CLK 7034 OCD-ARTESIA 1040 ATS-07-419

Form 3160-3
(April 2004)

JUN 04 2008

OCD-ARTESIA

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

R-111-POTASH

APPLICATION FOR PERMIT TO DRILL OR REENTER

S

5. Lease Serial No. NM103141 BHL
NM-103604 SHL

6. If Indian, Allotee or Tribe Name

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

HIGH CAVEKARST

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

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

8. Lease Name and Well No. 301039
GOODNIGHT "35" FEDERAL #2H

2. Name of Operator
LATIGO PETROLEUM, INC. (RICHARD WRIGHT 432-685-8140) 227001

9. API Well No.
30-015-36373

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.*)*
At surface 180' FSL & 490' FWL SECTION 35 T23S-R29E EDDY CO. NM
At proposed prod. zone 330' FNL & 660' FWL SECTION 35 T23S-R29E EDDY CO.

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 drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
180'	320	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
1900'±	TVD-7965 MD-12,380	NMB-000186

21 Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3086' GL	WHEN APPROVED	40 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/ Linda S.C. Rundell	/s/ Linda S.C. Rundell	JUN 02 2008

Title	Office
STATE DIRECTOR	NM STATE OFFICE

Application approval does not warrant or cert
onduct operations thereon.
Conditions of approval, if any, are attached.

NOTE: New Pit Rule
NMAC 19-15-17

rights in the subject lease which would entitle the applicant to

APPROVAL FOR TWO YEARS

itle 18 U.S.C. Section 1001 and Title 43 U.S.C.
tates any false, fictitious or fraudulent statem

nd willfully to make to any department or agency of the United
n.

(Instructions on page 2)

CARLSBAD CONTROLLED WATER BASIN

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

/s/ Rudy 6-11-08 KMS

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	11520	CEDAR CANYON-BONE SPRING

Property Code	Property Name	Well Number
~~36767~~	GOODNIGHT "35" FEDERAL	2H

OGRID No.	Operator Name	Elevation
~~17891~~ 227001	LATIGO PETROLEUM INC.	3086'

Surface Location

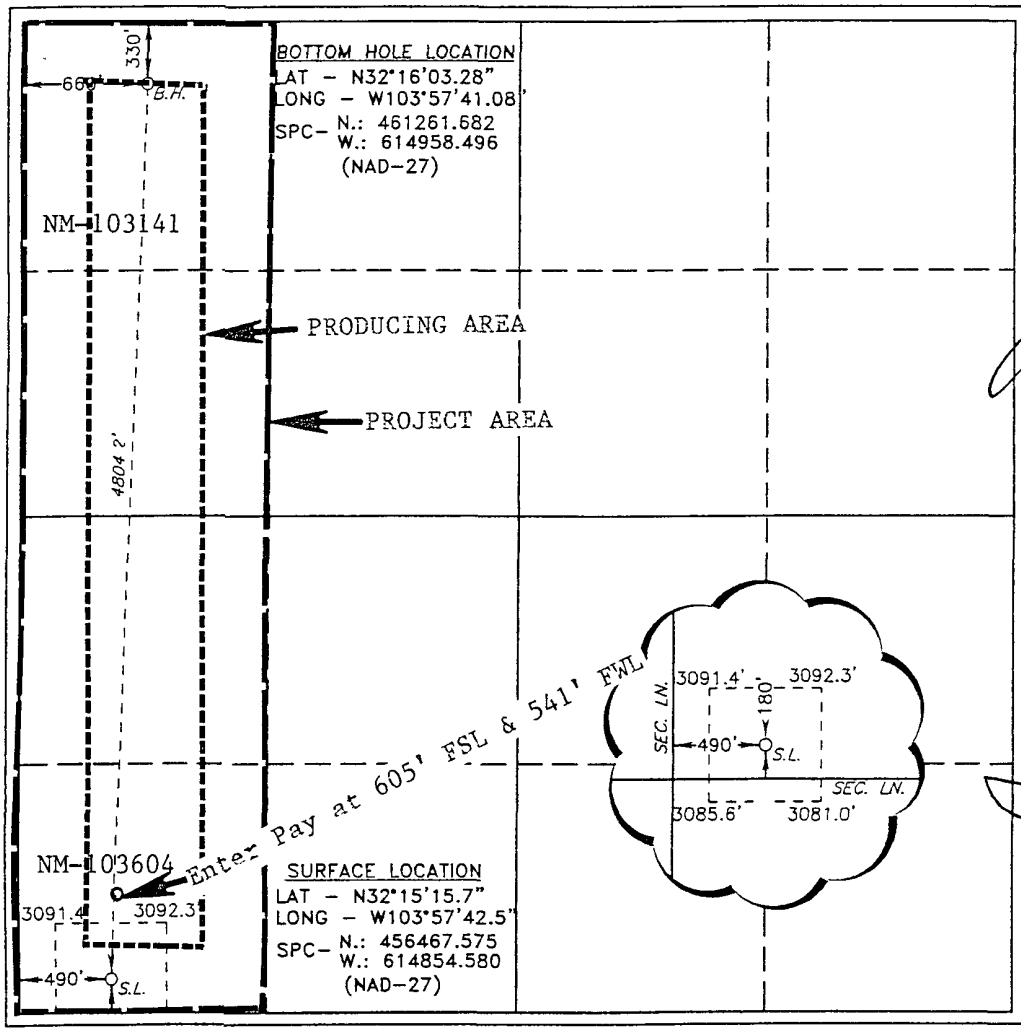
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	35	23 S	29 E		180	SOUTH	490	WEST	EDDY

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
D	35	23S	29E		330'	NORTH	660'	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 contained 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 pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Joe T. Janica
Signature

07/06/07
Date

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 supervison, and that the same is true and correct to the best of my belief.

MAY 25, 2007
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

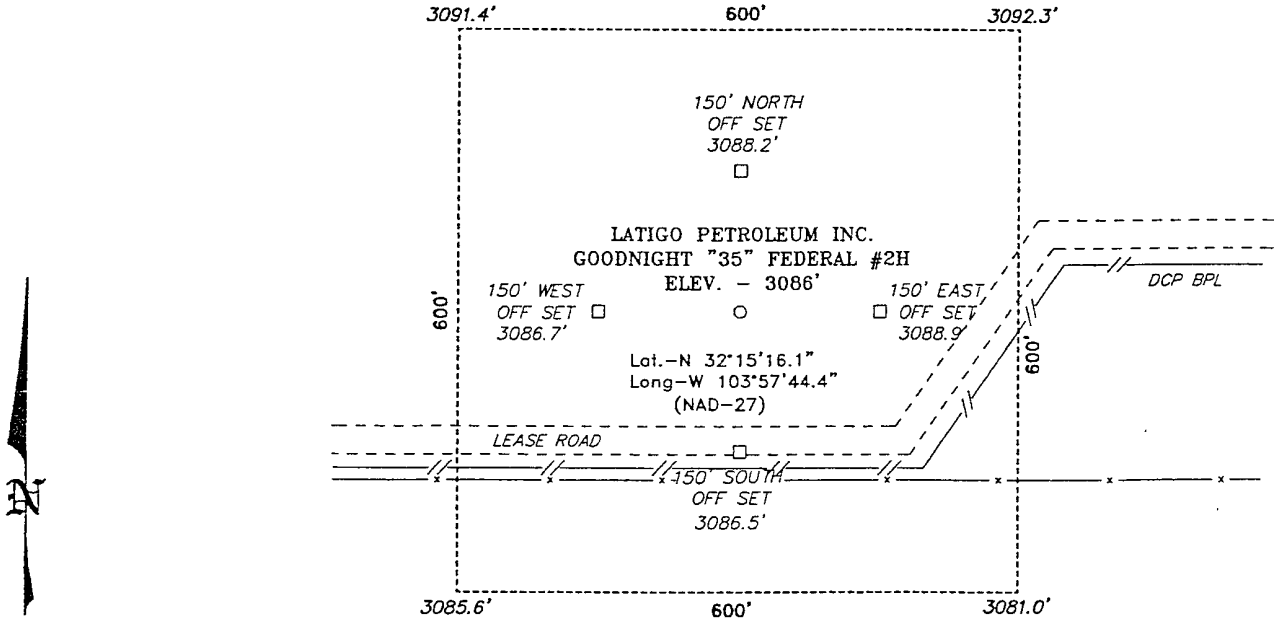
W.O. No. 18125

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

EXHIBIT "A"

SECTION 35, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 793 (RAWHIDE), GO SOUTH ON CO. RD. 793 TO THE OF PAVEMENT, CONTINUE SOUTH BY SOUTHEAST ON LEASE ROAD FOR 8.3 MILES TOTAL FROM STATE HWY 128 TO WATER TANK, AT WATER TANK GO WEST ON LEASE ROAD FOR 3.7 MILES TO PROPOSED LEASE ROAD.

