 697832.64             | 492867.77              | 32°21'14.205"N | 103°49'35.534"W | 0.12             |          |
| 6683.30    | 1.150              | 165.500        | 6682.45     | 47.15             | -53.67        | 45.09        | 697833.00             | 492865.91              | 32°21'14.187"N | 103°49'35.530"W | 0.15             |          |
| 6777.80    | 1.090              | 162.150        | 6776.93     | 47.74             | -55.45        | 45.60        | 697833.52             | 492864.14              | 32°21'14.169"N | 103°49'35.524"W | 0.09             |          |
| 6872.30    | 1.000              | 148.190        | 6871.42     | 48.51             | -57.00        | 46.31        | 697834.23             | 492862.58              | 32°21'14.154"N | 103°49'35.516"W | 0.28             |          |
| 6966.80    | 1.070              | 150.400        | 6965.90     | 49.43             | -58.47        | 47.18        | 697835.10             | 492861.11              | 32°21'14.139"N | 103°49'35.506"W | 0.09             |          |
| 7019.00    | 1.000              | 148.600        | 7018.10     | 49.94             | -59.28        | 47.66        | 697835.57             | 492860.30              | 32°21'14.131"N | 103°49'35.500"W | 0.15             |          |
| 7051.00    | 1.300              | 131.100        | 7050.09     | 50.38             | -59.76        | 48.08        | 697835.99             | 492859.82              | 32°21'14.127"N | 103°49'35.495"W | 1.43             |          |
| 7082.00    | 2.700              | 100.400        | 7081.07     | 51.38             | -60.12        | 49.06        | 697836.98             | 492859.46              | 32°21'14.123"N | 103°49'35.484"W | 5.53             |          |
| 7113.00    | 5.000              | 90.600         | 7112.00     | 53.45             | -60.27        | 51.13        | 697839.05             | 492859.31              | 32°21'14.122"N | 103°49'35.460"W | 7.69             |          |
| 7145.00    | 7.600              | 85.000         | 7143.80     | 56.94             | -60.10        | 54.64        | 697842.55             | 492859.48              | 32°21'14.123"N | 103°49'35.419"W | 8.34             |          |
| 7176.00    | 10.300             | 85.000         | 7174.42     | 61.73             | -59.68        | 59.44        | 697847.35             | 492859.90              | 32°21'14.127"N | 103°49'35.363"W | 8.71             |          |
| 7207.00    | 12.700             | 86.200         | 7204.80     | 67.87             | -59.21        | 65.60        | 697853.51             | 492860.37              | 32°21'14.131"N | 103°49'35.291"W | 7.78             |          |
| 7238.00    | 15.300             | 86.300         | 7234.87     | 75.32             | -58.72        | 73.09        | 697861.00             | 492860.86              | 32°21'14.136"N | 103°49'35.204"W | 8.39             |          |
| 7270.00    | 18.500             | 87.600         | 7265.49     | 84.59             | -58.24        | 82.37        | 697870.28             | 492861.35              | 32°21'14.140"N | 103°49'35.095"W | 10.07            |          |
| 7301.00    | 22.300             | 89.200         | 7294.54     | 95.37             | -57.95        | 93.17        | 697881.08             | 492861.63              | 32°21'14.143"N | 103°49'34.969"W | 12.39            |          |
| 7332.00    | 26.200             | 91.300         | 7322.80     | 108.09            | -58.02        | 105.90       | 697893.81             | 492861.56              | 32°21'14.141"N | 103°49'34.821"W | 12.88            |          |
| 7364.00    | 30.300             | 92.900         | 7350.98     | 123.23            | -58.59        | 121.03       | 697908.94             | 492860.99              | 32°21'14.135"N | 103°49'34.645"W | 13.03            |          |
| 7395.00    | 34.600             | 94.400         | 7377.14     | 139.85            | -59.66        | 137.63       | 697925.53             | 492859.92              | 32°21'14.123"N | 103°49'34.451"W | 14.11            |          |
| 7427.00    | 38.700             | 95.900         | 7402.80     | 158.92            | -61.39        | 156.64       | 697944.55             | 492858.19              | 32°21'14.105"N | 103°49'34.230"W | 13.11            |          |
| 7459.00    | 42.800             | 96.000         | 7427.04     | 179.76            | -63.55        | 177.41       | 697965.32             | 492856.03              | 32°21'14.083"N | 103°49'33.988"W | 12.81            |          |



