7034 CK THIS IS A RE-ENTRY 1036 -416

Form 3160-3
(April 2004)

OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 02 2007
OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL OR REENTER

R-111-POTASH

5. Lease Serial No.
~~NM-103141~~ NM103604

6. If Indian, Allotee or Tribe Name
---

HIGH CAVEKARST

7. If Unit or CA Agreement, Name and No.
---

1a. Type of work: [ ] DRILL [XX] REENTER

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.
GOODNIGHT "35" FEDERAL # 1H

2. Name of Operator
LATIGO PETROLEUM, INC. (RICHARD WRIGHT 432-685-8140)

9. API Well No.
30-015-31096

3a. Address P.O. BOX 10340.
MIDLAND, TEXAS 79702-7340

3b. Phone No. *(include area code)*
432-685-8100

10. Field and Pool, or Exploratory
CEDAR CANYON-BONE SPRING

4. Location of Well *(Report location clearly and in accordance with any State requirements.)*
Carlsbad Controlled Water Basin

At surface 660' FSL & 2180' FWL SECTION 35 T23S-R29E EDDY CO. NM

At proposed prod. zone 330' FNL & 1980' FWL SECTION 35 T23S-R29E

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 35 T23S-R29E

14. Distance in miles and direction from nearest town or post office*
Approximately 10 miles East of Loving New Mexico

12. County or Parish
EDDY CO.

13. State
New Mexico

| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) | 16. No. of acres in lease | 17. Spacing Unit dedicated to this well |
|---|---|---|
| 660' | 640 | 160 |

| 18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. | 19. Proposed Depth | 20. BLM/BIA Bond No. on file |
|---|---|---|
| 1600' | TVD-7956'<br>MD-12,114' | NMB-000186 |

| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) | 22 Approximate date work will start* | 23. Estimated duration |
|---|---|---|
| 3100' GL | WHEN APPROVED | 35 Days |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form.

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer

| 25 Signature | Name *(Printed/Typed)* | Date |
|---|---|---|
| Joe T. Janica | Joe T. Janica | 07/06/07 |

Title
Agent

| Approved by *(Signature)* | Name *(Printed/Typed)* | Date |
|---|---|---|
| /s/ Tony J. Herrell | /s/ Tony J. Herrell | SEP 25 2007 |

| Title | Office |
|---|---|
| STATE DIRECTOR | NM STATE OFFICE |

**If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.**

holds legal or equitable title to those rights in the subject lease which would entitle the applicant to

APPROVAL FOR TWO YEARS

a crime for any person knowingly and willfully to make to any department or agency of the United s as to any matter within its jurisdiction.

*structions on page 2)*

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number | Pool Code | Pool Name |
|---|---|---|
| 30-025-39352 | 11520 | CEDAR CANYON-BONE SPRING |

| Property Code | Property Name | Well Number |
|---|---|---|
| 36767 | GOODNIGHT 35 FEDERAL | 1 H |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 17891 | LATIGO PETROLEUM, INC | 3100' |

### Surface Location

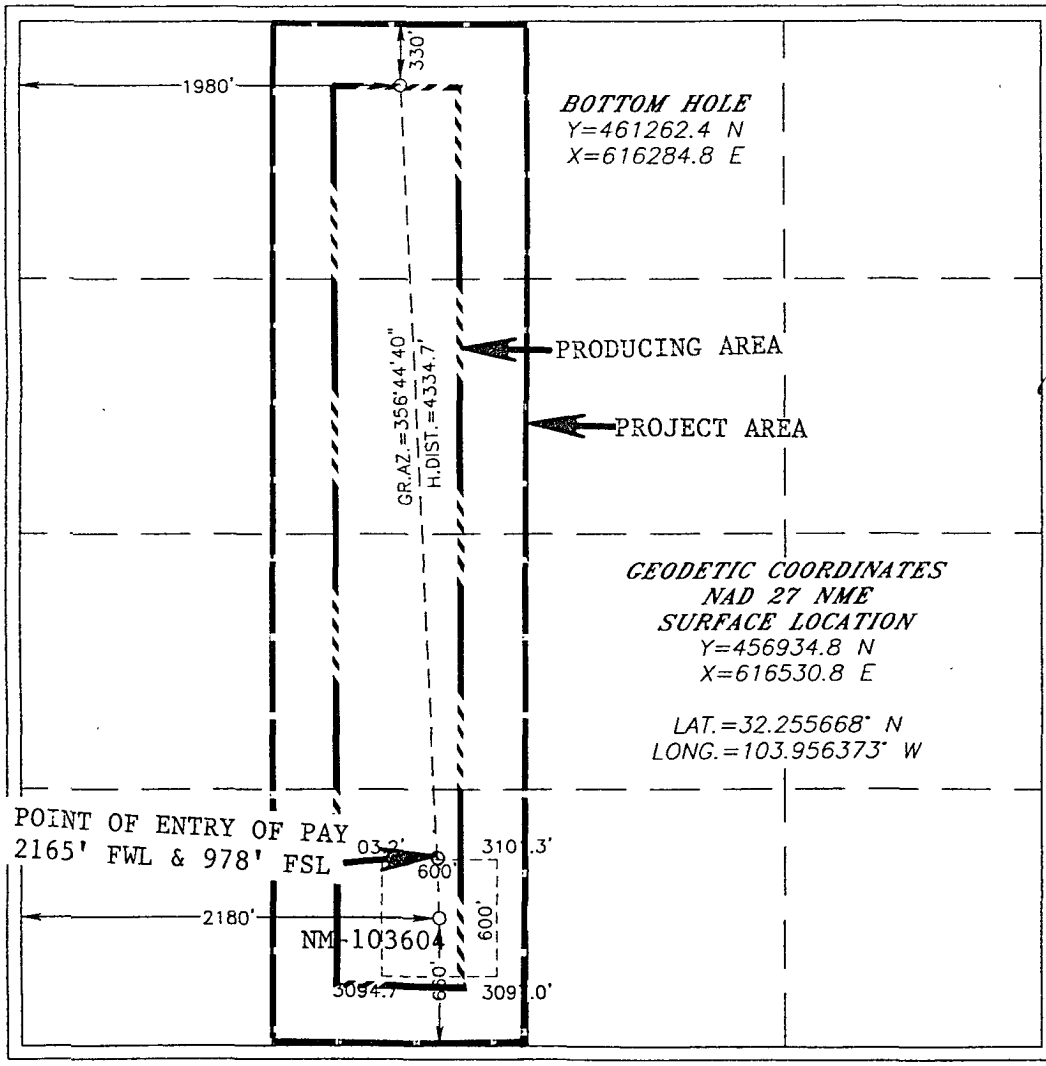
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| N | 35 | 23-S | 29-E | | 660 | SOUTH | 2180 | WEST | EDDY |

### Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| C | 35 | 23-S | 29-E | | 330 | NORTH | 1980 | WEST | EDDY |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 160 | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION




### OPERATOR CERTIFICATION

*I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

Signature Date 07/06/07

Joe T. Janica
Printed Name

Agent

### SURVEYOR CERTIFICATION

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.*

JANUARY 25, 2000

Date Surveyed JR

Signature & Seal of Professional Surveyor

RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

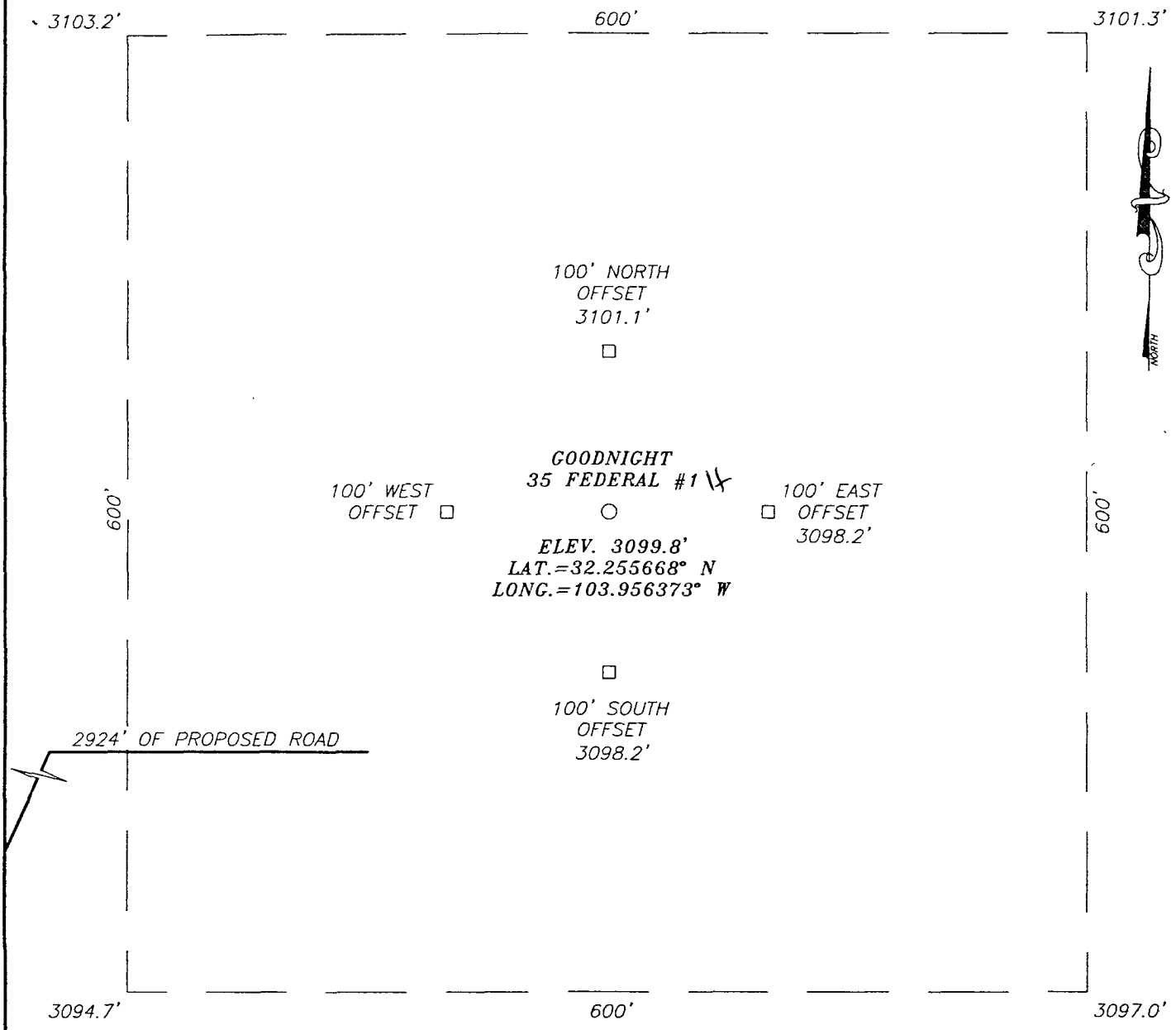
6/15/07

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

EXHIBIT "A"

# SECTION 35, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO




DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #128 AND CO. RD. #793 (RAWHIDE RD.), GO SOUTH ON CO. RD. #793 APPROX. 3.7 MILES, VEER RIGHT AND GO EAST APPROX. 0.2 MILES. TURN RIGHT AND GO SOUTH APPROX. 1.0 MILE. TURN LEFT AND GO EAST APPROX. 0.2 MILES. TURN RIGHT AND GO SOUTH APPROX. 1.0 MILE TO CO. RD. #748A (GAVLIN RD.). CONTINUE SOUTH APPROX. 1.2 MILES. TURN RIGHT AND GO WEST APPROX. 2.0 MILES. TURN RIGHT AND GO NORTHWEST APPROX. 1.1 MILES. TURN RIGHT AND GO EAST APPROX. 0.6 MILES TO THIS LOCATION.

100 0 100 200 Feet

Scale: 1"=100'


PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

(505) 393-3117


## LATIGO PETROLEUM, INC.

GOODNIGHT 35 FEDERAL #1H WELL
LOCATED 660 FEET FROM THE SOUTH LINE
AND 2180 FEET FROM THE WEST LINE OF SECTION 35,
TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

