

OCD-ARTESIA

ATS-08-571

UNITED STATES ¹¹¹ - 7 2008
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

5. Lease Serial No

NM 2748

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

GISSLER B #43

9. API Well No.

30-015-36415

10. Field and Pool, or Exploratory

LOCO HILLS, PADDOCK

11. Sec., T., R., M., or Blk. and Survey or Area
SEC 11, T17S, R30E

12. County or Parish
EDDY CTY

13. State
NEW MEXICO

1a. Type of Work ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

BURNETT OIL CO., INC.

3a. Address

801 Cherry ST. Unit #9 Fort Worth,

3b. Phone No. (include area code)

(817) 332-5108

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

At surface

Unit N, 330' FSL, 1800' FWL

At proposed prod zone

SAME AS ABOVE

14. Distance in miles and direction from nearest town or post office*

Approx 6 miles East & North of Loco Hills, New Mexico

15. Distance from proposed*

location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

330'

16. No. of Acres in lease

1240

17. Spacing Unit dedicated to this well

40

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft

330'

19. Proposed Depth

6000'

20. BLM/BIA Bond No. on file

NMB# 000197

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3705' GL

22. Approximate date work will start*

JULY 13, 2008

23. Estimated duration

18 Days to Drill

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
BLM.

25. Signature

Mark A Jacoby

Name (Printed/Typed)

MARK JACOBY

Date

6/03/2008

Title

ENGINEERING MANAGER

Approved by (Signature)

/S/ DAVID D. EVANS

Name (Printed/Typed)

/S/ DAVID D. EVANS

Date

JUL 03 2008

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct
operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ROSWELL CONTROLLED WATER BASIN

NOTE: NEW PIT RULE
19-15-17 NMAC PART 17
A form C-144 must be approved
before starting drilling operations.

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

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015	Pool Code 96718	Pool Name LOCO HILLS Paddock
Property Code 002389	Property Name GISSLER "B"	Well Number 43
OGRID No. 003080	Operator Name BURNETT OIL COMPANY	Elevation 3705'

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	11	17 S	30 E		330	SOUTH	1800	WEST	EDDY

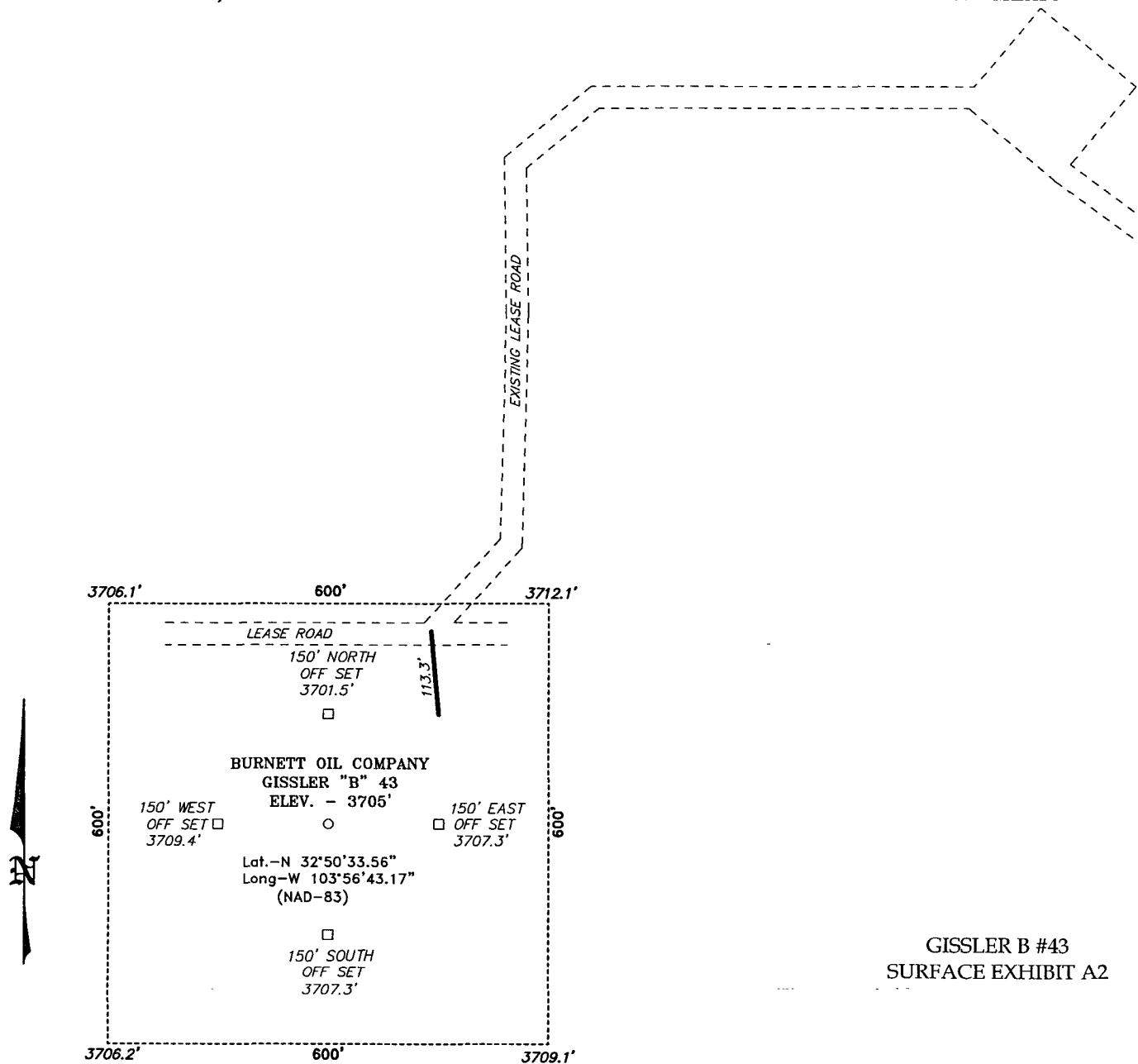
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