# Actual Wellpath Report

No. 129H AWP

Page 4 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                    |          |              |
|----------|------------------------------------|----------|--------------|
| Operator | BOPCO, L.P.                        | Slot     | No. 129H SHL |
| Area     | Eddy County, NM                    | Well     | No. 129H     |
| Field    | (JRU) Quahada Ridge, SE (Delaware) | Wellbore | No. 129H AWB |
| Facility | James Ranch Unit No. 129H          |          |              |

## WELLPATH DATA (156 stations)

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] | Comments |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|----------|
| 7490.00    | 46.500             | 94.300         | 7449.09     | 201.52            | -65.50        | 199.11       | 697987.01             | 492854.08              | 32°21'14.063"N | 103°49'33.735"W | 12.54            |          |
| 7522.00    | 49.100             | 95.300         | 7470.59     | 225.20            | -67.49        | 222.73       | 698010.63             | 492852.10              | 32°21'14.042"N | 103°49'33.460"W | 8.45             |          |
| 7553.00    | 52.800             | 95.200         | 7490.11     | 249.23            | -69.69        | 246.70       | 698034.60             | 492849.89              | 32°21'14.019"N | 103°49'33.180"W | 11.94            |          |
| 7585.00    | 56.900             | 94.500         | 7508.53     | 275.36            | -71.90        | 272.76       | 698060.66             | 492847.69              | 32°21'13.996"N | 103°49'32.877"W | 12.94            |          |
| 7616.00    | 60.900             | 94.300         | 7524.54     | 301.88            | -73.93        | 299.22       | 698087.12             | 492845.65              | 32°21'13.975"N | 103°49'32.568"W | 12.92            |          |
| 7646.00    | 65.100             | 94.200         | 7538.16     | 328.59            | -75.91        | 325.87       | 698113.77             | 492843.67              | 32°21'13.954"N | 103°49'32.258"W | 14.00            |          |
| 7678.00    | 68.300             | 89.200         | 7550.82     | 357.96            | -76.77        | 355.24       | 698143.13             | 492842.82              | 32°21'13.944"N | 103°49'31.916"W | 17.49            |          |
| 7709.00    | 71.700             | 88.200         | 7561.42     | 387.03            | -76.10        | 384.35       | 698172.24             | 492843.48              | 32°21'13.949"N | 103°49'31.576"W | 11.38            |          |
| 7739.00    | 75.600             | 88.100         | 7569.86     | 415.74            | -75.17        | 413.12       | 698201.01             | 492844.41              | 32°21'13.957"N | 103°49'31.241"W | 13.00            |          |
| 7771.00    | 80.400             | 88.900         | 7576.52     | 446.97            | -74.36        | 444.40       | 698232.29             | 492845.23              | 32°21'13.964"N | 103°49'30.876"W | 15.20            |          |
| 7802.00    | 83.500             | 89.600         | 7580.86     | 477.62            | -73.96        | 475.09       | 698262.97             | 492845.63              | 32°21'13.966"N | 103°49'30.518"W | 10.25            |          |
| 7833.00    | 86.100             | 90.000         | 7583.67     | 508.46            | -73.85        | 505.96       | 698293.84             | 492845.73              | 32°21'13.966"N | 103°49'30.158"W | 8.48             |          |
| 7864.00    | 89.300             | 90.500         | 7584.91     | 539.41            | -73.98        | 536.93       | 698324.81             | 492845.60              | 32°21'13.963"N | 103°49'29.797"W | 10.45            |          |
| 7896.00    | 89.700             | 90.200         | 7585.19     | 571.39            | -74.18        | 568.93       | 698356.81             | 492845.40              | 32°21'13.960"N | 103°49'29.424"W | 1.56             |          |
| 7926.00    | 88.600             | 89.500         | 7585.63     | 601.36            | -74.10        | 598.92       | 698386.80             | 492845.48              | 32°21'13.959"N | 103°49'29.075"W | 4.35             |          |
| 7950.00    | 87.900             | 89.500         | 7586.37     | 625.32            | -73.89        | 622.91       | 698410.79             | 492845.69              | 32°21'13.960"N | 103°49'28.795"W | 2.92             |          |
| 8026.00    | 89.300             | 92.700         | 7588.22     | 701.27            | -75.35        | 698.86       | 698486.73             | 492844.23              | 32°21'13.942"N | 103°49'27.910"W | 4.59             |          |
| 8090.00    | 89.400             | 91.900         | 7588.95     | 765.27            | -77.92        | 762.81       | 698550.67             | 492841.67              | 32°21'13.913"N | 103°49'27.164"W | 1.26             |          |
| 8152.00    | 90.700             | 93.300         | 7588.90     | 827.26            | -80.73        | 824.74       | 698612.60             | 492838.85              | 32°21'13.883"N | 103°49'26.443"W | 3.08             |          |
| 8248.00    | 86.100             | 89.800         | 7591.58     | 923.18            | -83.33        | 920.63       | 698708.48             | 492836.26              | 32°21'13.853"N | 103°49'25.325"W | 6.02             |          |
| 8344.00    | 90.100             | 93.400         | 7594.76     | 1019.09           | -86.01        | 1016.50      | 698804.35             | 492833.57              | 32°21'13.821"N | 103°49'24.208"W | 5.60             |          |