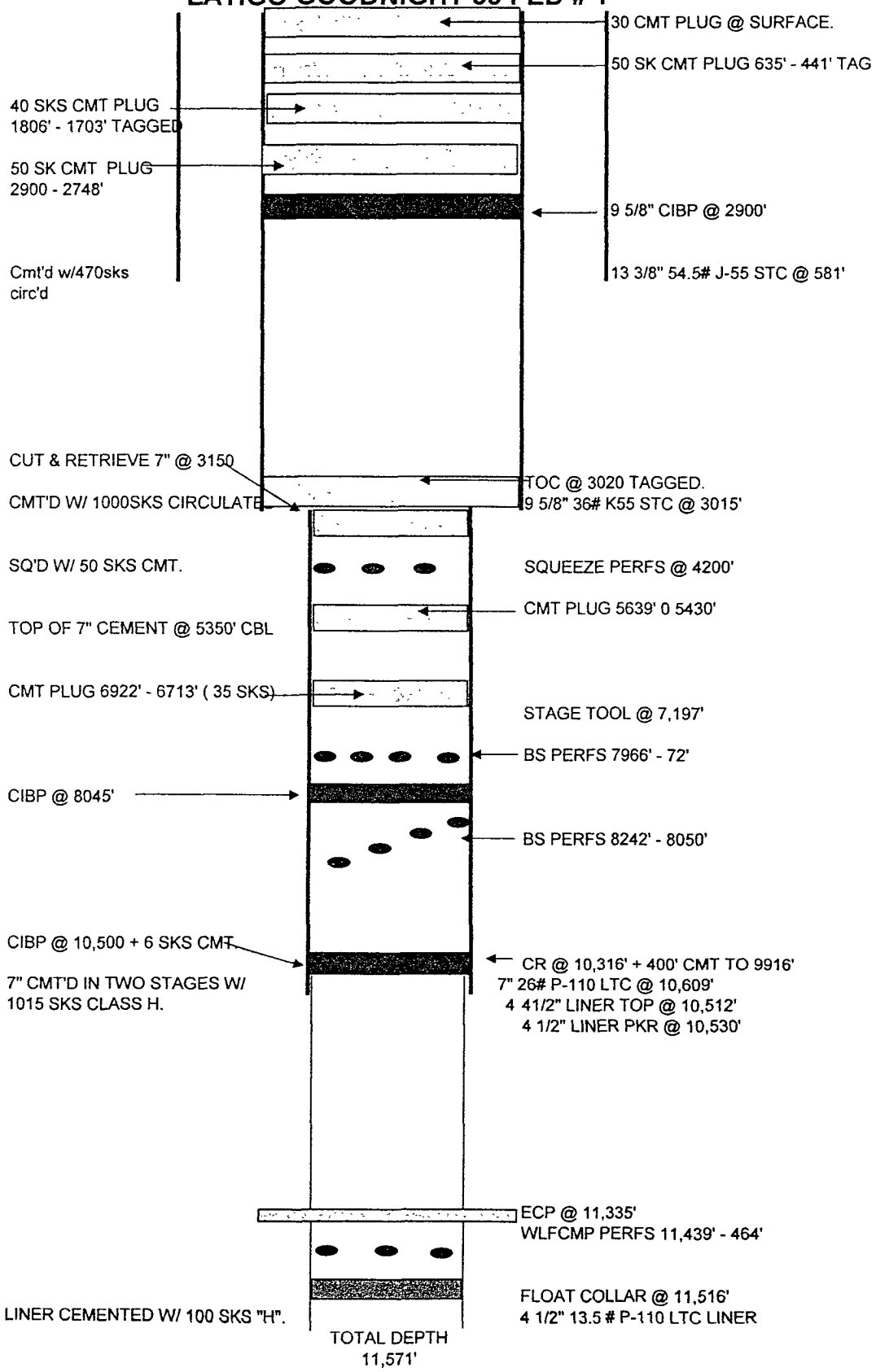
| | | | |
|---|---|---|---|
| Survey Date: 01/25/00 | Sheet 1 of 1 Sheets | | |
| W.O. Number: 07.13.0743 | Dr By: J.R. | | Rev 1:N/A |
| Date: 06/14/07 | Disk: CD#7 | 07130743 | Scale: 1"=100' |

# GOODNIGHT 35 FEDERAL # 1 RE- ENTRY PROCEDURE

660 FSL & 2180 FWL, SEC 35, T-23-S, R-29-E, EDDY COUNTY NEW MEXICO

| STEP | DESCRIPTION |
|---|---|
| 1 | PREPARE LOCATION FOR RE ENTRY EQUIPMENT AFTER FEDERAL APPROVAL. |
| 2 | EXTEND 9 5/8" CASING TO SURFACE & INSTALL WELL HEAD. TEST WELL HEAD. |
| 3 | MIRU WELL SERVICE UNIT. N/U BOP'S. TEST SAME. |
| 3 | CLEAN OUT 9 5/8" CASING TO 7" STUB @ ± 3150'. |
| 4 | TIH W/ TAPPERED MILL AND DRESS OFF 7" STUB. FLARE TOP FOR TOOL GUIDE. |
| 5 | TIH W/ TAPPERED MILL AND DRESS OFF 7" STUB. FLARE TOP FOR TOOL GUIDE. |
| 6 | TIH W/ 6 1/8" BIT AND CLEAN OUT 7" CASING TO KOP. CIRCULATE WITH CLEAN WATER. TEST CASING TO 500 PSI FOR INTEGRITY. |
| 7 | R/U WIRELINE. SET CIBP @ ± 7650'. R/D M/O WELL SERVICE UNIT. NOTE: KOP SHOULD BE 7638'. |
| 8 | MIRU ROTARY TOOLS. N/U BOP'S. THIRD PARTY TEST TO 3000 PSI. |
| 9 | P/U BIT, BHA & DRILL PIPE. GIH TO PLUG BACK TD OF ± 7650'. CIRCULATE. POH. |
| 10 | TIH W/ WHIPSTOCK AND ORIENTING EQUIPMENT. ORIENT TO ± 350°. SET WHIPSTOCK & DRILL CASING. |
| 11 | BUILD CURVE @ ± 18° PER 100 WITH AZIMUTH OF ± 357° |
| 12 | DRILL LATERAL WITH 6 1/8" HOLE TO A MEASURED DEPTH OF ± 12,114. EFFECTIVE LATERAL OF ± 3976'. SAND SHOULD BE INTERSECTED @ 8138' MD. INTERSECTION PLANNED @ 978' FSL & 2166' FWL SEC 35. BHL = 330 FNL & 1980 FWL. |
| 13 | RUN 4 1/2" 11.6# N-80 BTC CASING THROUGH CURVE AND TO END OF LATERAL. VERTICAL PORTION OF HOLE WILL HAVE 4 1/2" 11.6# N-80 LTC CASING. CEMENT WITH 400 SKS "C" W/ 8 PPS GILSONITE MIXED @ 14.09 PPG. YIELD 1.5 CUBIC FOOT PER SACK. TOC ESTIMATED @ 6500 FT FROM SURFACE. RIGID CENTRALIZERS ON EVERY 3RD JOINT IN LATERAL AND THROUGH CURVE. |
| 14 | R/D & M/O ROTARY TOOLS. |

# LATIGO GOODNIGHT 35 FED # 1H



# *LONG's METHOD OF SURVEY COMPUTATION*

## OBLIQUE CIRCULAR ARC INTERPOLATION

| | |
|---|---|
| 0 | MD OF INTERPOLATION DEPTH,(feet) |
| #N/A | TVD COORDINATE OF THE DEPTH (feet) |
| #N/A | N/S COORDINATE OF DEPTH (feet) |
| #N/A | E/W COORDINATE OF DEPTH (feet) |