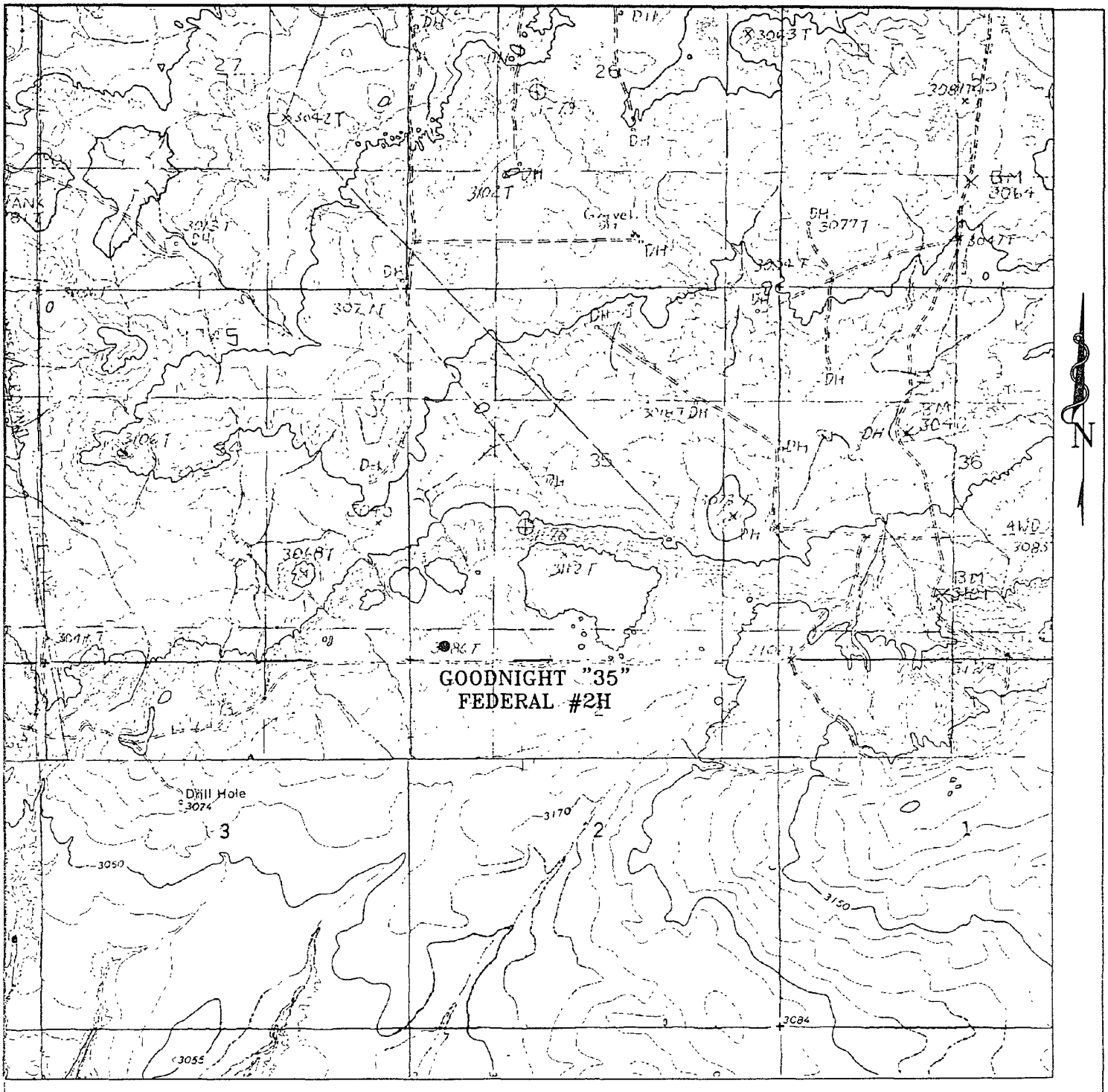
LATIGO PETROLEUM INC.

REF: GOODNIGHT "35" FEDERAL #2H / WELL PAD TOPO

THE GOODNIGHT "35" FEDERAL #2H LOCATED 180' FROM THE SOUTH LINE AND 490' FROM THE WEST LINE OF SECTION 35, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 18125	Drawn By: J. M. SMALL		
Date: 05-28-2007	Disk: JMS 18125W	Survey Date: 05-25-2007	Sheet 1 of 1 Sheets



GOODNIGHT "35" FEDERAL #2H

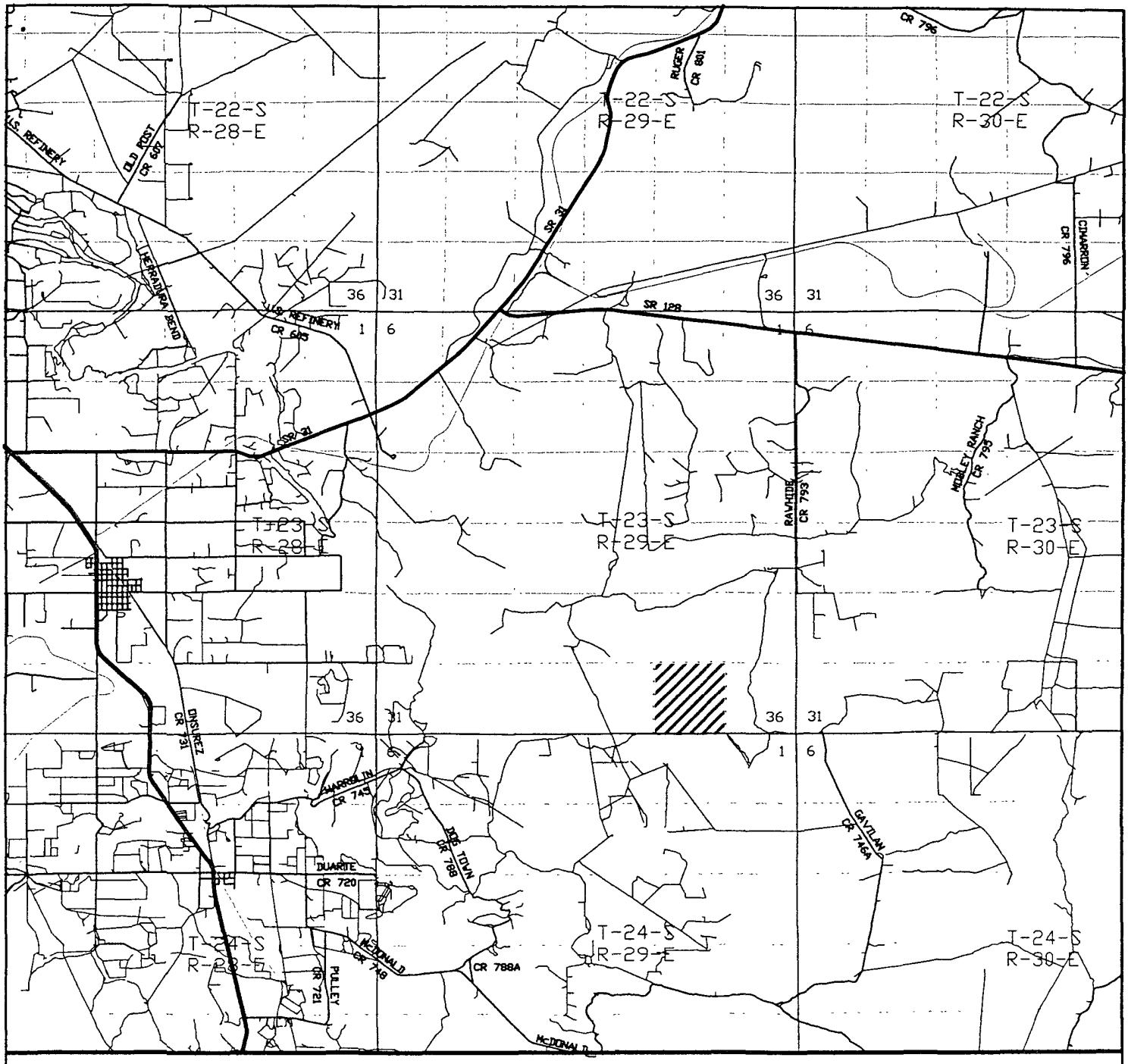
Located at 180' FSL and 490' FWL
Section 35, Township 23 South, Range 29 East,
N.M.P.M., Eddy County, New Mexico.

Basin Surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W O Number:	18125T
Survey Date:	05-25-2007
Scale:	1" = 2000'
Date:	05-29-2007

LATIGO PETROLEUM INC.