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

	<p>SURFACE LOCATION Lat - N32°50'33.56" Long - W103°56'43.17" NMSPC- N 670508.540 E 660505.268 (NAD-83)</p>	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Mark A. Jacoby</i> 6/23/2008 Signature Date</p> <p>MARK A. JACOBY Printed Name</p>
		<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APR 17 2008 Date Surveyed</p> <p><i>Gary L. Jones</i> Signature</p> <p>GARY L. JONES Professional Surveyor 7977</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>

SECTION 11, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



GISSLER B #43
SURFACE EXHIBIT A2

Directions to Location:

FROM THE JUNCTION OF LOVINGTON HWY AND
SQUARE LAKE, GO NORTH 1.2 MILES, THENCE TURN
LEFT 0.4 MILES, THENCE TURN RIGHT 0.4 MILES,
THENCE TURN LEFT 0.3 MILES TO PROPOSED LEASE
ROAD.

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

W.O. Number: 19510

Drawn By: J. SMALL

Date: 04-18-2008 Disk: JMS 19510W

BURNETT OIL COMPANY

REF: GISSLER "B" #43 / WELL PAD TOPO

THE GISSLER "B" #43 LOCATED 330'
FROM THE SOUTH LINE AND 1800' FROM THE WEST LINE OF
SECTION 11, TOWNSHIP 17 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 04-17-2008 Sheet 1 of 1 Sheets



PROPOSED FLOWLINE TO THE GISSLER "B" #43
 Section 11, Township 17 South, Range 30 East,
 N.M.P.M., Eddy County, New Mexico.

GISSLER B #43
 SURFACE EXHIBIT C

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: KJG - 19763T.DWG

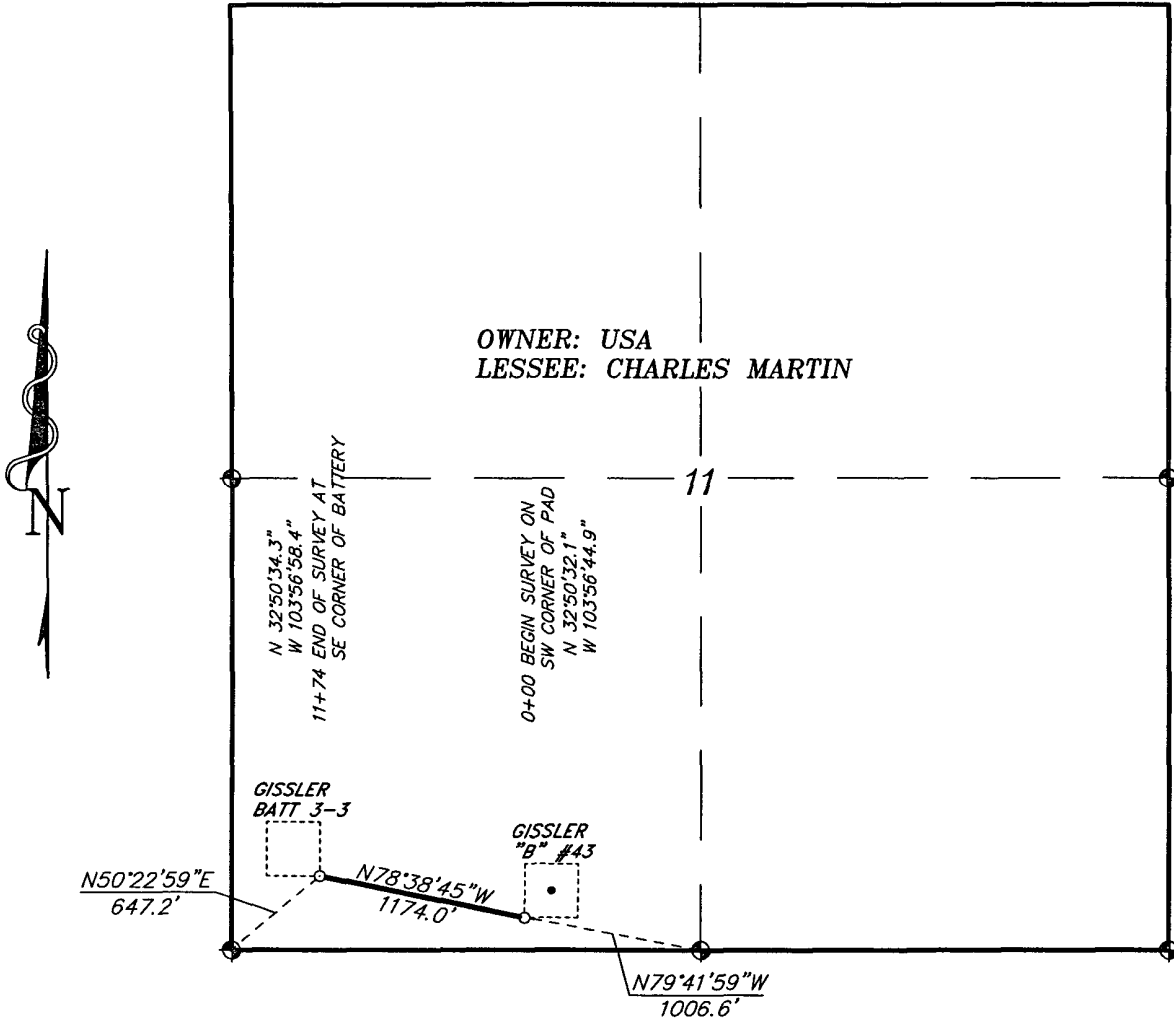
Survey Date: 05-15-2008

Scale: 1" = 2000'

