AUTHORITY FOR EXPENDITURE

LEASE: Logan Draw 30

WELL NUMBER: 1

PBTD: 9,300'

LOCATION: 1,650' FNL & 660' FEL, Section 30, T17S, R27E, Eddy County NM

EXPLORATORY, DEVELOPMENT, WORKOVER: E

FIELD: Logan Draw Morrow DESCRIPTION OF WORK: Drill and complete as a flowing Morrow gas producer.

DATE PREPARED: 11/12/99

EST. START DATE:

EST. COMPLETION DATE:

ACCOUNTING WELL NUMBER:

COMMUNICATIONS ACCOUNT NUMBER:

| INTANGIBLE COSTS: Drilling Footage 9,300 Ft @ 16.00 \$/Ft Drilling Daywork 2 2 5,400 \$/day Drilling Turnkey Rig Mobilization and Demobilization Road & Location Expense Damages Directional Drilling - Tools and Service Drilling Fluids Fuel, Power, and Water | 20 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | TO CSG PT 157,728 11,448 0 16,695 2,500 0 | OVE Ric ILLIA ILLIA ILLIA ILLIA | 0 11,448 0 0 2,120 | TOTAL WELL 157,728 22,896 0 |
|---|--|---|--|--------------------------------|--------------------------------------|
| Drilling Daywork 2 2 5,400 \$/day Drilling Turnkey Rig Mobilization and Demobilization Road & Location Expense Damages Directional Drilling - Tools and Service Drilling Fluids | | 11,448 0 0 16,695 2,500 | 161244 1818110 1818118 181818 | 11,448 0 | 22,896 |
| Drilling Turnkey Rig Mobilization and Demobilization Road & Location Expense Damages Directional Drilling - Tools and Service Drilling Fluids | ikayi ipani ipan ipan ipan | 0 0 16,695 2,500 | 2518218 2818218 281828 | 0 | 0 |
| Rig Mobilization and Demobilization Road & Location Expense Damages Directional Drilling - Tools and Service Drilling Fluids | | 0 16,695 2,500 | ilie iy ii e i | 0 | 0 |
| Road & Location Expense Damages Directional Drilling - Tools and Service Drilling Fluids | | 16,695 2,500 | i i ki se | | 0 |
| Damages Directional Drilling - Tools and Service Drilling Fluids | 3114518 3114518 | 2,500 | | 2 120 | |
| Directional Drilling - Tools and Service Drilling Fluids | £#413# | | | | 18,815 |
| Drilling Fluids | | | erkint. | 0. | 2,500 |
| Drilling Fluids | 181231 | , vi | 1812.190 | 0 | 0 |
| | | 26,500 | - J. | 0 | 26,500 |
| | 经股份 | 10,600 | 7.01.2.00 | 0 | 10,600 |
| Supplies - Bits | 131414 | 0 | 18.834 | 795 | 795 |
| Supplies - Casing Equipment | 拟线线 | 1,007 | 1312 140 | 3,710 | 4,717 |
| Supplies - Liner Equipment | 16414 | 0 | JU. 16 | 0 | 0 |
| Supplies - Miscellaneous | 15/17/0 | 0 | | 0 | 0 |
| Cement and Cmt. Services - Surface Csg | 1524 568 | 10,600 | | 0 | 10,600 |
| Cement and Cmt. Services - Int. Csg | 14451 | 0 | 15/4 | 0 | 0 |
| Cement and Cmt. Services - Prod. Csg | . P54 | 0 | 11.17 | 21,200 | 21,200 |
| Cement and Cmt. Services - Other | 1574 ETE | 0 | , in the second | 0 | 0 |
| Rental - Drilling Tools and Equipment | 157454 | 0 | EIL 180 | 0 | 0 |
| Rental - Miso. | 2.57.4 3.8 E | 8,560 | | 3,180 | 11,740 |
| Testing - Drill Stem / Production | £844394 | 4,770 | | 2,650 | 7,420 |
| Open Hole Logging | 1514200 | 31,800 | 78.4 | 0 | 31,800 |
| Mudlogging Services | IFIELD. | 9,540 | . 794 | 0 | 9,540 |
| Special Services | 14424 | 0 | 1312190 | 0 | 0 |
| Plug and Abandon | 2.F1 2.B1 2 | 12,000 | 21227 | (12,000) | 0 |
| Pulling and/or Swabbing Unit | Ma | 0 | 1414.414 | 15,264 | 15,264 |
| Reverse Equipment | Na | 0 | 1618 PER | 5,300 | 5,300 |
| Wireline Services | 2.024.20E | 0 | 18/1.20 | 19,080 | 19,080 |
| Stimulation | 1954 | 0 | 18/8.25 | 12,720 | 12,720 |
| Pump / Vacuum Truck Services | and a part | 0 | jaine | 6,075 | 6,075 |
| Transportation | **** | 0 | igikaja: | 2,650 | 2,650 |
| Tubular Goods - Inspection & Testing | 2,054 Mrg | 1,961 | 3/1,270 | 5,300 | 7,261 |
| Unclassified | 184be | 530 | 21526 | 0 | 530 |
| Telephone and Radio Expense | 经报记的 | 795 | 1212.76 | 318 | 1,118 |
| Engineer / Geologist / Landman | 381 438 0 | 22,500 | 15.(3.380 | 3,000 | 25,500 |
| Company Labor - Field Supervision | £854.302 | 13,250 | 18,74,864 | 6,500 | 19,750 |
| Contract Labor / Roustabout | 1514344 | 1,590 | 1815.260 | 9,540 | 11,130 |
| Legal and Professional Service | 1812270 | 5,000 | istati | 0 | 5,000 |
| Insurance | 1814.278 | 4,998 | 1512.915 | 0 | 4,998 |
| Overhead | 284 387 | 7,000 | 15,18,280 | 3,500 | 10,500 |
| SUBTOTAL | | 361,371 | | 122,350 | 483,721 |
| Contingencies (10%) | | 36,137 | | 12,235 | 48,372 |
| ESTIMATED TOTAL INTANGIBLES | | 397,508 | | 134,585 | 532,093 |