GOODNIGHT "35" FEDERAL #2H
Located at 180' FSL and 490' FWL
Section 35, Township 23 South, Range 29 East,
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1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number: 18125TR
Survey Date: 05-25-2006
Scale: 1" = 2 MILES
Date: 05-29-2007

LATIGO PETROLEUM INC.

1. GOODNIGHT 35 FEDERAL # 2H.
180 FSL & 490 FWL, , SEC 35, T23S, R29E, EDDY COUNTY, NEW MEXICO TD 11,136 md & 8025' TVD. BHL ANTICIPATED @ 330 FNL & 660 FWL SAME SECTION. "WILD CAT BONE SPRINGS". 160 ACRE PRORATION UNIT.

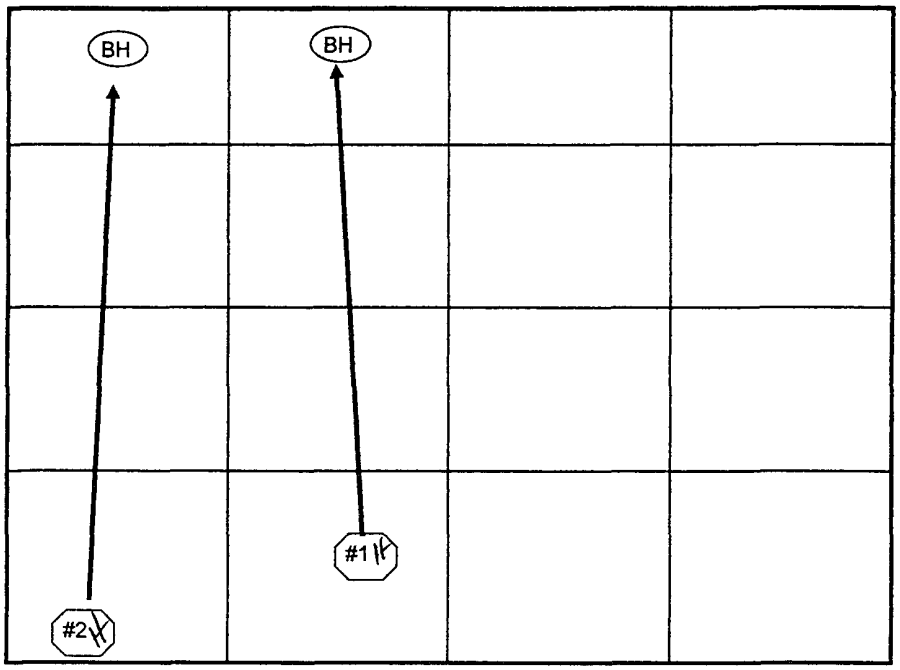
SURFACE CASING:
17 ½" HOLE DRILLED W/ FRESH WATER. SET 13 3/8" 48 # H-40 CASING @ 550 ft. CMT'D W/ 450 SKS 65:35:6 (C:POZ:GEL) TAILED W/ 200 SKS "C" W/ 2% CACL2. CMT CIRCULATED TO SURFACE.

INTERMEDIATE CASING:
NIPPLE UP 3K BOP EQUIPMENT
11 " HOLE DRILLED W/ BRINE WATER. SET 9 5/8" CASING @ 3000'. CMT W/ 800 SKS 65:35:6 (C:POZ:GEL) + 5% NACL.. TAILED W/ 200 SKS "C" W/ 2% CACL2. CMT CIRCULATED TO SURFACE. CMT LEAD SLURRY ADJUSTED AFTER RUNNING FLUID CALIPER.
CASING PROGRAM = 3000 9 5/8" 36# J-55 LTC

PRODUCTION CASING:
NIPPLE UP 3K BOP EQUIPMENT. DRILL 8 ½ " HOLE THROUGH CURVE TO ± 8123. CHANGE HOLE SIZE TO 7 7/8" & COMPLETE LATERAL TO ± 11,118'. RUN 5 ½" 17# N-80 CASING TO TOTAL DEPTH. STAGE TOOL @ 4500' & 2500'. CEMENT 1ST STAGE W/ ± 1800 SKS PREMIUM PLUS MIXED @ 14.1 PPG. 2ND STAGE CMT'D W/ 650 SKS PREMIUM PLUS MIXED @ 14.1 PPG. 3RD STAGE CMT'D W/ 650 SKS PREMIUM PLUS LIGHT FOLLOWED BY 100 SKS PP MIXED @ 14.8 PPG. TOC CIRCULATED.
CASING PROGRAM = 5 ½ INCH 17# N-80 LTC & BTC

GOODNIGHT WELL GROUPINGS

Sec 35, 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 # 2	180 FSL & 490 FWL	1ST BONE SPRINGS HORIZ	PROPOSED HORZ
GOODNIGHT 35 FED # 1	660 FSL & 2180 FWL	11,571 MORROW TEST	PROPOSED RE ENTRY
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

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	6.142718	7488.00	7488.00	0.00	0.00	-
2	100	12	6.142718	7588.00	7587.27	10.37	1.12	12.00
3	100	24	6.142718	7688.00	7682.20	41.04	4.42	12.00
4	100	36	6.142718	7788.00	7768.65	90.66	9.76	12.00
5	100	48	6.142718	7888.00	7842.83	157.07	16.90	12.00
6	100	60	6.142718	7988.00	7901.50	237.36	25.55	12.00
7	100	72	6.142718	8088.00	7942.10	328.03	35.30	12.00
8	100	84	6.142718	8188.00	7962.85	425.10	45.75	12.00
9	50	90	6.142718	8238.00	7965.46	474.72	51.09	12.00
10	100	90	6.142718	8338.00	7965.46	574.15	61.79	0.00
11	100	90	6.142718	8438.00	7965.46	673.58	72.49	0.00
12	100	90	6.142718	8538.00	7965.46	773.00	83.19	0.00
13	100	90	6.142718	8638.00	7965.46	872.43	93.89	0.00
14	100	90	6.142718	8738.00	7965.46	971.85	104.59	0.00
15	100	90	6.142718	8838.00	7965.46	1071.28	115.29	0.00
16	100	90	6.142718	8938.00	7965.46	1170.70	126.00	0.00
17	100	90	6.142718	9038.00	7965.46	1270.13	136.70	0.00
18	100	90	6.142718	9138.00	7965.46	1369.56	147.40	0.00
19	100	90	6.142718	9238.00	7965.46	1468.98	158.10	0.00
20	100	90	6.142718	9338.00	7965.46	1568.41	168.80	0.00
21	100	90	6.142718	9438.00	7965.46	1667.83	179.50	0.00
22	100	90	6.142718	9538.00	7965.46	1767.26	190.20	0.00
23	100	90	6.142718	9638.00	7965.46	1866.69	200.90	0.00
24	100	90	6.142718	9738.00	7965.46	1966.11	211.60	0.00
25	100	90	6.142718	9838.00	7965.46	2065.54	222.30	0.00
26	100	90	6.142718	9938.00	7965.46	2164.96	233.00	0.00
27	100	90	6.142718	10038.00	7965.46	2264.39	243.70	0.00
28	100	90	6.142718	10138.00	7965.46	2363.81	254.40	0.00
29	100	90	6.142718	10238.00	7965.46	2463.24	265.10	0.00
30	100	90	6.142718	10338.00	7965.46	2562.67	275.80	0.00
31	100	90	6.142718	10438.00	7965.46	2662.09	286.50	0.00
32	100	90	6.142718	10538.00	7965.46	2761.52	297.20	0.00
33	100	90	6.142718	10638.00	7965.46	2860.94	307.90	0.00
34	100	90	6.142718	10738.00	7965.46	2960.37	318.60	0.00
35	100	90	6.142718	10838.00	7965.46	3059.80	329.31	0.00
36	100	90	6.142718	10938.00	7965.46	3159.22	340.01	0.00
37	100	90	6.142718	11038.00	7965.46	3258.65	350.71	0.00
38	100	90	6.142718	11138.00	7965.46	3358.07	361.41	0.00
39	100	90	6.142718	11238.00	7965.46	3457.50	372.11	0.00
40	100	90	6.142718	11338.00	7965.46	3556.92	382.81	0.00
41	100	90	6.142718	11438.00	7965.46	3656.35	393.51	0.00
42	100	90	6.142718	11538.00	7965.46	3755.78	404.21	0.00
43	100	90	6.142718	11638.00	7965.46	3855.20	414.91	0.00
44	100	90	6.142718	11738.00	7965.46	3954.63	425.61	0.00
45	100	90	6.142718	11838.00	7965.46	4054.05	436.31	0.00
46	408	90	6.142718	12246.00	7965.46	4459.71	479.97	0.00
47								
48								

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" 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 will is provided for your information.