| 8440.00    | 90.000             | 91.800         | 7594.68     | 1115.08           | -90.36        | 1112.40      | 698900.24             | 492829.22              | 32°21'13.774"N | 103°49'23.090"W | 1.67             |          |
| 8535.00    | 89.100             | 89.900         | 7595.42     | 1210.04           | -91.77        | 1207.38      | 698995.22             | 492827.81              | 32°21'13.755"N | 103°49'21.983"W | 2.21             |          |
| 8630.00    | 89.900             | 91.600         | 7596.25     | 1305.00           | -93.02        | 1302.36      | 699090.19             | 492826.57              | 32°21'13.739"N | 103°49'20.876"W | 1.98             |          |
| 8725.00    | 88.700             | 91.400         | 7597.41     | 1399.99           | -95.50        | 1397.32      | 699185.15             | 492824.08              | 32°21'13.710"N | 103°49'19.769"W | 1.28             |          |
| 8821.00    | 88.300             | 92.700         | 7599.93     | 1495.95           | -98.94        | 1493.23      | 699281.04             | 492820.65              | 32°21'13.671"N | 103°49'18.651"W | 1.42             |          |
| 8916.00    | 87.200             | 90.900         | 7603.66     | 1590.87           | -101.92       | 1588.10      | 699375.91             | 492817.67              | 32°21'13.637"N | 103°49'17.545"W | 2.22             |          |
| 9011.00    | 88.200             | 90.700         | 7607.47     | 1685.76           | -103.24       | 1683.01      | 699470.82             | 492816.34              | 32°21'13.619"N | 103°49'16.439"W | 1.07             |          |
| 9107.00    | 88.100             | 91.300         | 7610.57     | 1781.69           | -104.92       | 1778.95      | 699566.75             | 492814.67              | 32°21'13.598"N | 103°49'15.321"W | 0.63             |          |
| 9203.00    | 88.200             | 92.600         | 7613.67     | 1877.64           | -108.18       | 1874.84      | 699662.63             | 492811.40              | 32°21'13.561"N | 103°49'14.203"W | 1.36             |          |
| 9298.00    | 89.700             | 93.900         | 7615.41     | 1972.60           | -113.57       | 1969.67      | 699757.45             | 492806.02              | 32°21'13.504"N | 103°49'13.098"W | 2.09             |          |
| 9395.00    | 87.400             | 93.400         | 7617.86     | 2069.53           | -119.74       | 2066.43      | 699854.21             | 492799.84              | 32°21'13.438"N | 103°49'11.970"W | 2.43             |          |
| 9490.00    | 88.300             | 92.600         | 7621.43     | 2164.46           | -124.71       | 2161.23      | 699949.01             | 492794.88              | 32°21'13.384"N | 103°49'10.865"W | 1.27             |          |
| 9585.00    | 87.900             | 91.300         | 7624.58     | 2259.40           | -127.94       | 2256.12      | 700043.89             | 492791.65              | 32°21'13.348"N | 103°49'09.760"W | 1.43             |          |
| 9681.00    | 88.400             | 89.100         | 7627.68     | 2355.28           | -128.27       | 2352.07      | 700139.83             | 492791.31              | 32°21'13.340"N | 103°49'08.641"W | 2.35             |          |
| 9776.00    | 88.600             | 88.700         | 7630.16     | 2450.09           | -126.45       | 2447.02      | 700234.77             | 492793.13              | 32°21'13.354"N | 103°49'07.534"W | 0.47             |          |
| 9871.00    | 89.500             | 89.500         | 7631.74     | 2544.93           | -124.96       | 2541.99      | 700329.74             | 492794.63              | 32°21'13.364"N | 103°49'06.427"W | 1.27             |          |
| 9981.00    | 89.700             | 91.500         | 7632.50     | 2654.87           | -125.92       | 2651.98      | 700439.72             | 492793.67              | 32°21'13.349"N | 103°49'05.145"W | 1.83             |          |
| 10078.00   | 89.500             | 90.700         | 7633.18     | 2751.85           | -127.78       | 2748.96      | 700536.69             | 492791.80              | 32°21'13.326"N | 103°49'04.014"W | 0.85             |          |
| 10174.00   | 88.400             | 91.700         | 7634.94     | 2847.82           | -129.79       | 2844.92      | 700632.65             | 492789.79              | 32°21'13.302"N | 103°49'02.896"W | 1.55             |          |
| 10270.00   | 88.800             | 92.400         | 7637.29     | 2943.79           | -133.22       | 2940.83      | 700728.55             | 492786.36              | 32°21'13.263"N | 103°49'01.778"W | 0.84             |          |
| 10366.00   | 88.900             | 93.200         | 7639.21     | 3039.76           | -137.91       | 3036.69      | 700824.41             | 492781.67              | 32°21'13.212"N | 103°49'00.661"W | 0.84             |          |
| 10461.00   | 89.400             | 93.200         | 7640.62     | 3134.74           | -143.22       | 3131.53      | 700919.25             | 492776.37              | 32°21'13.155"N | 103°48'59.556"W | 0.53             |          |
| 10556.00   | 88.300             | 91.700         | 7642.53     | 3229.71           | -147.28       | 3226.42      | 701014.13             | 492772.31              | 32°21'13.110"N | 103°48'58.450"W | 1.96             |          |
| 10652.00   | 87.300             | 90.500         | 7646.21     | 3325.62           | -149.12       | 3322.33      | 701110.03             | 492770.47              | 32°21'13.088"N | 103°48'57.332"W | 1.63             |          |