Date: 05-29-2008

BURNETT OIL
CO., INC

SECTION 11, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



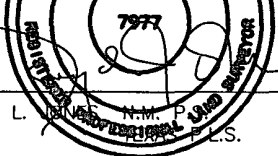
LEGAL DESCRIPTION

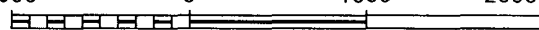
A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 11, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

1174.0 FEET = 71.15 RODS = 0.22 MILES = 0.81 ACRES

GISSLER B #43
SURFACE EXHIBIT C1

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED
FROM FIELD NOTES OF AN ACTUAL SURVEY AND
MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND
SURVEYS AS SPECIFIED BY THIS STATE.


GARY L. JONES N.M. P.S. No. 7977
Professional Surveyor No. 5074

1000 0 1000 2000 FEET


BURNETT OIL CO., INC

REF: PROPOSED FLOWLINE TO THE GISSLER "B" #43

A PIPELINE CROSSING USA LAND IN
SECTION 11, TOWNSHIP 17 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 19763

Drawn By: K. GOAD

Date: 05-29-2008

Disk: KJG - 19763P.DWG

Survey Date: 05-22-2008

Sheet 1 of 1 Sheets



MASTER DRILLING PLAN
BURNETT OIL CO., INC.

ALL VERTICAL/HORIZONTAL CEDAR LAKE YESO/ LOCO HILLS PADDOCK WELLS
FEDERAL LEASE # LC029338A, LC029339A, LC030570A, LC055264, LC055958, NM2746, NM2747
FEDERAL LEASE # NM2748 & NM074939

Section 8, 11, 12, 13, 14, 23, 24 & 25, Township 17 South, Range 30 East, Eddy County, N.M.

ACTUAL WELL LOCATION WILL BE ON THE SUBMITTED 3160-3 WITH THE SURFACE USE PLAN

1. Geological Name of Surface Formation

a. Alluvium.....Surface

2. Estimated tops of Geologic Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a. Seven Rivers.....	1604'	Oil
b. Queen.....	2222'	Oil
c. Grayburg.....	2670'	Oil
d. San Andres.....	2985'	Oil
e. Glorieta.....	4460'	Oil
f. Total Depth	6000'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. We will set 10-3/4" casing @ approx. +/- 400' in the Anhydrite, above the Salt and circulate cement to surface. We will isolate the oil zones by running 7" casing to total depth and circulating cement to surface.

3. Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)

a. VERTICAL WELL

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
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(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)

14-3/4"	0'-400'	10-3/4"	32.75#	ST&C	H40	1.125	1.00	1.80
8-3/4"	0'-6000'	7"	23.00#	LT&C	J55	* 1.125	1.00	1.80

* 500' of fresh water gradient (.433 psi/ft) fluid will be maintained inside casing to keep SF 1.125. If fluid is not at the surface, the fluid level inside 7" Casing will be determined by wireline to insure a 500' minimum of standing fluid.

b. Horizontal

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor	
	MD	TVD							
14-3/4"	0'-400'	0'-400'	10-3/4"	32.75#	ST&C	H40	1.125	1.00	1.80
8-3/4"	0'-4500'	0'-4500'	7"	23.00#	LT&C	J55	1.40	1.00	1.80
8-3/4"	4500'-TD'	4500'-TD'	7"	23.00#	BT&C	J55	1.26	1.00	1.80

4. Cementing Program (Note Yields and DV Tool Depth if Multiple Stage.)

BLM WILL BE NOTIFIED TO HAVE THE OPTION TO WITNESS ALL CEMENTING OPERATIONS.

a. 10-3/4" Surface Cement to surface Lead with 150 sx Class C cement +10% A-10, + 10#/sx LCM-1, 1% CaCl, 0.01 gps FP-6L, 14.6 ppg, 1.67 CF/Sk Yield. Tail with 500 sks Class C cement + 2% CaCl + 0.01 gps FP-6L, 14.8 ppg, 1.35 CF/Sx yield. TOC Surface.

b. 7" Production Casing

1. VERTICAL

Stage 1 Cement: 550 sks (50:50) Poz (Fly Ash): Class C cement + 2% Bentonite + 0.01 gps FP-6L + 0.3% FL-52A + 1.2% CD-32 + 5% Sodium Chloride. Yield 1.27 CF/Sx. DV @ approx. 2600'

Stage 2 Cement: Lead with 1800 sks (35:65) Poz (Fly Ash): Class C cement + 6% Bentonite + 5 lbs/sx LCM-1 + 0.125 lbs/sx Cello Flake + .01 gps FP-6L + 5% Sodium Chloride, Yield 1.89 CF/Sx. Tail with 100 sx Class C + 1% CaCl + 0.01 gps FP-6L. 14.8 ppg, Yield 1.62 CF/Sx, TOC Surface.