1. LOCATION: 180' FSL & 490' FWL SECTION 35 T23S-R29E EDDY CO. NM

2. ELEVATION ABOVE SEA LEVEL:

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-7965 MD-12,380

6. ESTIMATED TOPS OF GELOOGICAL MARKERS:

Basal Anhydrite	2950'	Brushy Canyon	5260'
Delaware Lime	3150'	Bone Spring	6900'
Delaware Sand	3200'	1st Bone Spring	8020'
Cherry Canyon	4000'	TD (MD)	12,380'

7. POSSIBLE MINERAL BEARING FORMATION:

Brushy Canyon	Oil
Bone Spring	Oil

8. CASING PROGRAM:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-550'	13 3/8"	48#	8-R	ST&C	H-40
12¼"	0-3000'	9 5/8"	36#	8-R	ST&C	J-55
8½" & 7 7/8"	0-12,380	5½"	17#	8-R & BUTT	LT&C BUTT	N-80

All casing is new. Collapse 1.125 Burst 1.00 Tension 1.8 Body Yield 1.5

HALLIBURTON, HOBBS, NM
J. GONZALEZ
CMT SLURRIES
LB 4/29/08

APPLICATION TO DRILL

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 550' of 13 3/8" 48# H-40 ST&C casing. Cement with 450 Sx. of 65/35/6 POZ Class "C" Gel; tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
	LEAD 1.90	
	TAIL 1.35	
9 5/8"	Intermediate	Set 3000' of 9 5/8" 36# J-55 ST&C casing. Cement with 800 Sx. of 65/35/6 Class "C" POZ/Gel +5% Salt, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
	LEAD 2.12	
	TAIL 1.35	
5½"	Production	Set 12,380' of 5½" 17# N-80 LT&C & BUTTRESS casing. Cement in 3 stages, DV Tools At 4500' & 2500'. Cement 1st stage with 1800 Sx. of Premium Plus cement + addditives, mix at 14.1 PPG. Cement 2nd stage with 650 Sx. of Premium Plus cement mixed at 14.1 PPG. Cement 3rd stage with 650 Sx. of Premium Plus cement tail in with 100 Sx. of Premium PLus cement mixed at 14.8 PPG, circulate cement to surface.
	1st 1.3	
	2nd 1.3	
	3rd LEAD 1.9	
	TAIL 1.32	

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 hole on trips. Full opening stabbing valve and upper kelly cock will will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected in this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-550'	8.4-8.7	29-36	NC	Fresh water Spud Mud add paper to control seepage.
550-3000'	10.0-10.2	29-38	NC	Brine water add paper to control seepage, and use high viscosity sweeps to clean hole.
3000-12,380'	9.5- 10.0	30-38	NC*	Cut Brine use high viscosity sweeps to clean hole. If water loss needs to be control go to a Polymer System.

* Water loss may have to be reduced in order to condition hloe to run casing, if necessary go to a Polymer system.

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, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

12. LOGGING, CORING & TESTING PROGRAM:

A. Open hole logs: Dual Laterolog, MSFL, SNP, DENSITY, Gamma Ray, Caliper from 8123'± back to 9 5/8" casing shoe.

B. Cased hole logs: Run Gamma Ray, Neutron log from 9 5/8" casing shoe back to surface.

C. No DST's, Cores are planned at this time.

D. Mud logger may be rigged up at the desire of the Geologist.

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°.

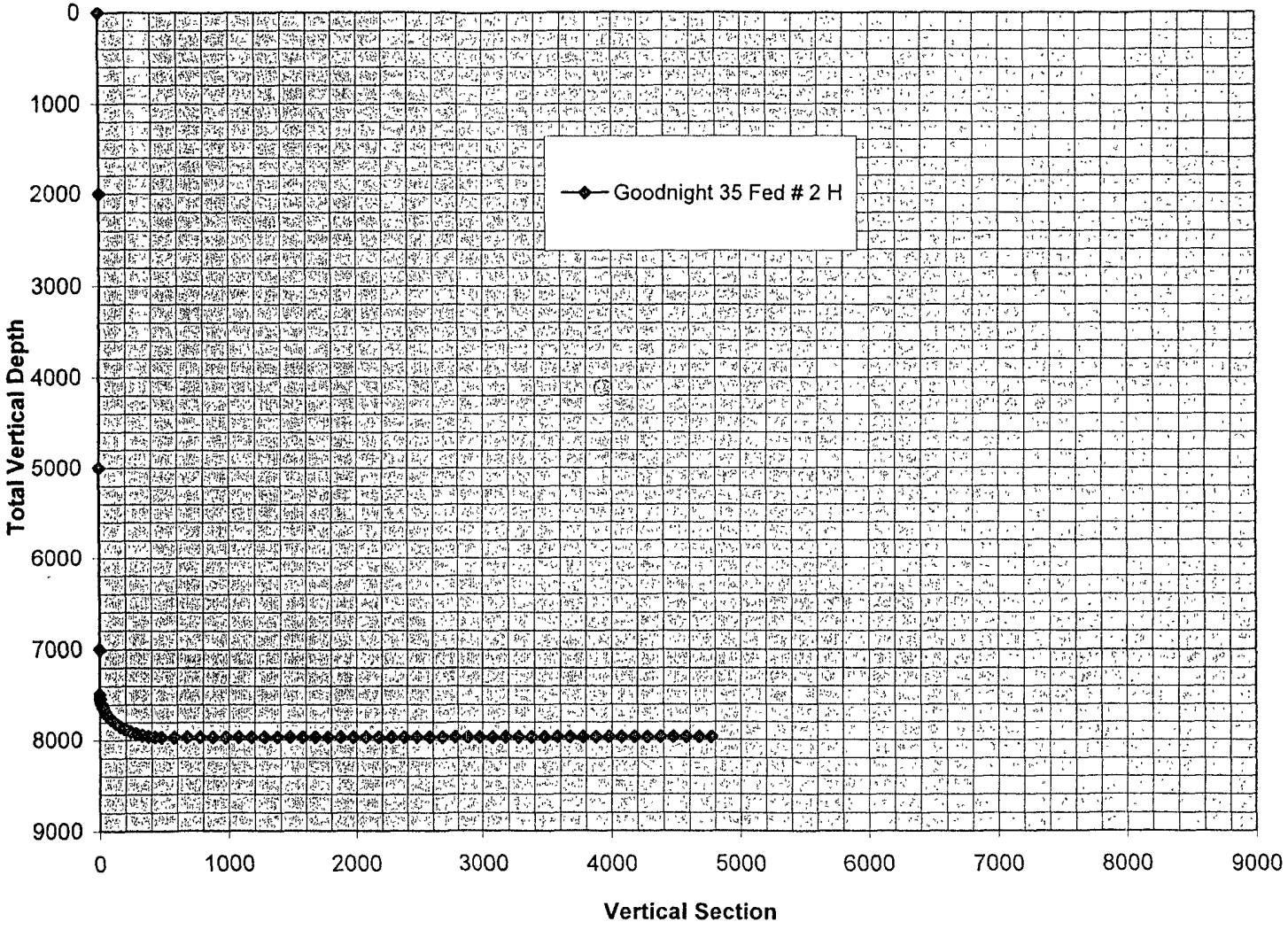
14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