## DISTANCE TABLE

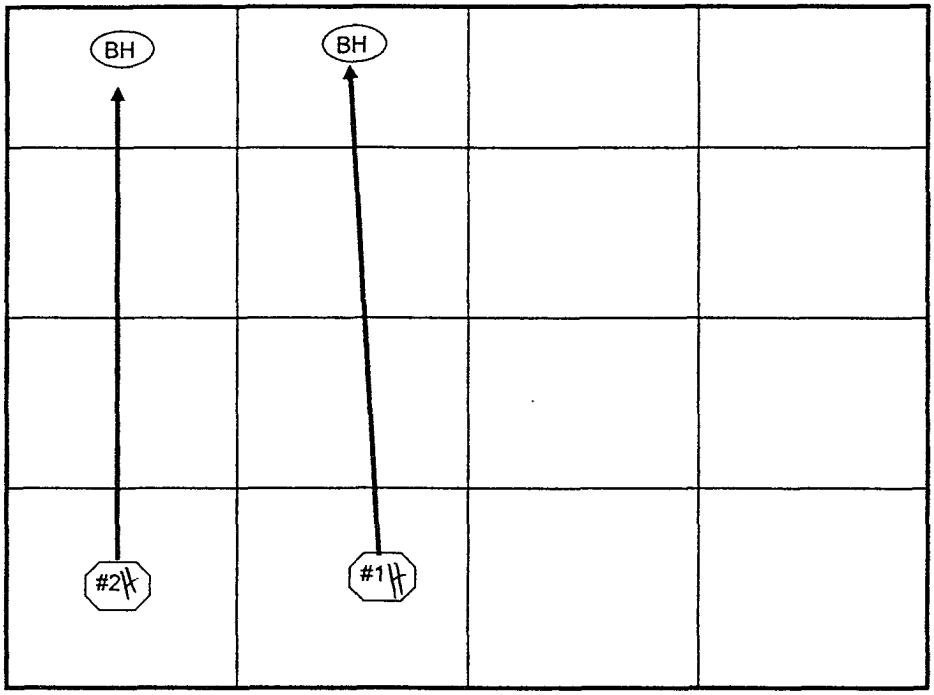
| STATION A | STATION B | |
|---|---|---|
| | | |
| | | |
| | | |
| 3 D DISTANCE BETWEEN STATION A AND STATION B | 0.00 | ft |
| Calculator = | | |

## TABLE OF SURVEY STATIONS

| STA # | ΔMD ft | INCL deg | AZIM deg | MD ft | TVD ft | N+/S- ft | E+/W- ft | DLS deg/100FT |
|---|---|---|---|---|---|---|---|---|
| 1 | TIE POINT => | 0 | 0 | 7638.00 | 7638.00 | 0.00 | 0.00 | - |
| 2 | 100 | 18 | 357.3308 | 7738.00 | 7736.36 | 15.56 | -0.73 | 18.00 |
| 3 | 100 | 36 | 357.3308 | 7838.00 | 7825.10 | 60.73 | -2.83 | 18.00 |
| 4 | 100 | 54 | 357.3308 | 7938.00 | 7895.52 | 131.07 | -6.11 | 18.00 |
| 5 | 100 | 72 | 357.3308 | 8038.00 | 7940.73 | 219.71 | -10.24 | 18.00 |
| 6 | 100 | 90 | 357.3308 | 8138.00 | 7956.31 | 317.96 | -14.82 | 18.00 |
| 7 | 100 | 90 | 357.3308 | 8238.00 | 7956.31 | 417.86 | -19.48 | 0.00 |
| 8 | 100 | 90 | 357.3308 | 8338.00 | 7956.31 | 517.75 | -24.14 | 0.00 |
| 9 | 50 | 90 | 357.3308 | 8388.00 | 7956.31 | 567.69 | -26.47 | 0.00 |
| 10 | 100 | 90 | 357.3308 | 8488.00 | 7956.31 | 667.58 | -31.12 | 0.00 |
| 11 | 100 | 90 | 357.3308 | 8588.00 | 7956.31 | 767.48 | -35.78 | 0.00 |
| 12 | 100 | 90 | 357.3308 | 8688.00 | 7956.31 | 867.37 | -40.44 | 0.00 |
| 13 | 100 | 90 | 357.3308 | 8788.00 | 7956.31 | 967.26 | -45.09 | 0.00 |
| 14 | 100 | 90 | 357.3308 | 8888.00 | 7956.31 | 1067.15 | -49.75 | 0.00 |
| 15 | 100 | 90 | 357.3308 | 8988.00 | 7956.31 | 1167.04 | -54.41 | 0.00 |
| 16 | 100 | 90 | 357.3308 | 9088.00 | 7956.31 | 1266.93 | -59.06 | 0.00 |
| 17 | 100 | 90 | 357.3308 | 9188.00 | 7956.31 | 1366.83 | -63.72 | 0.00 |
| 18 | 100 | 90 | 357.3308 | 9288.00 | 7956.31 | 1466.72 | -68.38 | 0.00 |
| 19 | 100 | 90 | 357.3308 | 9388.00 | 7956.31 | 1566.61 | -73.04 | 0.00 |
| 20 | 100 | 90 | 357.3308 | 9488.00 | 7956.31 | 1666.50 | -77.69 | 0.00 |
| 21 | 100 | 90 | 357.3308 | 9588.00 | 7956.31 | 1766.39 | -82.35 | 0.00 |
| 22 | 100 | 90 | 357.3308 | 9688.00 | 7956.31 | 1866.28 | -87.01 | 0.00 |
| 23 | 100 | 90 | 357.3308 | 9788.00 | 7956.31 | 1966.17 | -91.66 | 0.00 |
| 24 | 100 | 90 | 357.3308 | 9888.00 | 7956.31 | 2066.07 | -96.32 | 0.00 |
| 25 | 100 | 90 | 357.3308 | 9988.00 | 7956.31 | 2165.96 | -100.98 | 0.00 |
| 26 | 100 | 90 | 357.3308 | 10088.00 | 7956.31 | 2265.85 | -105.63 | 0.00 |
| 27 | 100 | 90 | 357.3308 | 10188.00 | 7956.31 | 2365.74 | -110.29 | 0.00 |
| 28 | 100 | 90 | 357.3308 | 10288.00 | 7956.31 | 2465.63 | -114.95 | 0.00 |
| 29 | 100 | 90 | 357.3308 | 10388.00 | 7956.31 | 2565.52 | -119.60 | 0.00 |
| 30 | 100 | 90 | 357.3308 | 10488.00 | 7956.31 | 2665.41 | -124.26 | 0.00 |
| 31 | 100 | 90 | 357.3308 | 10588.00 | 7956.31 | 2765.31 | -128.92 | 0.00 |
| 32 | 100 | 90 | 357.3308 | 10688.00 | 7956.31 | 2865.20 | -133.58 | 0.00 |
| 33 | 100 | 90 | 357.3308 | 10788.00 | 7956.31 | 2965.09 | -138.23 | 0.00 |
| 34 | 100 | 90 | 357.3308 | 10888.00 | 7956.31 | 3064.98 | -142.89 | 0.00 |
| 35 | 100 | 90 | 357.3308 | 10988.00 | 7956.31 | 3164.87 | -147.55 | 0.00 |
| 36 | 100 | 90 | 357.3308 | 11088.00 | 7956.31 | 3264.76 | -152.20 | 0.00 |
| 37 | 100 | 90 | 357.3308 | 11188.00 | 7956.31 | 3364.66 | -156.86 | 0.00 |
| 38 | 100 | 90 | 357.3308 | 11288.00 | 7956.31 | 3464.55 | -161.52 | 0.00 |
| 39 | 100 | 90 | 357.3308 | 11388.00 | 7956.31 | 3564.44 | -166.17 | 0.00 |
| 40 | 100 | 90 | 357.3308 | 11488.00 | 7956.31 | 3664.33 | -170.83 | 0.00 |
| 41 | 100 | 90 | 357.3308 | 11588.00 | 7956.31 | 3764.22 | -175.49 | 0.00 |
| 42 | 100 | 90 | 357.3308 | 11688.00 | 7956.31 | 3864.11 | -180.15 | 0.00 |
| 43 | 100 | 90 | 357.3308 | 11788.00 | 7956.31 | 3964.00 | -184.80 | 0.00 |
| 44 | 100 | 90 | 357.3308 | 11888.00 | 7956.31 | 4063.90 | -189.46 | 0.00 |
| 45 | 100 | 90 | 357.3308 | 11988.00 | 7956.31 | 4163.79 | -194.12 | 0.00 |
| 46 | 126 | 90 | 357.3308 | 12114.00 | 7956.31 | 4289.65 | -199.98 | 0.00 |
| 47 | | | | | | | | |
| 48 | | | | | | | | |