2. HORIZONTAL

Stage 1 Cement: 600 sks Super H + 0.5% LAD.1 + .4% CFR3 + 1 lb/sx Salt + .25lb/sx DAIR 3000. 1.60 CF/Sx Yield. DV @ approx. 2600'.

Stage 2 Cement: Lead : 1600 sx Prem. CI C + 2% CaCl + .124 #/sx Poly Flake. 1.89 CF/Sx Yield Tail: 200 sx CI C + 1% CaCl. Yield 1.33 CF/sx, TOC Surface.

The above cement volumes may be revised pending the caliper measurement from the open hole logs. Casing design is to bring all cement to the surface.

5. **Pressure Control Equipment:**

The blowout prevention equipment (BOPE) shown in **Drilling Exhibit E** will consist of a 2000 PSI Hydri Unit with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested as described in this order. The 10-3/4" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company (**Mann Welding**) will be used for the testing. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating.

6. **Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0'-400'	8.6-9.5			Fresh Water
400' - TD' MD	10.0 max.			Brine Water (VERTICAL/HORIZONTAL)

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. **Auxiliary Well Control and Monitoring Equipment:**

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve with the appropriate connections on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out 10-3/4" casing shoe until 7" casing is cemented.** The breathing equipment will be on location from drilling out the 10-3/4" casing shoe until total depth is reached.

8. **Hydrogen Sulfide Plan and Training:**

- All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on each well:
 - The hazards and characteristics of Hydrogen Sulfide (H₂S).
 - The proper use and maintenance of personal protective equipment and life support systems.
 - The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures and the prevailing wind.
 - The proper techniques for first aid and rescue procedures.

f. EMERGENCY CALL LIST FOR LAW ENFORCEMENT, FIRE AND MEDICAL ASSISTANCE IS ON ATTACHED DRILLING EXHIBIT A.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures.
- c. The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan (if applicable.)

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan (if applicable). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

a. Protective equipment for essential personnel:

1. Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area (to be determined.)

b. H2S detection and monitoring equipment:

1. Three (3) portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

c. Visual warning systems:

1. Wind direction indicators will be positioned for maximum visibility.
2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

d. Mud program:

1. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

e. Communication:

1. Cellular Telephone and/or 2-way radio will be provided at well site.
2. Landline telephone is located in field office.

f. Metallurgy:

1. All drill strings, casings, tubing, wellheads, Hydril BOPS, drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service.
2. All elastomers used for packing and seals shall be H2S trim.

9. Logging, Coring and Testing program:

- a. Any drill stem tests will be based on geological sample shows.
- b. The open hole electrical logging program will be:
 1. Total depth to 1000': Dual Laterolog-Micro Laterolog with SP and GR. Compensated Neutron-Z Density log with Gamma Ray and Caliper.
 2. Total depth to Surface: Compensated Neutron with Gamma Ray.
 3. No coring program is planned.
 4. Additional testing will be done subsequent to setting the 7" production casing. The specific intervals will be based on log evaluation, geological sample shows and drill stem tests.

10. Potential Hazards:

No abnormal pressures or temperatures are expected. There is known H₂S in this area. The operator will comply with the provisions of Onshore Oil and Gas Order #6. No lost circulation is expected to occur. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom hole pressure is 1000#. The maximum anticipated bottom hole temperature is 92°F.

11. Anticipated Start Date and Duration of Operation

Road and location construction will begin after BLM has approved the APD and has approved the start of the location work. The anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in and drilling is expected to take approx 25 days. If production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) to place the well on production.

12. Operator's representative on the site:

Burnett Oil Co., Inc. field representative responsible for compliance with the approved drilling and operations plan is

Mr. Belton Mathews, District Supt.
P.O. Box 188
Loco Hills, New Mexico 88255
Office phone: 505-677-2313
Home phone: 505-746-8647
Cellular phone: 505-703-9601