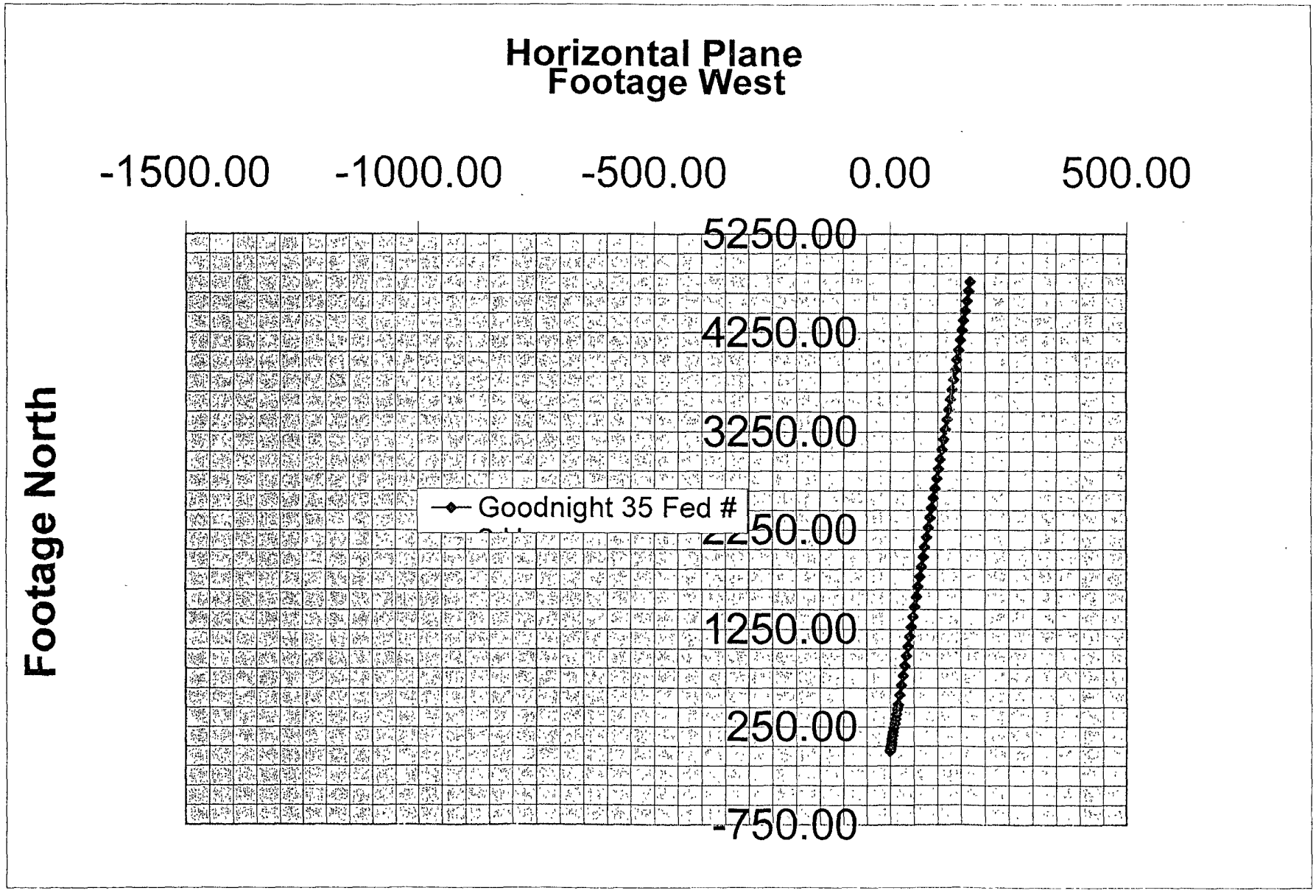
Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 40 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

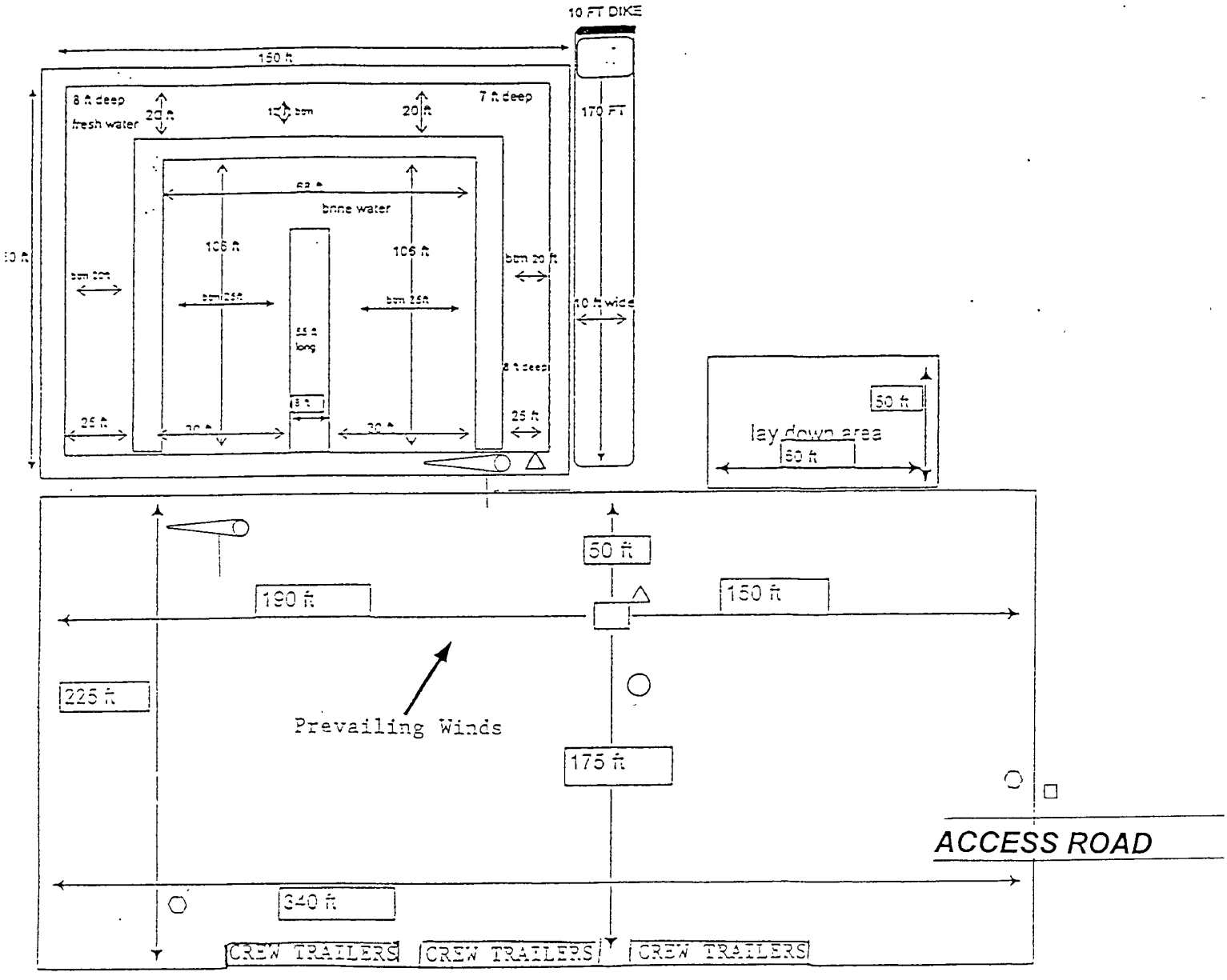
15. OTHER FACETS OF OPERATIONS:

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.

Goodnight 35 Fed # 2 H



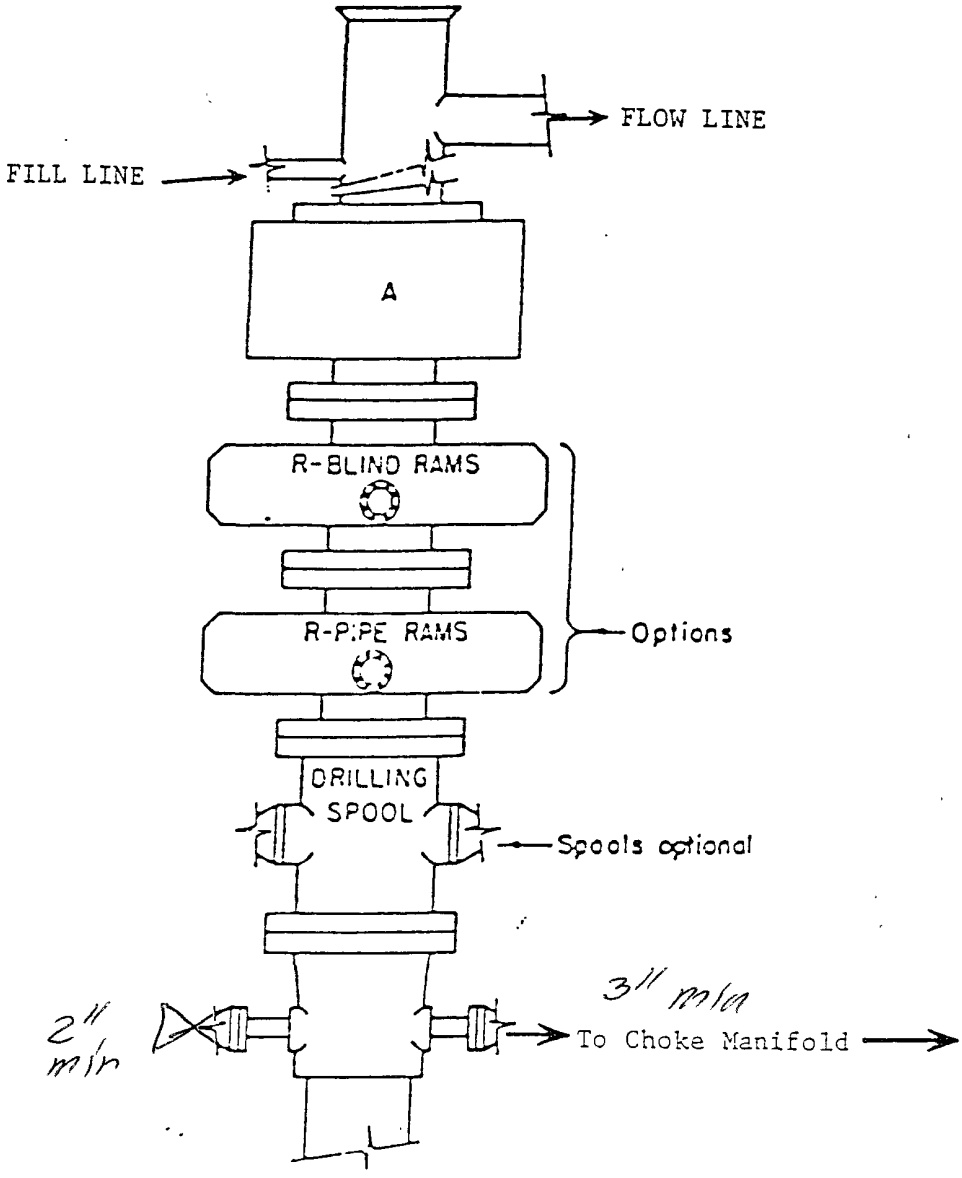

Horizontal Plane
Footage West
-1500.00
-1000.00
-500.00
0.00
500.00
Footage North
5250.00
4250.00
3250.00
2250.00
1250.00
250.00
-750.00
Goodnight 35 Fed #