# Actual Wellpath Report

No. 129H AWP

Page 5 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                    |          |              |
|----------|------------------------------------|----------|--------------|
| Operator | BOPCO, L.P.                        | Slot     | No. 129H SHL |
| Area     | Eddy County, NM                    | Well     | No. 129H     |
| Field    | (JRU) Quahada Ridge, SE (Delaware) | Wellbore | No. 129H AWP |
| Facility | James Ranch Unit No. 129H          |          |              |

## WELLPATH DATA (156 stations)

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | DLS<br>[°/100ft] | Comments          |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|------------------|-------------------|
| 10749.00   | 86.200             | 89.200         | 7651.71     | 3422.38           | -148.87       | 3419.17      | 701206.86             | 492770.72              | 32°21'13.085"N | 103°48'56.203"W | 1.75             |                   |
| 10843.00   | 89.000             | 92.800         | 7655.65     | 3516.25           | -150.51       | 3513.05      | 701300.74             | 492769.08              | 32°21'13.065"N | 103°48'55.109"W | 4.85             |                   |
| 10939.00   | 88.600             | 90.100         | 7657.66     | 3612.21           | -152.94       | 3608.99      | 701396.67             | 492766.65              | 32°21'13.036"N | 103°48'53.990"W | 2.84             |                   |
| 11035.00   | 87.800             | 88.400         | 7660.68     | 3708.03           | -151.68       | 3704.93      | 701492.60             | 492767.91              | 32°21'13.044"N | 103°48'52.872"W | 1.96             |                   |
| 11130.00   | 90.800             | 91.300         | 7661.84     | 3802.92           | -151.43       | 3799.90      | 701587.57             | 492768.16              | 32°21'13.042"N | 103°48'51.765"W | 4.39             |                   |
| 11226.00   | 92.700             | 92.500         | 7658.91     | 3898.86           | -154.61       | 3895.80      | 701683.46             | 492764.98              | 32°21'13.006"N | 103°48'50.647"W | 2.34             |                   |
| 11322.00   | 91.100             | 91.300         | 7655.72     | 3994.80           | -157.79       | 3991.69      | 701779.34             | 492761.80              | 32°21'12.970"N | 103°48'49.530"W | 2.08             |                   |
| 11417.00   | 91.800             | 92.500         | 7653.32     | 4089.77           | -160.94       | 4086.60      | 701874.25             | 492758.65              | 32°21'12.934"N | 103°48'48.423"W | 1.46             |                   |
| 11512.00   | 91.600             | 93.200         | 7650.50     | 4184.72           | -165.66       | 4181.44      | 701969.09             | 492753.93              | 32°21'12.883"N | 103°48'47.318"W | 0.77             |                   |
| 11607.00   | 92.000             | 92.800         | 7647.52     | 4279.67           | -170.63       | 4276.26      | 702063.90             | 492748.96              | 32°21'12.829"N | 103°48'46.213"W | 0.60             |                   |
| 11702.00   | 89.600             | 95.400         | 7646.19     | 4374.59           | -177.42       | 4371.00      | 702158.63             | 492742.17              | 32°21'12.757"N | 103°48'45.109"W | 3.72             |                   |
| 11799.00   | 89.200             | 95.400         | 7647.21     | 4471.44           | -186.55       | 4467.56      | 702255.19             | 492733.04              | 32°21'12.662"N | 103°48'43.984"W | 0.41             |                   |
| 11894.00   | 88.600             | 96.200         | 7649.03     | 4566.24           | -196.15       | 4562.06      | 702349.68             | 492723.44              | 32°21'12.563"N | 103°48'42.883"W | 1.05             |                   |