Date: 4/25/2008
UPDATE

By Mark A. Jacoby
Mark A. Jacoby
Engineering Manager



BURNETT OIL CO., INC. EMERGENCY NOTIFICATION LIST

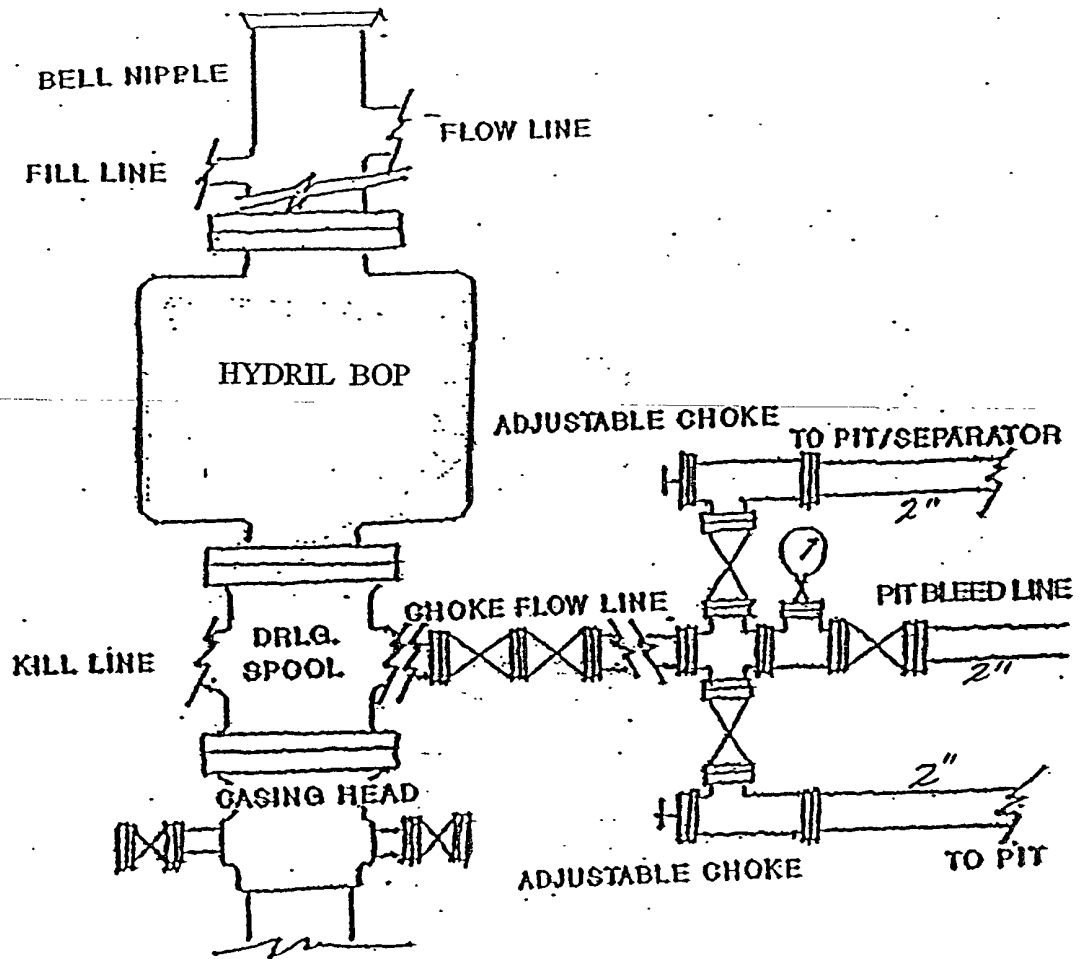
BURNETT OIL CO., INC. 87 SQUARE LAKE ROAD (CR #220) HOUSE #2 (575) 677-2313
LOCO HILLS, NEW MEXICO (2 MILES EAST OF LOCO HILLS TO CR220 THEN NORTH ON
CR#220 TO FIRST BUILDING ON LEFT. CELL # (575) 703-9601, 9602, 9603 OR 9604.

EDDY COUNTY SHERIFF 911 (575) 746-9888

LOCO HILLS FIRE DEPARTMENT (VOLUNTEER ONLY.) 911 (575) 677 2349
FOR MEDICAL OR FIRE


THIS MUST BE POSTED AT THE RIG WHILE ON LOCATION.