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

EXHIBIT "D"
RIG LAY OUT PLAT

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" 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 #2H
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

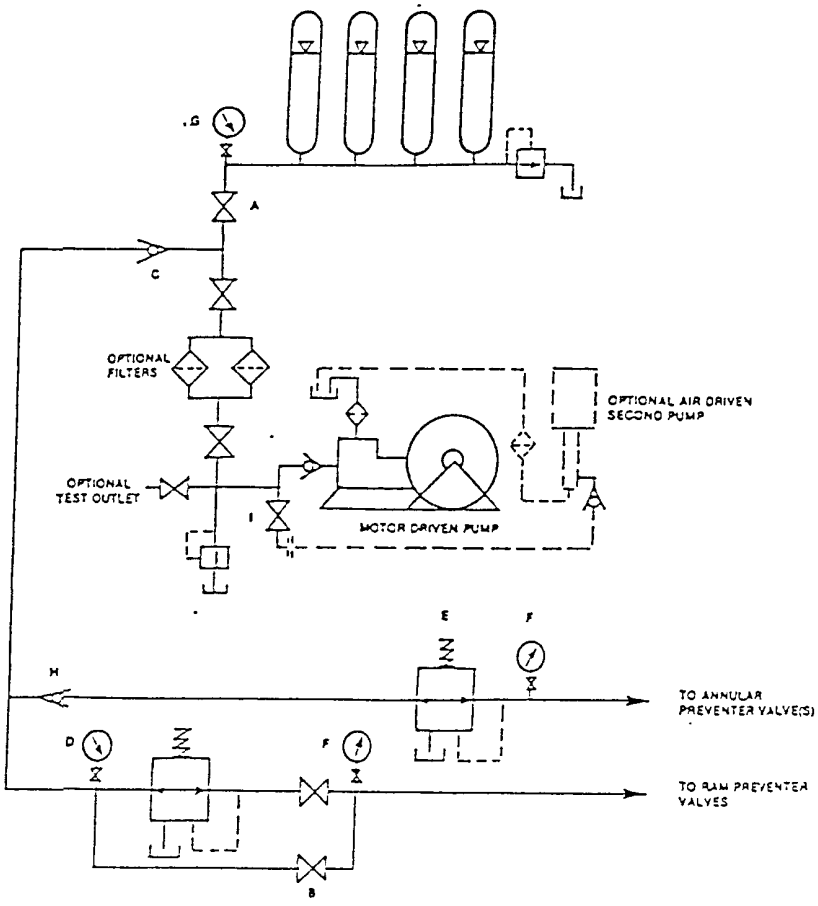


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

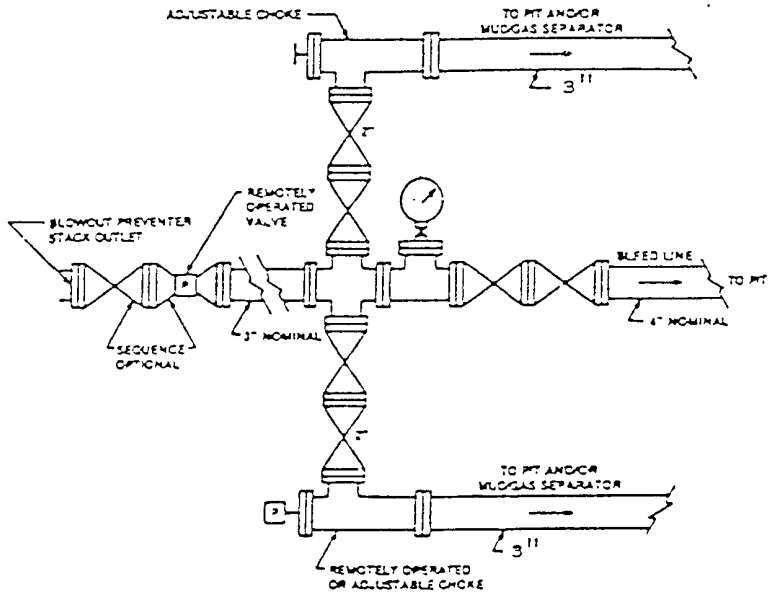


FIGURE K-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" 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 #2H
UNIT "M" 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.

From Hobbs New Mexico take U.S. Hi-wqy 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 .4 miles, turn Left (West) go .25 miles to location on the North side of road.

2. PLANNED ACCESS ROADS: No new road 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

B. Disposal wells

C. Drilling wells

D. Producing wells

E. Abandoned wells

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 #2H
UNIT "M" 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 : 07/06/07

TITLE : Agent

CERTIFICATION

I HEREBY CERTIFY THAT I OR PERSONS UNDER MY SUPERVISION HAVE INSPECTED THE PROPOSED DRILL SITE AND ACCESS ROAD ROUTES, THAT I AM FAMILIAR WITH THE CONDITIONS THAT CURRENTLY EXIST, AND 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 POGO PRODUCING COMPANY, ITS CONTRACTORS OR ITS SUB-CONTRACTORS IS IN THE CONFORMITY WITH THIS PLAN AND THE TERMS AND THE CONDITIONS UNDER WHICH IT IS APPROVED. THIS STATEMENT IS SUBJECT TO THE PROVISIONS OF U.S.C. 1001 FOR THE FILING OF A FALSE STATEMENT.

OPERATORS REPRESENTIVEVES:

BEFORE CONSTRUCTION

JOE T. JANICA
TIERRA EXPLORATION, INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 8241
OFFICE PHONE 505-391-8503
CELL 505-390-1598

DURING & AFTER CONSTRUCTION

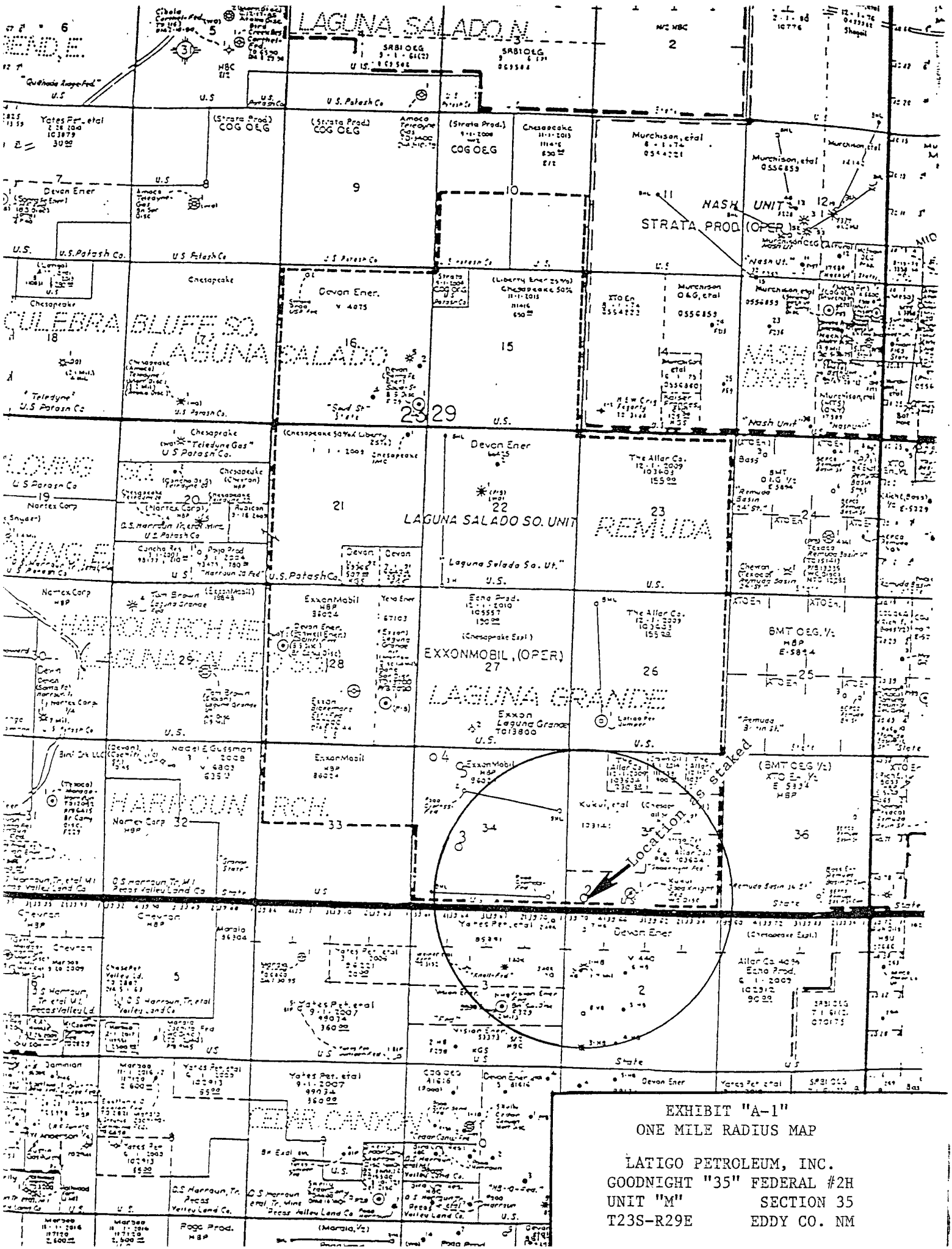
RICHARD WRIGHT
~~POGO PRODUCING~~ LARIGO Petroleum COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
OFFICE PHONE 432-685-8140
CELL 432-556-1653