# GOODNIGHT WELL GROUPINGS

Sec 26, T-23-S, R-29-E, Eddy County, New Mexico




| Well Name | Legal Location in 35 | Depth and Strata | Current Prod Zone |
|---|---|---|---|
| GOODNIGHT 35 FED # 2H | 660 FSL & 660 FWL | 1ST BONE SPRINGS HORIZ | PROPOSED HORZ |
| GOODNIGHT 35 FED # 1H | 660 FSL & 2180 FWL | 11,571 MORROW TEST | PROPOSED HORZ |
| GOODNIGHT 35 FED # 2 | 860 FNL & 2620 FWL | PERMITTED BUT NOT DRILLED | LATIGO EXPIRED APD |
| GOODNIGHT 35 FED # 3 | 440 FSL & 660 FWL | PERMITTED BUT NOT DRILLED | KUKUI EXPIRED APD |

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6, the following information on the above well is provided for your information.

1. LOCATION: 660' FSL & ~~2080'~~ 2180 FWL SECTION 35 T23S-R29E EDDY CO. NM

2. ELEVATION ABOVE SEA LEVEL: 3100' GL

3. GEOLOGIC NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits.

4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.

5. PROPOSED DRILLING DEPTH: TVD -7956' MD-12,114'

6. ESTIMATED TOPS OF GELOOGICAL MARKERS:

| | | | |
|---|---|---|---|
| Basal Anhydrite | 2950' | Brushy Canyon | 5250' |
| Delaware Lime | 3150' | Bone Spring | 6900' |
| Delaware Sand | 3200' | 1st Bone Spring Pay | 8025' |
| Cherry Canyon | 4000' | TD (MD) | 12,114' |

7. POSSIBLE MINERAL BEARING FORMATION:

| | |
|---|---|
| Brushy Canyon | Oil |
| Bone Spring | Oil |

8. CASING PROGRAM:

| Hole Size | Interval | OD of Casing | Weight | Thread | Collar | Grade |
|---|---|---|---|---|---|---|
| 17½" | 0-581' | 13 3/8" | 54.5# | 8-R | ST&C | J-55 |
| 12¼" | 0-3115' | 9 5/8" | 36# | 8-R | ST&C | J-55 |
| 8 3/4" | 0-10609' | 7" | 26# | 8-R | LT&C | P-110 |

(ALL ABOVE CASING STRINGS ARE IN PLACE AND CEMENTED)

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

| | | |
|---|---|---|
| 13 3/8" | Surface | 581' of 13 3/8" casing was run and cemented with 470 Sx. circulated cement. |
| 9 5/8" | Intermediate | Set 3015' of 9 5/8" 36# ST&C casing. Cemented with 1000 Sx. of cement and circulated cement to surface. |
| 7" | 2nd Intermediate | Set 7" casing at 10,609'. Cemented in two stages with 1015 Sx. of Class "H" cement. |

All above casings have been set and cemented by original operator.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI working pressure choke manifold with dual adjustable chokes. No abnormal pressure or temperatures are expected while drilling this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

| DEPTH | MUD WT. | VISC. | FLUID LOSS | TYPE MUD SYSTEM |
|---|---|---|---|---|
| 0-8045' | 10.0-10.1 | 29-32 | NC | Brine water used to drill cement plugs and clean out casing to CIBP @ 8045' |
| 7638-12,114' | 10.0-10.2 | 29-38 | NC* | Brine water use high viscosity sweeps to clean hole. |

* Water loss may have to be controled in order to run casing.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and/or the water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

12. LOGGING, CORING & TESTING PROGRAM:

A. No logs, cores, or DST's are planned at this time

B. Mud logger may be rigged up on hole at the time the hole is deviated.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $H^2S$ in this area. If $H^2S$ is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4250 PSI, and Estimated BHT 180°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 25 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Bone Spring formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

| | |
|---|---|
| Well name: | **Goodnight 35 Fed # 1** H BH |
| Operator: | **Latigo** |
| String type. | Production |
| Location: | New Mexico USA |

**Design parameters:**

**Collapse**
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

**Burst**
Max anticipated surface pressure: 2,972 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 3,926 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**
Design factor 1.125

**Burst:**
Design factor 1.00

**Tension:**
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 6,826 ft

**Environment:**
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 186 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: Surface

Directional well information:
Kick-off point 7638 ft
Departure at shoe: 4280 ft
Maximum dogleg: 18 °/100ft
Inclination at shoe: 90 °

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Internal Capacity (ft³) |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 6500 | 4.5 | 11.60 | J-55 | ST&C | 6500 | 6500 | 3.875 | 567.2 |
| 2 | 1500 | 4.5 | 11.60 | L-80 | LT&C | 7927 | 8000 | 3.875 | 130.9 |
| 1 | 4100 | 4.5 | 11.60 | J-55 | ST&C | 7956 | 12100 | 3.875 | 357.8 |