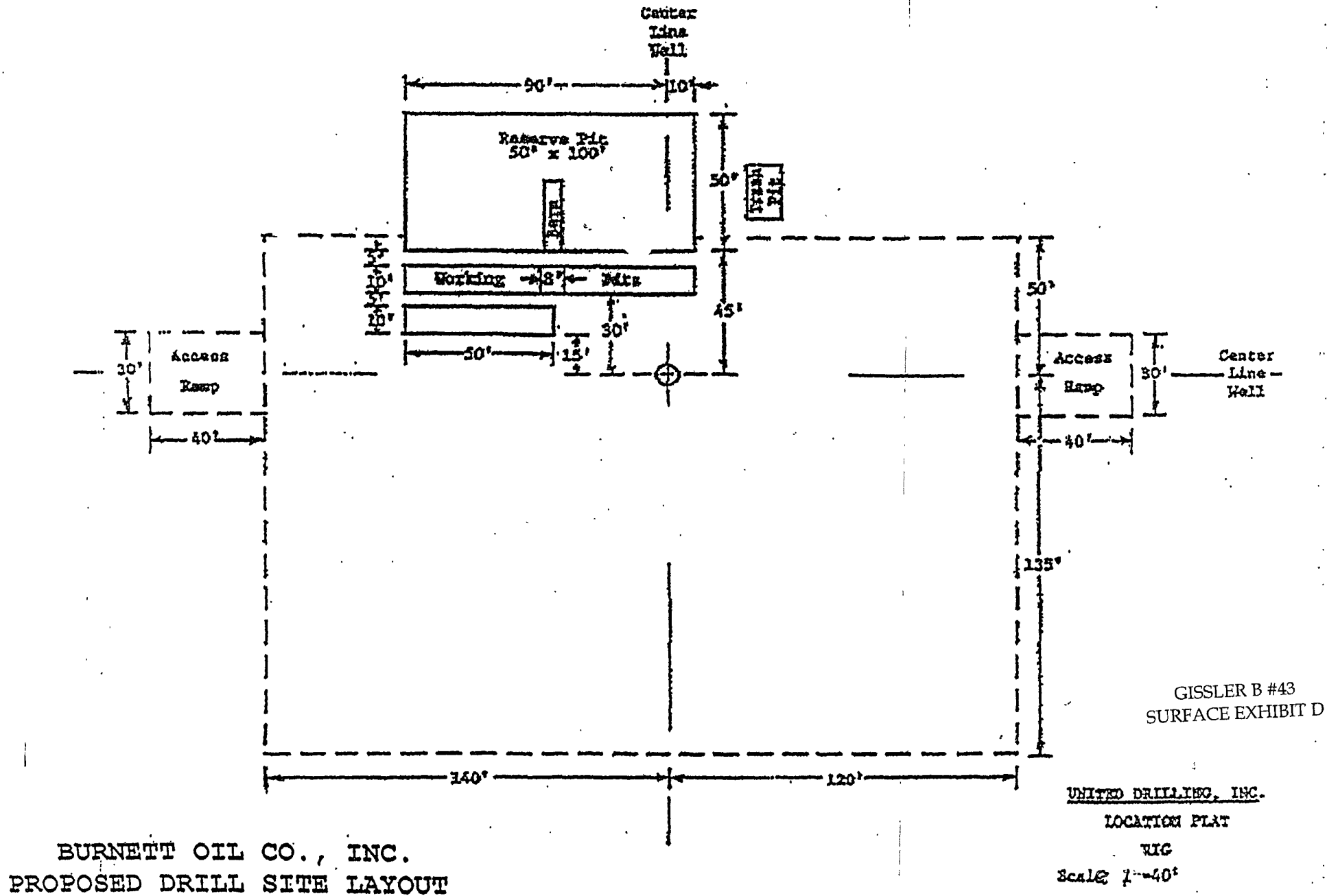
DRILLING PLAN EXHIBIT A



BURNETT OIL CO., INC.

BLOWOUT PREVENTER &
CHOKE MANIFOLD DIAGRAM
2000 PSI WORKING PRESSURE
SERIES 600 FLANGES

DRILLING EXHIBIT 





SURFACE USE PLAN OF OPERATIONS

BURNETT OIL CO., INC.

Gissler B Well No. 43, Lease No. NM 2748

Surface Location Unit N, 330' FSL, 1800' FWL

Section 11, Township 17 South, Range 30 East, Eddy County, N. M.

1. EXISTING ROADS:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. This well was staked by Basin Surveys.
- b. All roads into the location are shown on the Vicinity Map (Exhibit A.)
- c. Directions to location: from the intersection of US Hwy #82 and Square Lake (CR 220) go North on CR 220 1.2 mile then left (West) on lease road 0.4 mile then left (South) 0.3 Mile to proposed new lease road (near Gissler B#22 well site.)

2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 and Exhibit A1 & A2 show the existing area. **This location will require approx 114' of additional access road. All new lease road will be on the pad.**
- b. All construction material will be native caliche. It may be available at the proposed location. If unavailable on location or road, caliche will be hauled from nearest BLM approved caliche pit.

3. Location of existing wells:

- a. See the attached Exhibit B plat showing all wells within a ½ mile radius of the proposed well site.

4. Location of existing and/or proposed production facilities:

See Exhibit B, C and C1 for the location of existing Gissler B #3-3 Tank Battery facility on this Federal Lease.

- a. This battery will be an above ground commingled Grayburg/Loco Hills Paddock production facility.
- b. The well site will require electricity for the prime mover. We will contact Central Valley Electric Cooperative, Inc. to provide the electric power poles and the electric line from their nearest connection. The routing and pole placement will be provided in their ROW application. All electrical installation will be done in accordance with all existing state and federal regulations.
- c. All flowline from the new well pad site is on this Federal lease. (See Exhibit C and C1 plat.) The required approx. 1200' will be along existing road and flowline routing. All will be 3" poly laid above ground.

5. Location and Type of Water Supply:

All water to be used in drilling this well will be brine or fresh water transported by truck over existing and above proposed lease road from Loco Hills, New Mexico or produced water furnished from our existing waterflood facilities in the area. We may install a pump and lay a **temporary 2" poly line** on the lease from the battery to the rig for this drilling water.

6. Construction Materials:

All construction material for the roadway and drilling pad will be native caliche from the nearest BLM approved pit or from existing available deposits found on the location. All will be in accordance with the drilling stipulations for this well.

7. Methods of Handling Waste Disposal:

- a. Drill cuttings will be disposed of in the lined reserve drilling pit. Auxiliary lined emergency water containment pits may also be necessitated by large volume water flows. All drilling fluids will be allowed to evaporate after completion of drilling. After proper disposal of contents, pits will be back filled, leveled and re-seeded per BLM site stipulations.
- b. Trash, waste paper, garbage and junk will be placed in a portable, screened trash container on location. All trash and debris will be transported to an authorized off-lease disposal station within 30 days following the completion activities.
- c. A properly maintained Porto-john will be provided for the crews during drilling and completion operations. All will be removed after completion operations have ended.
- d. Oil produced during testing will be put into steel storage tank for later sales.
- e. Water produced during testing operations will be put in the lined reserve pit until well is turned to the lease tank battery. All pit contents will be disposed of through one of our approved disposal methods.

8. Ancillary Facilities: There are no planned ancillary facilities for this well.

9. Well Site Layout:

- a. Exhibit D shows the relative location and dimensions of the drilling pad and related components. Only minor differences, if any, in length and/or width of the drilling pad are anticipated, depending on which drilling contractor is selected to drill the well. Only minor leveling of the drilling site is anticipated.
- b. All pits will be in accordance with the stipulations for this well. Pit liner will be 12 mil thick polyethylene and will extend over the dike and be anchored in place. Reserve pit will be fenced until empty.