NAME; JOE T. JANICA Joe T. Janica

DATE : 07/06/07

TITLE: Agent

;


LAGUNA SALADO N.
NASH UNIT
STRATA PROD (OPER
CULEBRA BLUFF SO.
LAGUNA SALADO
LAGUNA SALADO SO. UNIT
REMUDA
EXXONMOBIL, (OPER)
LAGUNA GRANDE
HARROUN RCH.
Location as staked
EXHIBIT "A-1"
ONE MILE RADIUS MAP
LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

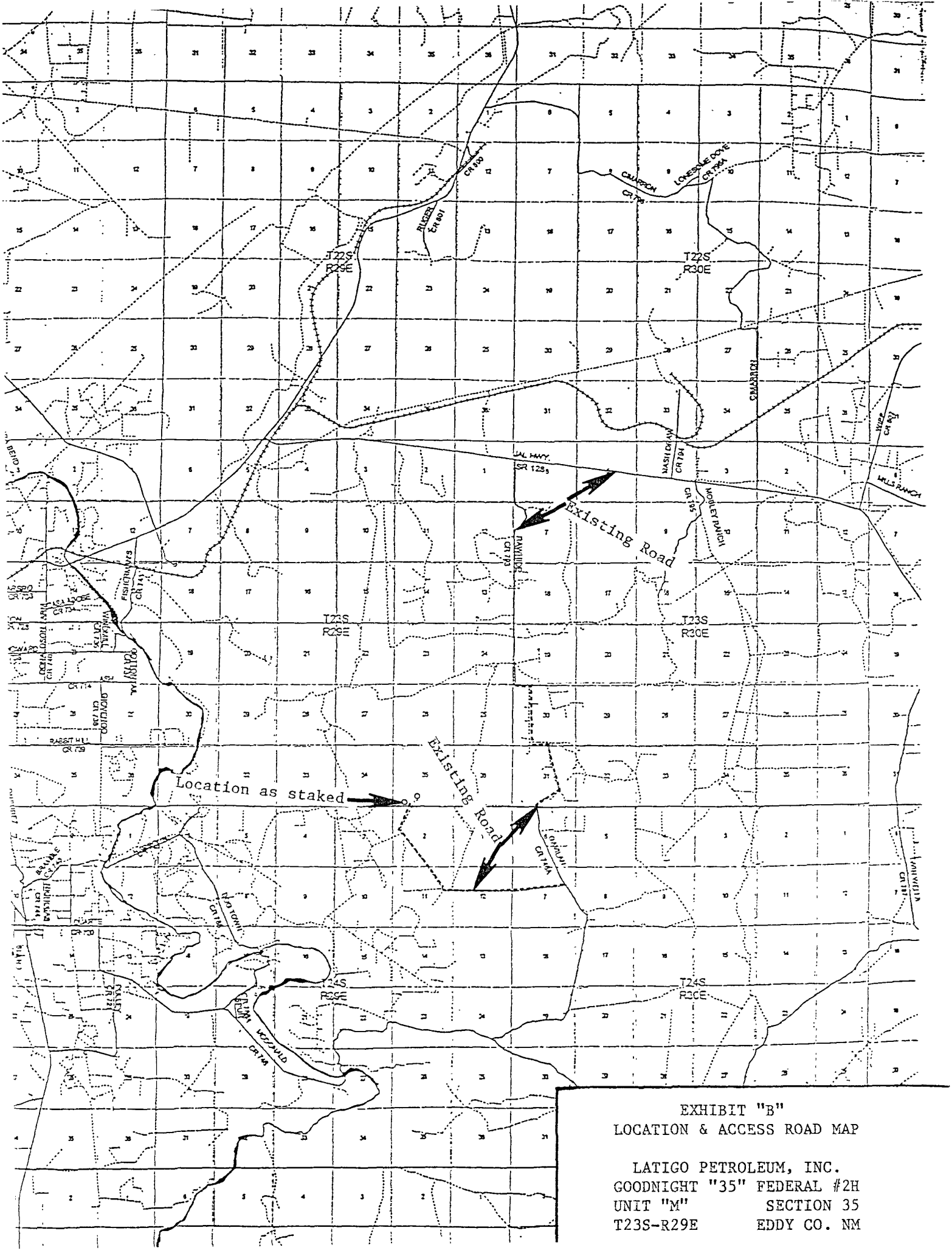


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

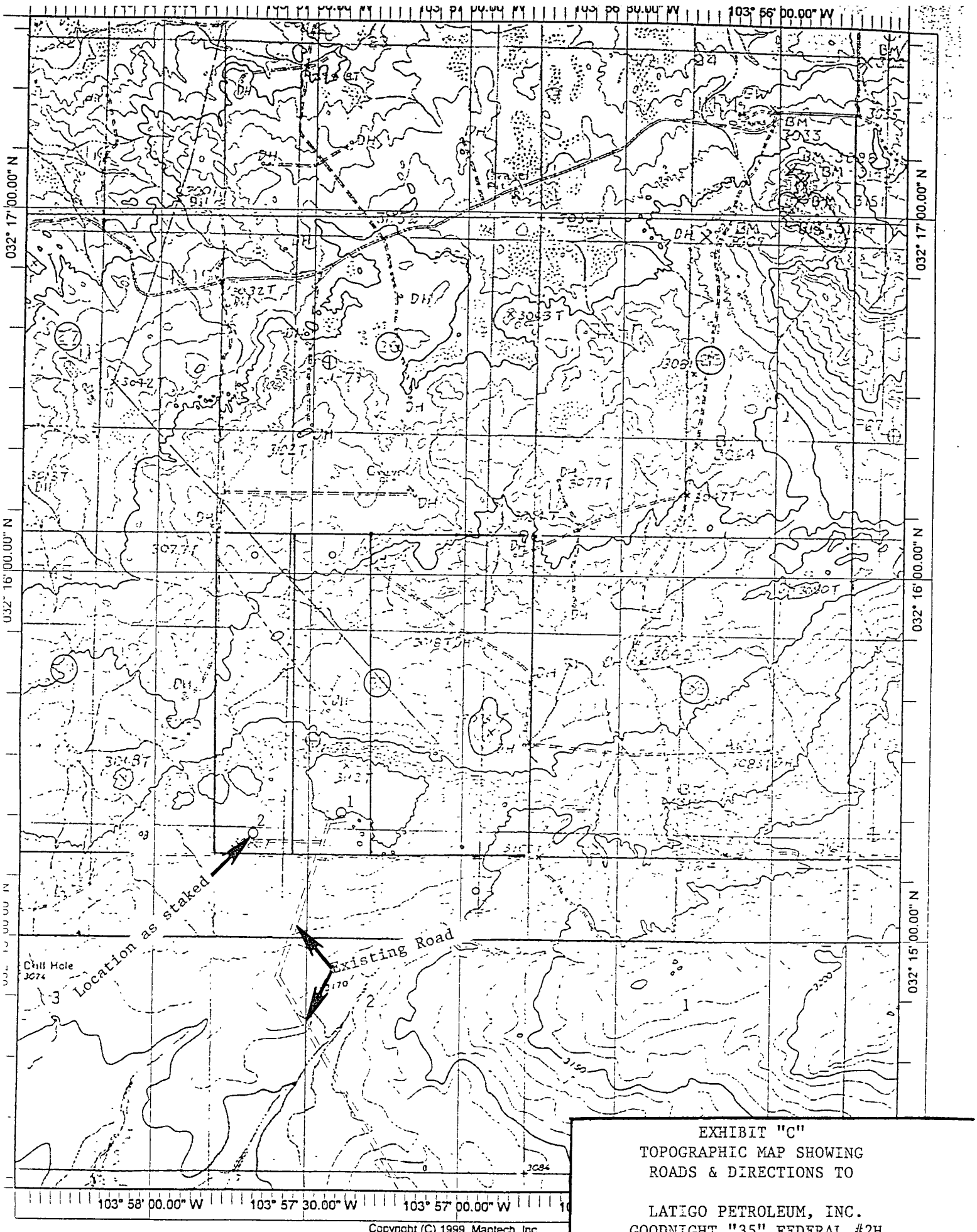


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

LATIGO PETROLEUM, INC.
GOODNIGHT "35" FEDERAL #2H
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	LATIGO PETROLEUM INC
LEASE NO.:	NM-103141
WELL NAME & NO.:	2H – GOODNIGHT 35 FEDERAL
SURFACE HOLE FOOTAGE:	180' FSL & 490' FWL
BOTTOM HOLE FOOTAGE	330' FNL & 660' FWL
LOCATION:	Section 35, T23S., R29E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Cave/Karst – The location has been designated as high karst occurrence. Conditions of Approval will include measures for early leak detection and prevention to prevent possible contamination of karst aquifers.

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.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 150' X 150' on the North side V-Door East.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

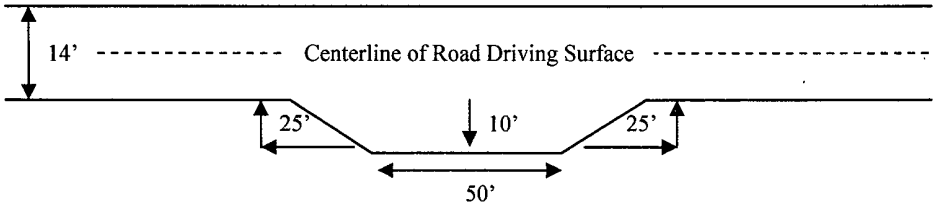
Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

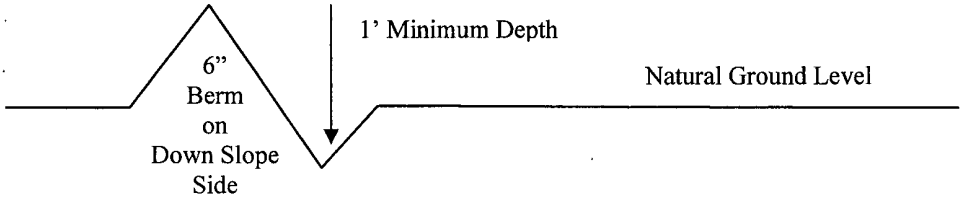


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations
Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

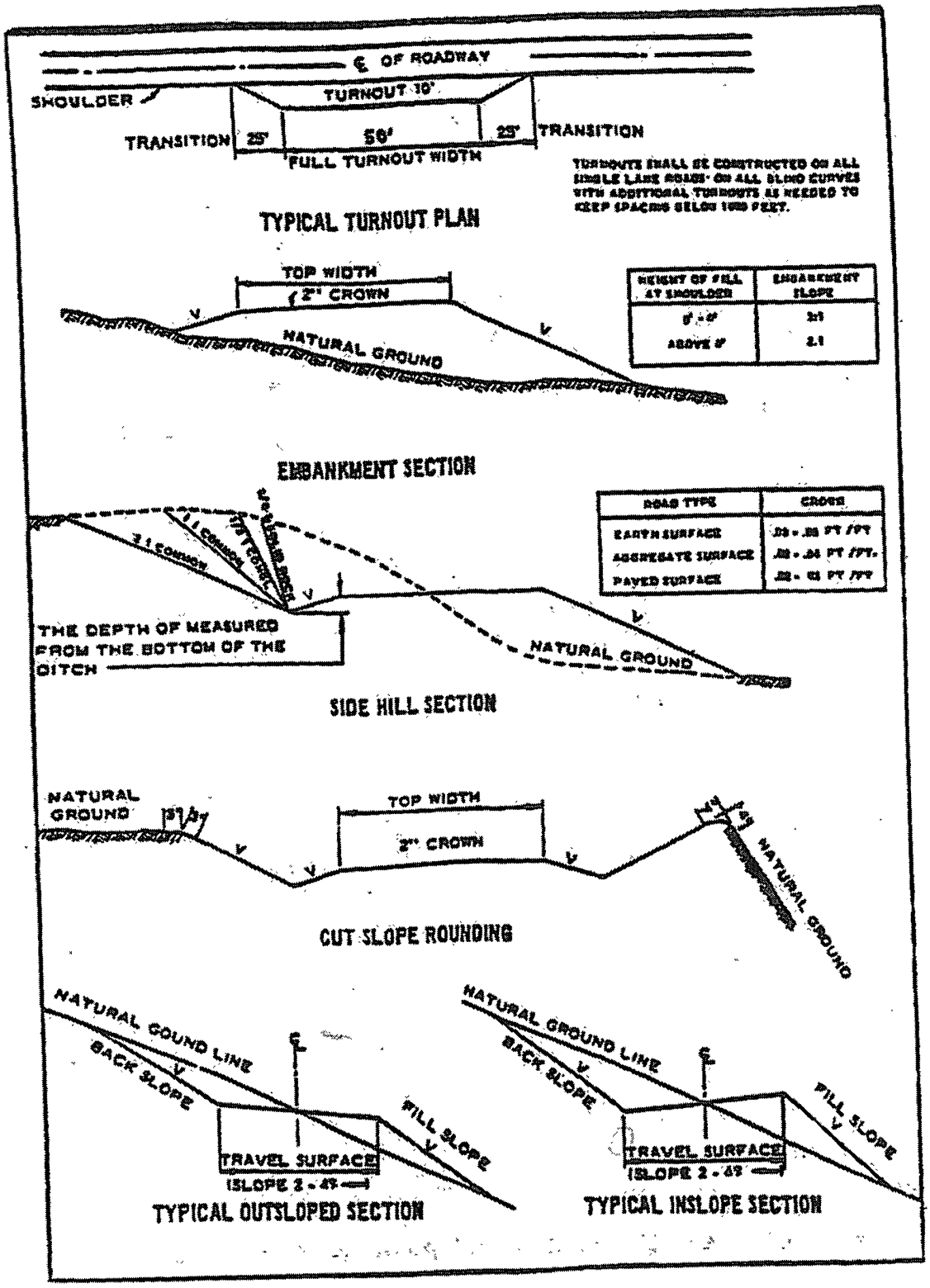
A gate shall be constructed and fastened securely to H-braces.

Fence Requirement
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access
Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of **4 hours** in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOP/BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**

2. 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.

3. Floor controls are required for 3M or Greater systems. These 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.

4. 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 manufactures of the logging tools recommended speed.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.