Exploration and Production Dallas, Texas

AUTHORITY FOR EXPENDITURE

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WELL NUMBER: 1

PBTD: 9,300'

LOCATION: 1,650' FNL & 660' FEL, Section 30, T17S, R27E, Eddy County NM

FIELD: Logan Draw Morrow

EXPLORATORY, DEVELOPMENT, WORKOVER: E

DESCRIPTION OF WORK: Drill and complete as a flowing Morrow gas producer.

0

DATE PREPARED: 11/12/99

EST. START DATE:

EST. COMPLETION DATE:

ACCOUNTING WELL NUMBER:

COMMUNICATIONS ACCOUNT NUMBER:

| TANGIBLE COSTS: | puos. | TO CSG PT | GGDE | COMPLETION | TOTAL WELL |
|--|--------------|-----------|------------|------------|------------|
| Conductor Casing 0 Ft @ 0.00 \$/Ft | 1176.202 | 0 | j ka | 0 | 0 |
| Surface Csg 1,500 Ft @ 12.00 \$/Ft | 1,590,516 | 18,000 | ly a | 0 | 18,000 |
| Intermediate Csg 0 Ft @ 0.00 \$/Ft | 1/943/1 | 0 | ** | 0 | 0 |
| Protection Csg 0 Ft @ 0.00 \$/Ft | 1326.570 | 0 | | 0 | 0 |
| Production Csg 9,300 Ft@ 8.00 \$/Ft | 761 | 0 | | 74,400 | 74,400 |
| Protection Liner 0 Ft @ 0.00 \$/Ft | £,126,5216 | 0 | W4. | 0 | 0 |
| Production Liner 0 Ft@ 0.00 \$/Ft | 1954 | 0 | | 0 | 0 |
| Tubing 9,100 Ft @ 3.25 \$/Ft | 3454 | 0 | unia | 29,575 | 29,575 |
| Rods 0 Ft@ 0.00 \$/Ft | W | 0 | 1522.344 | 0 | 0 |
| Artificial Lift Equipment | 1631 | 0 | 1872.740 | 0 | 0 |
| Tank Battery | , ince | 0 | 11116 | 10,600 | 10,600 |
| Separators/Heater Treater/Gas Units/FWKO | | 0 | 22240 | 12,720 | 12,720 |
| * Well Head Equipment & Christmas Tree | 1826.562 | 2,000 | 157234 | 11,500 | 13,500 |
| Subsurface Well Equipment | na. | 0 | 1812.270 | 6,148 | 6,148 |
| Flow Lines | 104 | 0 | 122.173 | 13,250 | 13,250 |
| Saltwater Disposal Pump | .44 | 0 | jerkej | 0 | 0 |
| Gas Meter | 144 | 0 | 1572.224 | 1,484 | 1,484 |
| Lact Unit | . 701 | 0 | 1812.187 | 0 | 0 |
| Vapor Recovery Unit | 104 | 0 | ililio | 0 | 0 |
| Other Well Equipment | 751 | 0 | J. J. Land | 0 | 0 |
| ROW and Damages | | 0 | 1512,550 | 0 | 0 |
| Surface Equipment Installation Costs | NA. | 0 | 1812.294 | 9,540 | 9,540 |
| Elect. Installation | N/A | 0 | 1222.25 | 0 | 0 |
| | | | | | |
| ESTIMATED TOTAL TANGIBLES | | 20,000 | | 169,217 | 189,217 |
| | | | | | |
| ESTIMATED TOTAL WELL COSTS | 417,508 | | 303,802 | 721,810 | |

THIS AFE IS ONLY AN ESTIMATE. BY SIGNING YOU AGREE TO PAY YOUR SHARE OF THE ACTUAL COSTS INCURRED.

| NAC APIA | 0.22 | | DATE. |
|----------|---------|---------------------------------------|----------|
| PREPARED | BY: BMW | Buur | 11/12/99 |
| REVIEWED | BY: TRM | | |
| APPROVED | BY: | | |
| APPROVED | BY: | · · · · · · · · · · · · · · · · · · · | |

| WI APPROVAL: | COMPANY | |
|--------------|---------|--|
| | BY | |
| | TITLE | |
| | DATE | |