10. Plans for surface Reclamation:

- a. After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operations will be removed. Pits liners will be buried or hauled away. Pits will be backfilled, leveled and re-seeded in accord with the BLM well stipulations.
- b. Any unguarded pits containing fluid will be fence until backfilled.
- c. The pad size will be reduced to the amount required for normal operation of the producing well. This reduced portion will be restored to the BLM stipulations in section a.
- d. If a well is abandoned, the surface location and unneeded road will be restored according to BLM stipulations within 90 days of final abandon and sit re-seeded with BLM (B) seed mix.

11. Surface ownership:

All lands are owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary use of the region for the production of oil and gas and the grazing of livestock...

12. Other information:

- a. The area surrounding the well site is grassland. The area is relatively flat with small hills and sand dunes. The topsoil is fine, deep sand underlain by caliche. Vegetation cover is generally sparse and consists of mesquite, yucca, shinnery oak and sparse native grasses. Wildlife in the area includes deer, coyotes, rabbits, rodents, reptiles, dove and quail.
- b. No permanent or live water is found in the general proximity of this area.
- c. No dwellings are found within two (2) miles of this location.
- d. There is intermittent cattle grazing and hunting in the area; however, the principal land use is for oil and gas production.
- e. An archaeological clearance report from Boone Archaeological Services will be sent to the BLM office in Carlsbad, N.M.

13. Bond Coverage:

Current Bond is BLM Bond # NMB000197. The Surety Bond is #B000863. Both are effective May 21, 2004 and remain in place.

14. Operator's Representative:

Burnett Oil Co., Inc. field representative responsible for compliance with the approved surface use and operations plan is:

Mr. Belton Mathews, District Supt.
P.O. Box 188
Loco Hills, New Mexico 88255
Office phone: (575) 677-2313
Home phone: (575) 746-8647
Cellular phone: (575) 703-9601



OPERATOR CERTIFICATION

BURNETT OIL CO., INC.

Gissler B Well No. 43, Lease No. NM 2748

Surface Location Unit N, 330' FSL, 1800' FWL

Section 11, Township 17 South, Range 30 East, Eddy County, N. M.

Operator's Representative:

Burnett Oil Co., Inc. field representative responsible for compliance with the approved surface use and operations plan is:

Mr. Belton Mathews, District Supt.

P.O. Box 188

Loco Hills, New Mexico 88255

Office phone: (575) 677-2313

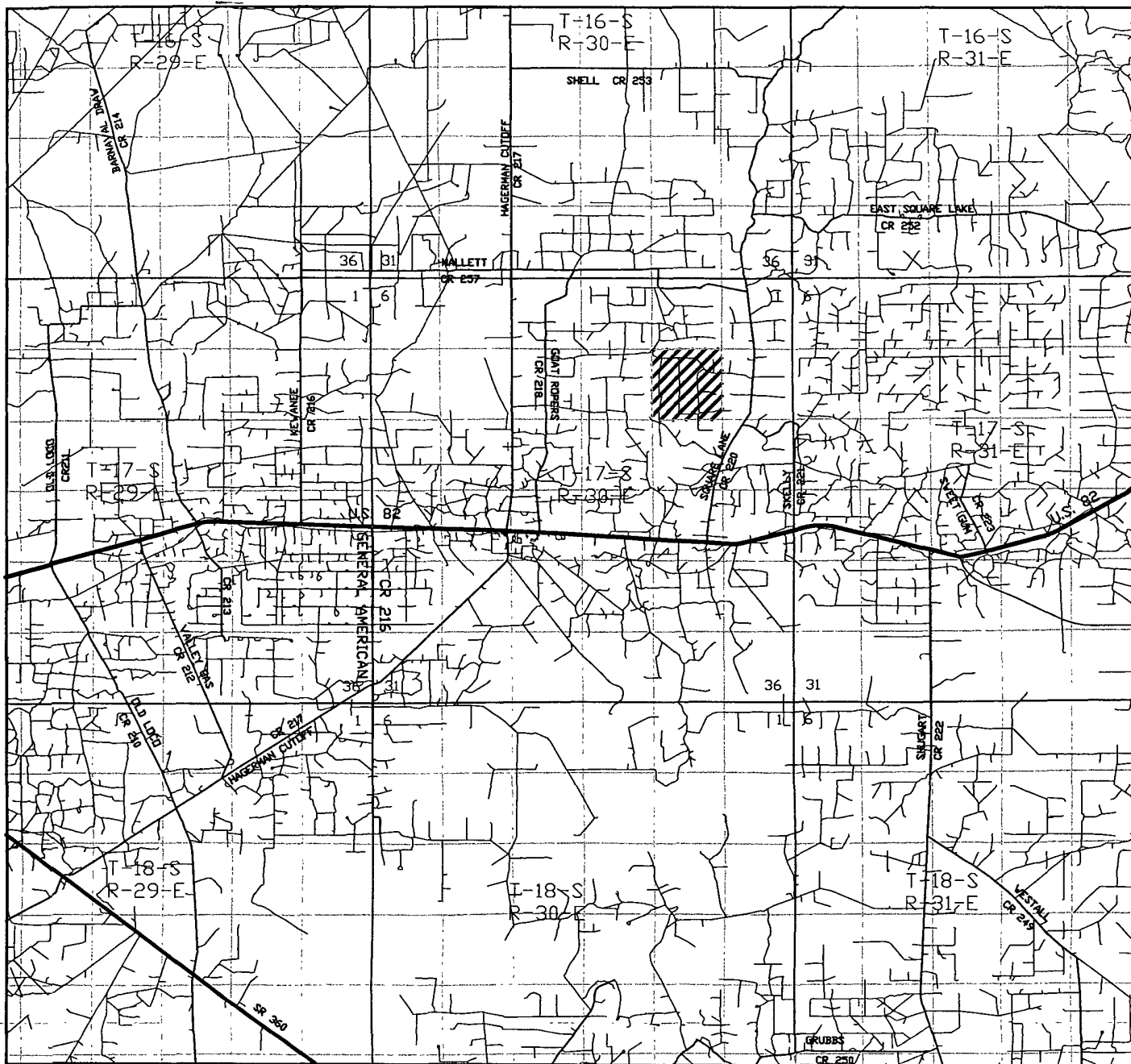
Home phone: (575) 746-8647

Cellular phone: (575) 703-9601

I hereby certify that I, or persons under my direct supervision have inspected the drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Burnett Oil Co., Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 6/4/2008