Centralizers required on surface casing as per Onshore Order 2.III.B.1.f

Possible lost circulation in Delaware, Bone Spring
High potential for karst type features

1. The **13-3/8** inch surface casing shall be set at **approximately 550 feet (25 feet into the Rustler Anhydrite and above the top of the salt)** and cemented to the surface. **If the salt is penetrated, set surface casing 25 feet above the top of the salt.**

   Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing

   a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

   b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

   c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

   d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a-e above.

   Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing

3. The minimum required fill of cement behind the **5-1/2 inch** production casing is:

   a. **First stage to DV tool at 4500 feet cement shall:**

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

   b. **Second stage to DV tool at 2500 feet cement shall:**

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with third stage cement job.

   c. **Third stage above DV tool at 2500 feet cement shall:**

☒ Cement to surface. If cement does not circulate see B.1.a-d above.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint

4. 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.

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

C. PRESSURE CONTROL

1. 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.

2. The appropriate BLM office shall be notified a minimum of **4 hours** in advance for a representative to witness the tests.

    a. The tests shall be done by an independent service company.

    b. The results of the test shall be reported to the appropriate BLM office.

    c. 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.

    d. 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.

LB 4/30/08

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture 4, for Gypsum Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Alkali Sacaton (Sporobolus airoides)	1.0
DWS⊆ Four-wing saltbush (Atriplex canescens)	5.0

⊆DWS: DeWinged Seed

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.