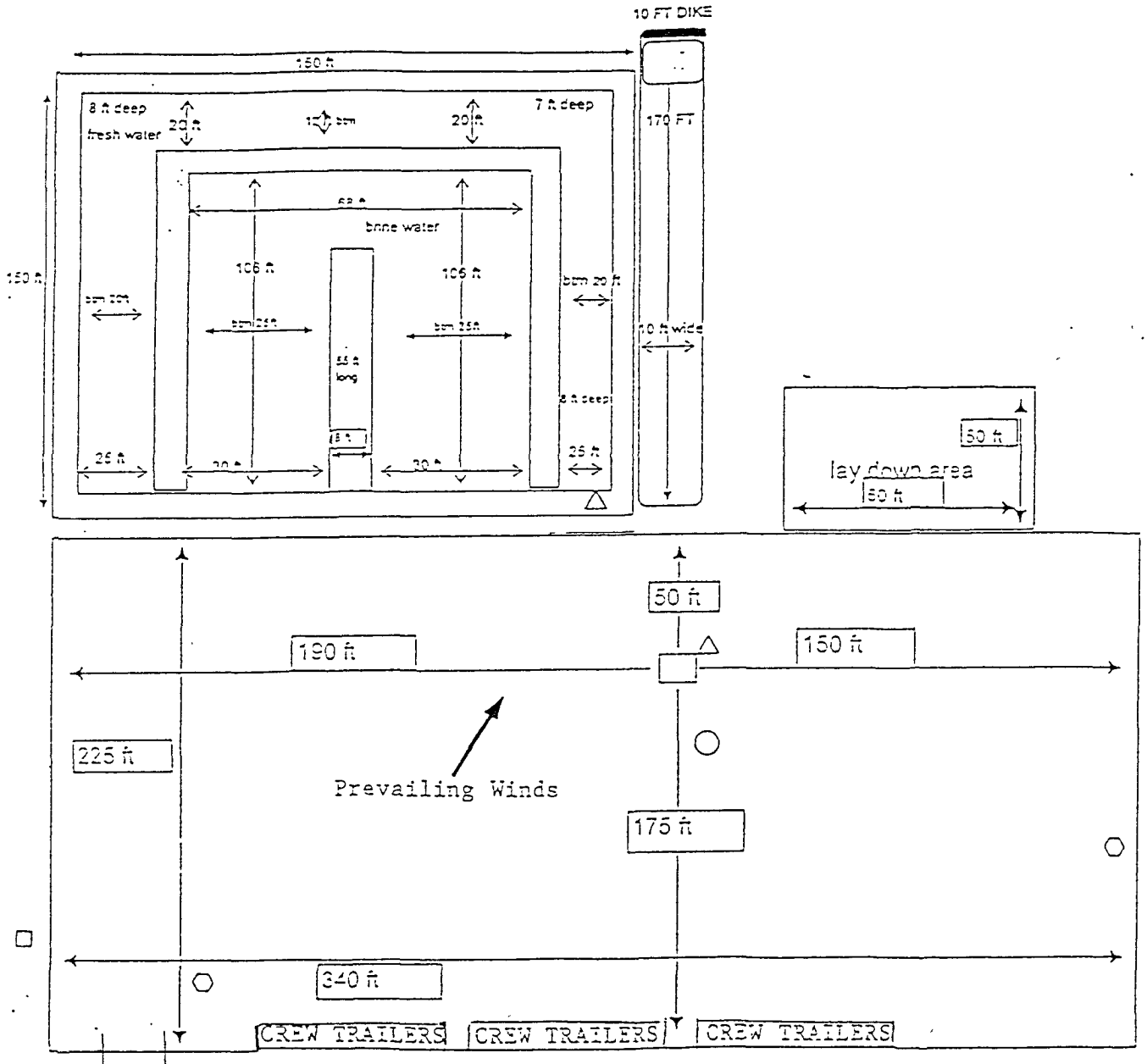
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 3208 | 4833 | 1.506 | 3752 | 5350 | 1.43 | 79 | 154 | 1.94 J |
| 2 | 3912 | 5839 | 1.493 | 3923 | 7780 | 1.98 | 4 | 212 | 56.03 J |
| 1 | 3926 | 4960 | 1.263 | 3926 | 5350 | 1.36 | -13 | 154 | -12.06 J |

All N-80 grade per Richard wright 8-2-07

Prepared by: Richard Wright
Phone: 432 685 8140
FAX: (281) 447-8933
Date: July 23,2007
Houston,TX

Remarks
Collapse is based on a vertical depth of 7956 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

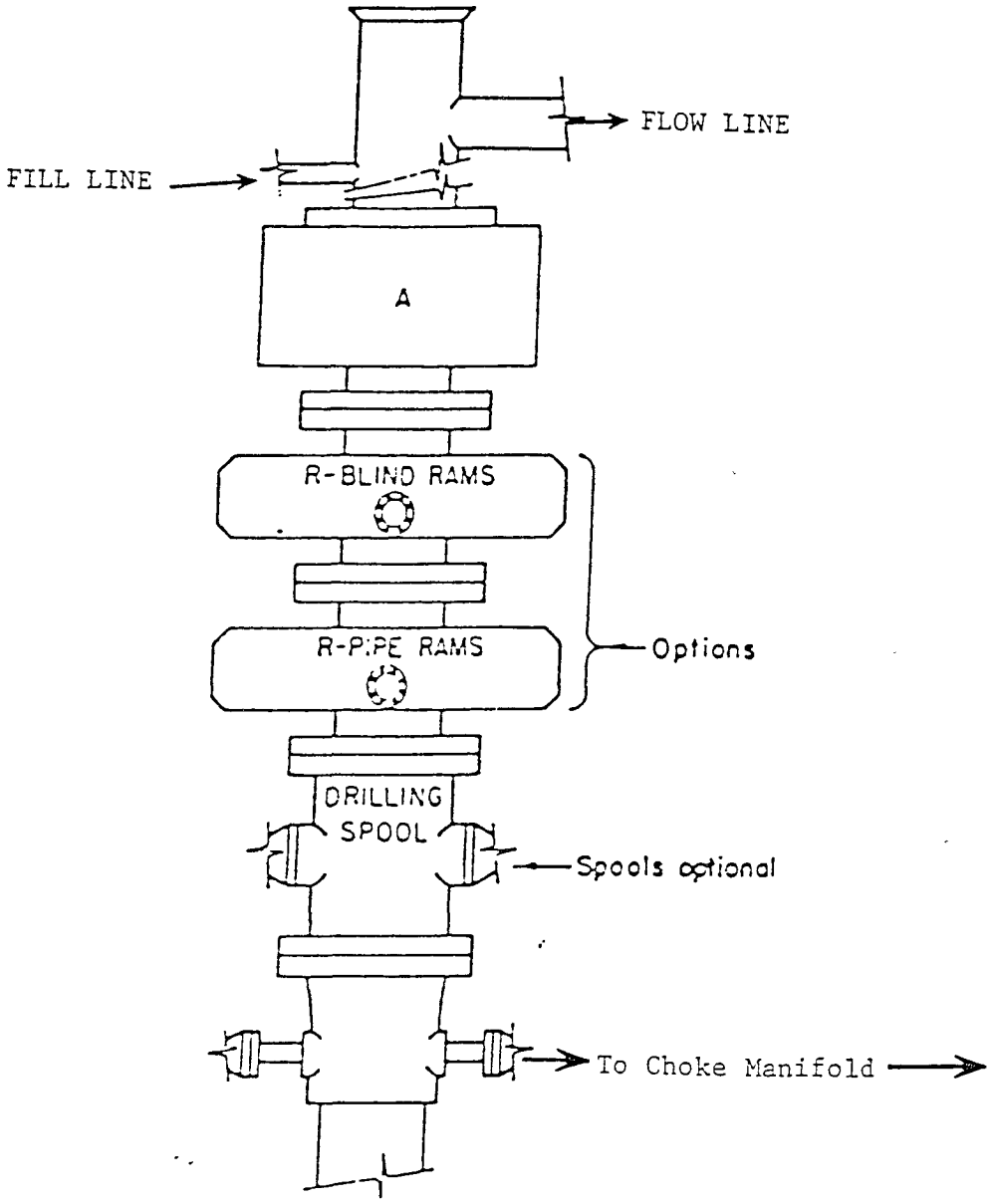
Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a




- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shake
- ⬭ Briefing Areas
- ○ Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM




ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

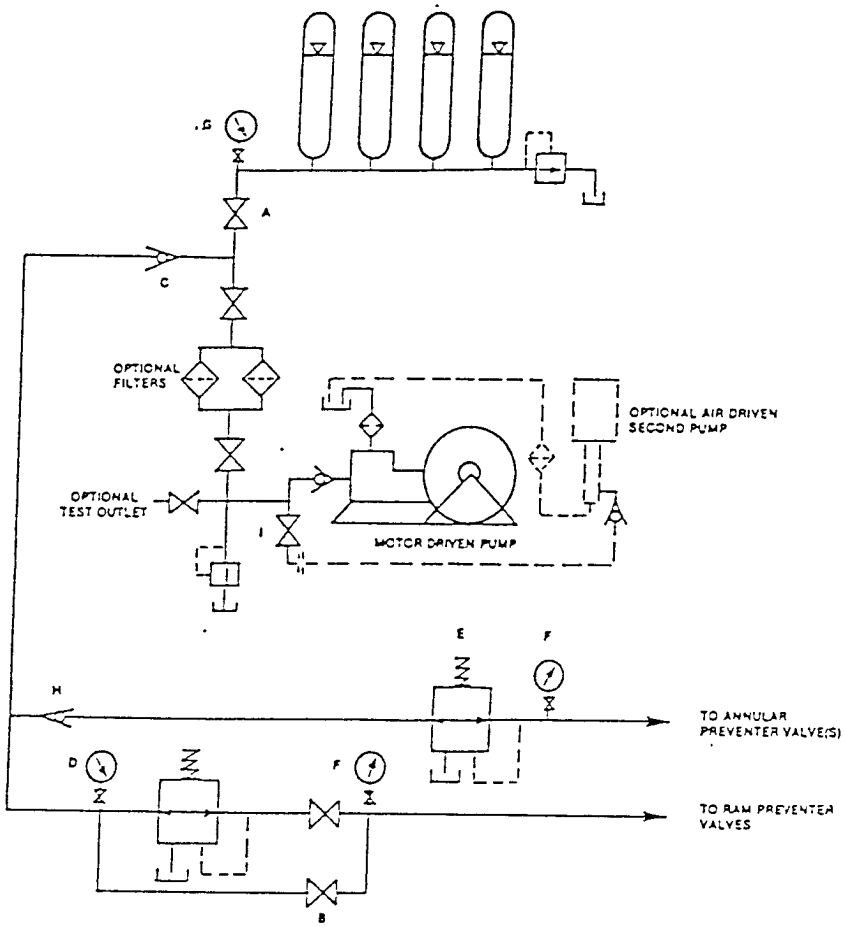



FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

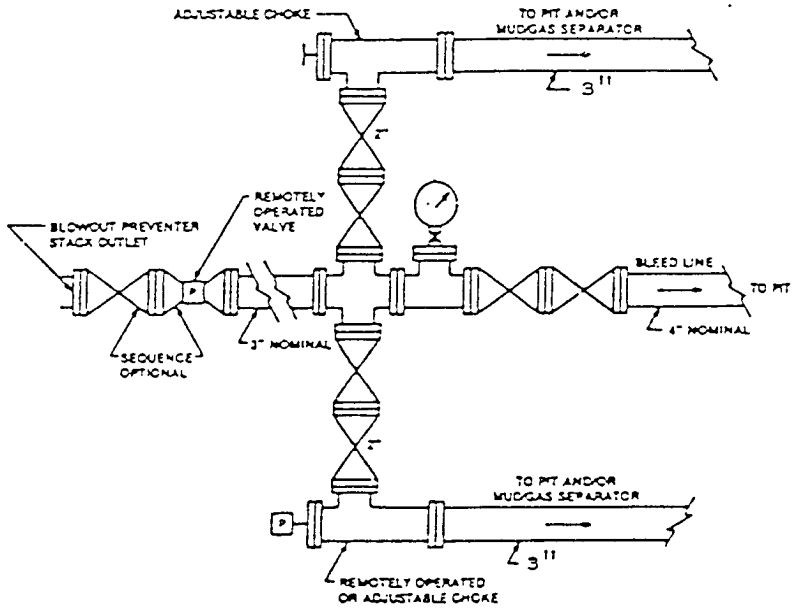



FIGURE K-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

# HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified $H_2S$ safety instructor to the following:

   A. Characteristics of $H_2S$
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of $H_2S$ detectors, warning system and briefing areas.
   E. Evacuation procedure, routes and first aid.
   F. Proper use of 30 minute pressure demand air pack.

2. $H_2S$ Detection and Alarm Systems

   A. $H_2S$ detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.

3. Windsock and/or wind streamers

   A. Windsock at mudpit area should be high enough to be visible.
   B. Windsock at briefing area should be high enough to be visible.
   C. There should be a windsock at entrance to location.

4. Condition Flags and Signs

   A. Warning sign on access road to location.
   B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, $H_2S$ present in dangerous concentration. Only emergency personnel admitted to location.

5. Well control equipment

   A. See exhibit "E"

6. Communication

   A. While working under masks chalkboards will be used for communication.
   B. Hand signals will be used where chalk board is inappropriate.
   C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.

7. Drillstem Testing

   A. Exhausts will be watered.
   B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
   C. If location is near any dwelling a closed D.S.T. will be performed.

8. Drilling contractor supervisor will be required to be familiar with the effects $H_2S$ has on tubular goods and other mechanical equipment.