| 11989.00   | 88.200             | 96.300         | 7651.68     | 4660.97           | -206.49       | 4656.45      | 702444.07             | 492713.10              | 32°21'12.456"N | 103°48'41.783"W | 0.43             |                   |
| 12084.00   | 87.500             | 96.300         | 7655.25     | 4755.66           | -216.91       | 4750.81      | 702538.42             | 492702.69              | 32°21'12.348"N | 103°48'40.684"W | 0.74             |                   |
| 12179.00   | 88.700             | 97.100         | 7658.40     | 4850.32           | -227.98       | 4845.11      | 702632.71             | 492691.61              | 32°21'12.234"N | 103°48'39.585"W | 1.52             |                   |
| 12275.00   | 87.700             | 95.000         | 7661.41     | 4946.05           | -238.10       | 4940.52      | 702728.12             | 492681.50              | 32°21'12.129"N | 103°48'38.474"W | 2.42             |                   |
| 12369.00   | 88.200             | 95.000         | 7664.78     | 5039.88           | -246.28       | 5034.10      | 702821.69             | 492673.31              | 32°21'12.044"N | 103°48'37.383"W | 0.53             |                   |
| 12465.00   | 89.300             | 94.400         | 7666.87     | 5135.77           | -254.15       | 5129.76      | 702917.34             | 492665.45              | 32°21'11.961"N | 103°48'36.269"W | 1.31             |                   |
| 12529.00   | 89.200             | 94.700         | 7667.71     | 5199.71           | -259.22       | 5193.55      | 702981.13             | 492660.37              | 32°21'11.908"N | 103°48'35.525"W | 0.49             |                   |
| 12580.00   | 89.200             | 94.700         | 7668.42     | 5250.66           | -263.40       | 5244.37      | 703031.95             | 492656.19              | 32°21'11.864"N | 103°48'34.933"W | 0.00             | Projection to Bit |



# Actual Wellpath Report

No. 129H AWP

Page 6 of 6



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                                    |          |              |
|----------|------------------------------------|----------|--------------|
| Operator | BOPCO, L.P.                        | Slot     | No. 129H SHL |
| Area     | Eddy County, NM                    | Well     | No. 129H     |
| Field    | (JRU) Quahada Ridge, SE (Delaware) | Wellbore | No. 129H AWB |
| Facility | James Ranch Unit No. 129H          |          |              |

## TARGETS

| Name          | MD<br>[ft] | TVD<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | Shape |
|---------------|------------|-------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|-------|
| Fairway       |            | 7588.00     | -88.40        | 660.00       | 698447.87             | 492831.18              | 32°21'13.815"N | 103°49'28.364"W | point |
| Target 1      |            | 7588.00     | -26.19        | 669.49       | 698457.36             | 492893.39              | 32°21'14.430"N | 103°49'28.249"W | point |
| No. 129H PBHL |            | 7688.00     | -207.09       | 5295.13      | 703082.70             | 492712.50              | 32°21'12.419"N | 103°48'34.338"W | point |

## WELLPATH COMPOSITION

Ref Wellbore: No. 129H AWB

Ref Wellpath: No. 129H AWP

| Start MD<br>[ft] | End MD<br>[ft] | Positional Uncertainty Model           | Log Name/Comment | Wellbore     |
|------------------|----------------|----------------------------------------|------------------|--------------|
| 0.00             | 6966.80        | Generic gyro - northseeking (Standard) | Gyro             | No. 129H AWB |
| 6966.80          | 12580.00       | NaviTrak (Standard)                    | MWD              | No. 129H AWB |

SHA