

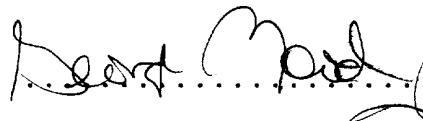
SCIENTIFIC DRILLING INTERNATIONAL

MIDLAND, TEXAS

PHILLIPS PETROLEUM

Well Name : EAST VACUUM GBSA UNIT #3332003  
Location : LEA COUNTY, NEW MEXICO  
:  
:  
Date Surveyed :  
Job No. :  
:

This survey is correct to the best of my knowledge  
and is supported by actual field data.

..... COMPANY REPRESENTATIVE

Received

FEB 12 1991

P.B.R. Regulatory Section

SCIENTIFIC DRILLING INTERNATIONAL

Client : PHILLIPS PETROLEUM  
Well Name : EAST VACUUM GBSA UNIT #3332003  
Location : LEA COUNTY, NEW MEXICO

Page 1 of 2  
Date  
Filename : 3332003

No Interpolation

| MD   | INC  | DIR      | TVD     | +N/-S  | +E/-W | VS    | D'LEG |
|------|------|----------|---------|--------|-------|-------|-------|
| ft   | deg  | deg      | ft      | ft     | ft    | ft    | °/100 |
| 0    | 0.00 | N 0.00°E | 0.00    | 0.00   | 0.00  | 0.00  | 0.0   |
| 100  | 0.81 | N34.68°W | 100.00  | 0.58   | -0.40 | -0.70 | 0.8   |
| 200  | 0.77 | N32.66°W | 199.99  | 1.73   | -1.17 | -2.07 | 0.0   |
| 300  | 0.60 | S86.92°W | 299.98  | 2.25   | -2.18 | -3.14 | 0.7   |
| 400  | 0.52 | S71.52°W | 399.98  | 2.07   | -3.14 | -3.64 | 0.2   |
| 500  | 0.21 | S32.61°W | 499.97  | 1.69   | -3.63 | -3.69 | 0.4   |
| 600  | 0.57 | S66.04°W | 599.97  | 1.25   | -4.14 | -3.70 | 0.4   |
| 700  | 0.44 | N74.65°W | 699.97  | 1.18   | -5.00 | -4.23 | 0.4   |
| 800  | 0.35 | N76.95°W | 799.96  | 1.35   | -5.67 | -4.80 | 0.1   |
| 900  | 0.30 | S85.43°W | 899.96  | 1.40   | -6.24 | -5.21 | 0.1   |
| 1000 | 0.20 | N76.32°W | 999.96  | 1.43   | -6.67 | -5.53 | 0.1   |
| 1100 | 0.00 | N 0.00°E | 1099.96 | 1.47   | -6.84 | -5.67 | 0.2   |
| 1200 | 0.16 | S 2.79°W | 1199.96 | 1.33   | -6.85 | -5.57 | 0.2   |
| 1300 | 0.50 | S64.67°E | 1299.96 | 0.87   | -6.57 | -5.04 | 0.5   |