9. If $H_2S$ is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with $H_2S$ scavengers if necessary.

SURFACE USE PLAN

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

1. EXISTING AND PROPOSED ROADS:

A. Exhibit "B" is a reporduction of a County General Hi-way map showing existing roads. Exhibit "C" is a reproduction of a USGS topographic map showing existing roads and and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. All new roads will be constructed to BLM specifications.

B. Exhibit "A" shows the proposed well site as staked.

C. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico go 42± miles to WIPP Road, turn Left go 13 miles to CR 802 turn Right go 3.7± miles to State Hi-way 128, turn Right go 6± miles to Rawhide Road (CR-793) turn Left go 3.9± miles, turn Left go .3miles, turn Right go .9± miles ; turn Left go .3 miles, turn Right follow lease road 2.8± miles, turn Right (West) go 2 miles, bear Left go Northwest go 1.3± miles to Devon Energy well # 2 bear Northeast and follow lease road .5+ miles to location.

2. PLANNED ACCESS ROADS: No new roads will be required.

A. The access roads will be crowned and sitched to a 14' wide travel surface, within a 30' R-O-W.

B. Gradient of all roads will be less than 5%.

C. Turn-outs will be constructed where necessary.

D. If require new access roads will be surface with a minimum of 4-6" of caliche. this material will be obtained from a local source.

E. Center line for new roads will be flagged, road construction will be done as field conditions require.

F. Culverts will be placed in the access road as drainage conditions require. Roads will be constructed to use low water crossings for drainage as required by the topographic conditions.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS: EXHIBIT "A-1"

A. Water wells - None known

B. Disposal wells - None known

C. Drilling wells - None known

D. Producing wells - As shown on Exhibit "A-1"

E. Abandoned wells - As shown on Exhibit "A-1"

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "C" shows proposed roads , flowlines and powerlines.

5. LOCATION & TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the location access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of the drill site, if additional material is required it will be obtained from a local source and transported over the location access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE:

A. All trash, junk and other waste material will be contained in trash cages or trash bins in order to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.

B. Sewage from living quatersw will be drained into holding tanks and will be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of well.

C. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a State approved disposal site. Later the pits will be broken out to speed drying. Water produced during completion will be stored in tanks and disposed of in State approved disposal site. Oil and condensate produced during completion will be put in storage tanks and sold.

D. Drill cuttings will be disposed of in resebev pits or if necessary will be taken to a State approved landfarm and disposed of properly.

E. Any remaining salts or mud additives will be collected by the supplier and to stock, this includes all broken bags.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

9. WELL SITE LAYOUT:

A. Exhibit "D" shows the proposed well site layout.

B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.

C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encontered during pit construction indicate that a plastic liner is required to contain lateral migration.

D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than12 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.

E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completionphases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out.If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any will be reshaped to the original configuration with provisions made to alleviate furture erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

Should the well be a producer the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #1H
UNIT "N" SECTION 35
T23S-R29E EDDY CO. NM

11. OTHER INFORMATION:

A. This location is located on a South trending mesa/plateauwhich drops off to the North. Soils consists of silty clay loams with unconsolidated sands. Vegetation consists of mesquite, yucca, acacoa, broom weed and native grasses.

B. The surface and minerals are owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used to graze livestock and for the production of oil and gas.

C. An archaeological survey will be conducted on the roads and the location and the results will be filed in The Roswell Field Office.

D. There are no dwellings within 2 miles of location.

12. OPERATOR'S REPRESENTIVES:

BEFORE CONSTRUCTION:

TIERRA EXPLORATION, INC
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-391-8503
CELL PHONE 505-390-1598

DURING AND AFTER CONSTRUCTION:

LATIGO PETROLEUM, INC.
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
MARK FAIRCHILD 432-685-8188

13. CERTIFICATION: I hereby certify that I or persons under my supervision have inspected the proposed drill site and access route, that I am fimiliar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge are true and correct, and that the work associated with the operations proposed herein will be performed by LATIGO PETROLEUM, INC. contractors/subcontractors is in the conformity with this plan and the terms and the conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME : Joe T. Janica Joe T Janica

DATE 7, :

TITLE : Agent

# Conditions of Approval
# Cave and Karst

EA#: NM-520-07-1040
Lease #: NM-103604
**Latigo Petroleum, Inc.**
**Goodnight 35 Fed. #1H**

**Cave/Karst Surface Mitigation**
The following stipulations will be applied to minimize impacts during construction, drilling and production.

**Berming:**
Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

**Cave/Karst Subsurface Mitigation**
The following stipulations will be applied to protect cave/karst and ground water concerns:

**Rotary Drilling with Fresh Water:**
Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

**Casing:**
All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

**Lost Circulation:**
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

**Abandonment Cementing:**
Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

**Differential Shut-off Systems**:
A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

**Record Keeping:**
The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

## CONDITIONS OF APPROVAL - DRILLING

| | |
|---|---|
| **Operator's Name:** | **Latigo Petroleum, Inc** |
| **Well Name & No.** | **1H-Goodnight "35" Federal** |
| **Location SHL:** | **0660' FSL, 2180' FWL, Sec. 35, T-23-S, R-29-E, Eddy County, NM** |
| **Location BHL:** | **0330' FNL, 1980' FWL, Sec. 35, T-23-S, R-29-E, Eddy County, NM** |
| **Lease:** | **NM 103604** |

### I. DRILLING OPERATIONS REQUIREMENTS:

**A.** The Bureau of Land Management (BLM) is to be notified a minimum of 2 hours in advance for a representative to witness:

1. Spudding well
2. Setting and/or Cementing of all casing strings
3. BOPE tests

- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

**B. Although no Hydrogen Sulfide has been reported in the area, it is always a possible hazard.**

**C.** Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

**D.** When floor controls are required, (3M or Greater), controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

**E.** Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufacturers of the logging tools recommended speed. **(R-111-P area only)**

### II. CASING: RE-ENTRY

**A.** The 13-3/8 inch surface casing is existing and is set at **581 feet and cemented to the surface.**

**B.** The 9-5/8 inch intermediate casing is set at **3,015 feet and cemented to surface.**

**C. The 7 inch intermediate casing is set at 10,609 feet and was cut at 3150' when the well was previously plugged and the top of cement is at 5350' per CBL. Possible cement behind 7" at 4200' due to squeeze of perforations at that depth.**

**CIT will also be against formation based on existing casing design.**
**Possible lost circulation in the Delaware and Bone Spring formations.**

**D.** The minimum required fill of cement behind the 4-1/2 inch production casing is **for cement to come to surface due to R-111-P requirements. DVT may be required.**

**E.** If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

**F. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.**

## III. PRESSURE CONTROL:

**A.** All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

**B.** The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

1. The tests shall be done by an independent service company.
2. The results of the test shall be reported to the appropriate BLM office.
3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

**Engineer on call phone (after hours): Carlsbad - 505-706-2779**

**WWI 072507**