| 1400 | 1.12 | S56.13°E | 1399.95 | 0.17   | -5.34 | -3.70 | 0.6   |
| 1500 | 0.56 | S23.84°E | 1499.94 | -0.94  | -4.41 | -2.25 | 0.7   |
| 1600 | 0.57 | S21.09°E | 1599.93 | -1.85  | -4.03 | -1.32 | 0.0   |
| 1700 | 0.60 | S17.56°E | 1699.93 | -2.82  | -3.69 | -0.37 | 0.0   |
| 1800 | 0.50 | S 1.27°E | 1799.92 | -3.76  | -3.53 | 0.43  | 0.2   |
| 1900 | 0.74 | S28.07°W | 1899.92 | -4.81  | -3.78 | 1.04  | 0.4   |
| 2000 | 0.68 | S12.08°W | 1999.91 | -5.96  | -4.21 | 1.62  | 0.2   |
| 2100 | 0.71 | S18.69°W | 2099.90 | -7.12  | -4.53 | 2.27  | 0.1   |
| 2200 | 0.38 | S30.41°W | 2199.90 | -7.99  | -4.92 | 2.64  | 0.3   |
| 2300 | 0.40 | S44.79°E | 2299.90 | -8.62  | -4.84 | 3.17  | 0.5   |
| 2400 | 0.92 | S78.99°E | 2399.89 | -9.15  | -3.84 | 4.23  | 0.6   |
| 2500 | 1.40 | S88.69°E | 2499.87 | -9.37  | -1.83 | 5.74  | 0.5   |
| 2600 | 2.12 | N68.80°E | 2599.82 | -8.84  | 1.18  | 7.36  | 1.0   |
| 2700 | 2.62 | N69.89°E | 2699.73 | -7.38  | 5.05  | 8.86  | 0.5   |
| 2800 | 2.27 | N68.49°E | 2799.64 | -5.87  | 9.03  | 10.41 | 0.4   |
| 2900 | 1.54 | N79.73°E | 2899.59 | -4.96  | 12.23 | 11.87 | 0.8   |
| 3000 | 1.52 | S88.95°E | 2999.55 | -4.74  | 14.89 | 13.49 | 0.3   |
| 3100 | 1.18 | S80.95°E | 3099.52 | -4.95  | 17.24 | 15.21 | 0.4   |
| 3200 | 0.87 | S75.69°E | 3199.51 | -5.31  | 18.99 | 16.66 | 0.3   |
| 3279 | 1.75 | S30.60°E | 3278.49 | -6.37  | 20.40 | 18.38 | 1.6   |
| 3341 | 2.66 | S26.11°E | 3340.44 | -8.47  | 21.53 | 20.70 | 1.5   |
| 3403 | 5.04 | S39.56°E | 3402.29 | -11.96 | 23.78 | 24.80 | 4.1   |
| 3465 | 6.29 | S34.43°E | 3463.99 | -16.84 | 27.46 | 30.89 | 2.2   |
| 3527 | 6.78 | S28.15°E | 3525.59 | -22.87 | 31.13 | 37.82 | 1.4   |
| 3589 | 8.44 | S25.70°E | 3587.04 | -30.19 | 34.84 | 45.75 | 2.7   |
| 3651 | 8.67 | S31.43°E | 3648.35 | -38.29 | 39.25 | 54.72 | 1.4   |

# SCIENTIFIC DRILLING INTERNATIONAL

Client : PHILLIPS PETROLEUM  
 Well Name : EAST VACUUM GBSA UNIT #3332003  
 Location : LEA COUNTY, NEW MEXICO

Page 2 of 2  
 Date  
 Filename : 3332003

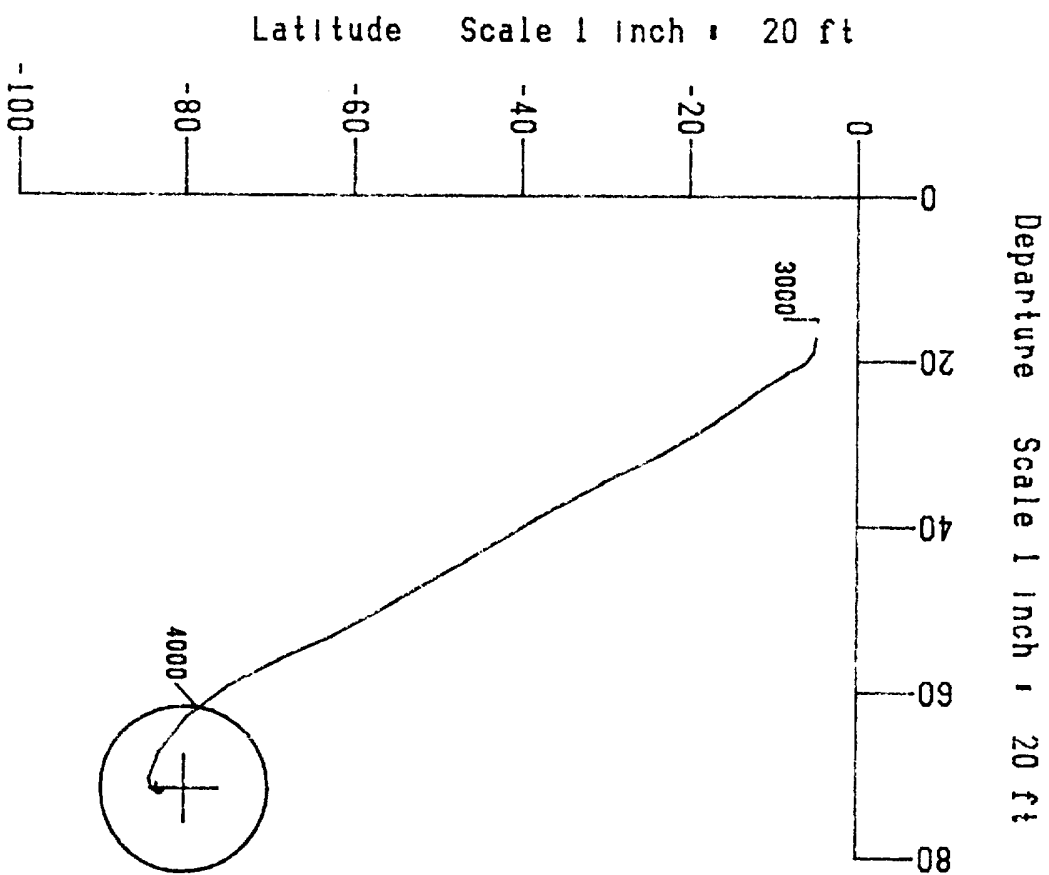
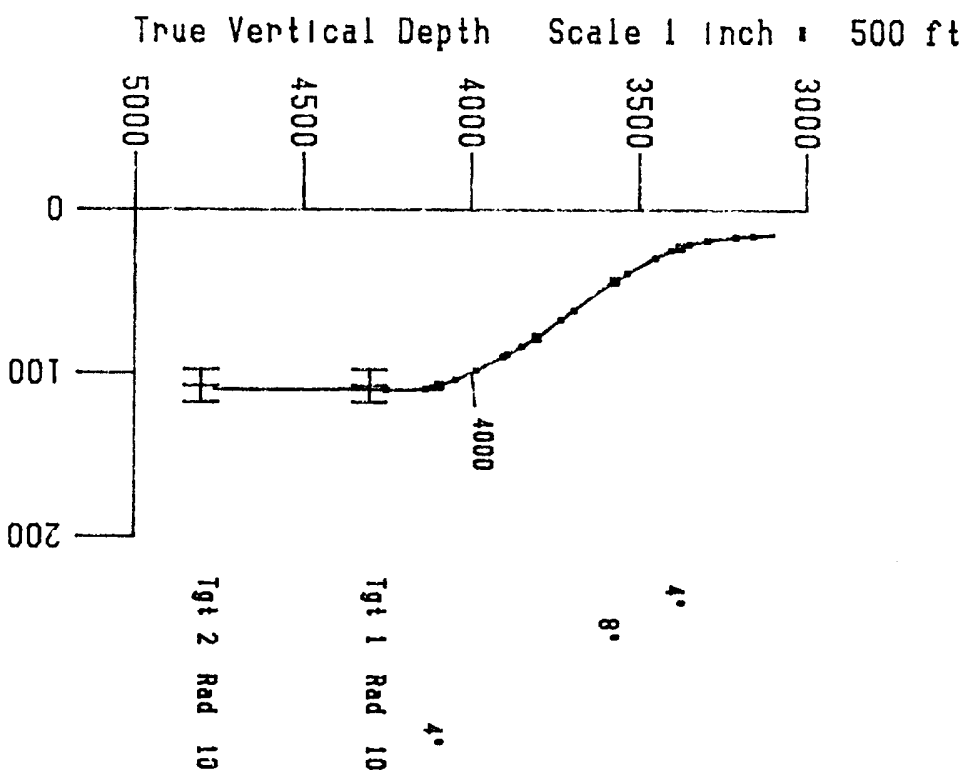
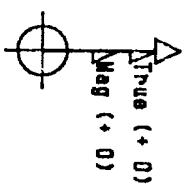
No Interpolation

| MD<br>ft | INC<br>deg | DIR<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS D'LEG<br>ft °/100 |
|----------|------------|------------|-----------|-------------|-------------|----------------------|
| 3713     | 9.14       | S30.32°E   | 3709.60   | -46.53      | 44.18       | 64.14 0.8            |
| 3775     | 8.71       | S31.25°E   | 3770.85   | -54.79      | 49.10       | 73.57 0.7            |
| 3837     | 7.34       | S28.18°E   | 3832.24   | -62.30      | 53.39       | 82.03 2.3            |
| 3899     | 5.92       | S21.11°E   | 3893.83   | -68.81      | 56.37       | 88.85 2.6            |
| 3961     | 6.60       | S34.50°E   | 3955.46   | -74.77      | 59.52       | 95.39 2.6            |
| 4023     | 5.24       | S41.74°E   | 4017.12   | -79.80      | 63.46       | 101.77 2.5           |
| 4085     | 4.69       | S64.75°E   | 4078.89   | -82.99      | 67.73       | 107.00 3.3           |
| 4147     | 1.63       | S73.49°E   | 4140.79   | -84.21      | 70.92       | 110.04 5.0           |
| 4209     | 1.10       | N32.33°E   | 4202.77   | -83.72      | 72.21       | 110.54 2.7           |
| 4271     | 0.97       | N 6.50°E   | 4264.76   | -82.68      | 72.58       | 110.01 0.8           |
| 4333     | 0.06       | S57.40°W   | 4326.76   | -82.44      | 72.20       | 109.58 1.6           |
| 4395     | 0.59       | N77.41°E   | 4388.76   | -82.67      | 72.30       | 109.81 1.0           |
| 4457     | 0.26       | S13.45°E   | 4450.76   | -82.89      | 72.65       | 110.21 1.0           |
| 4519     | 0.21       | S31.06°W   | 4512.75   | -83.13      | 72.61       | 110.37 0.3           |
| 4581     | 0.26       | N88.12°W   | 4574.75   | -83.25      | 72.40       | 110.31 0.4           |
| 4643     | 0.22       | S53.35°W   | 4636.75   | -83.32      | 72.16       | 110.20 0.3           |
| 4705     | 0.36       | N70.06°W   | 4698.75   | -83.37      | 71.86       | 110.04 0.5           |
| 4767     | 0.37       | N82.60°W   | 4760.75   | -83.27      | 71.47       | 109.71 0.1           |

Origin of Bottom Hole Closure PLATFORM CENTRE  
 Bottom Hole Closure 110 ft S40.64°E



SCIENTIFIC DRILLING INTERNATIONAL  
FOR  
PHILLIPS PETROLEUM  
EAST VACUUM GBSA UNIT #3332003  
IN  
LEA COUNTY, NEW MEXICO



Vertical Section Scale 1 inch = 100 ft

PLANE OF VERT SECTn S42 00E  
PLOT DATE 01-01-1991

TARGET DETAILS

| No | TVD    | Lat   | Dep  |
|----|--------|-------|------|
| 1  | 4300.0 | -80.0 | 72.0 |
| 2  | 4800.0 | -80.0 | 72.0 |

WELL PROPOSAL

| Sec | MD  | TVD | VS  | INC | DIR     | LAT | DEP | TGT |
|-----|-----|-----|-----|-----|---------|-----|-----|-----|
| 1   | 0.0 | 0.0 | 0.0 | 0.0 | N00 00E | 0.0 | 0.0 |     |

CASING DETAILS

| No | Size | TVD | MD |
|----|------|-----|----|
|----|------|-----|----|

RECEIVED

OCT 28 1991

049  
HONOLULU OFFICE