By Mark A. Jacoby
Mark A. Jacoby
Engineering Manager



GISSLER "B" #43

Located 330' FSL and 1800' FWL

Section 11, Township 17 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

GISSLER B #43
SURFACE EXHIBIT A

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

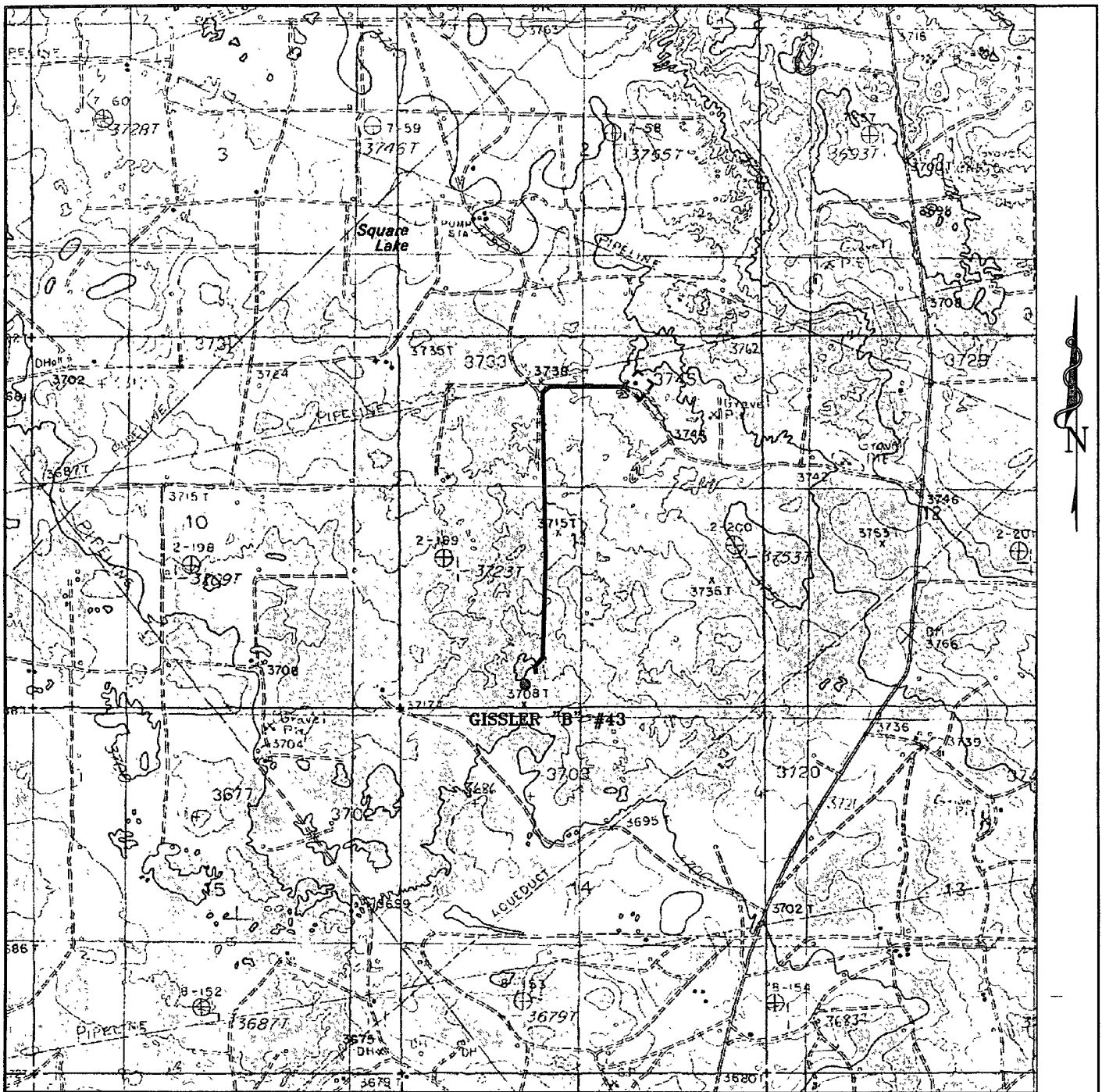
W.O. Number: JMS 19510TR

Survey Date: 04-17-2008

Scale: 1" = 2 MILES

Date: 04-18-2008

BURNETT OIL
COMPANY



GISSLER "B" #43

Located 330' FSL and 1800' FWL

**Section 11, Township 17 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.**

GISSLER B #43
SURFACE EXHIBIT A1

**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: JMS 19510T

Survey Date: 04-17-2008

Scale: 1" = 2000'

Date: 04-18-2008

**BURNETT OIL
COMPANY**

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Burnett Oil Co.
LEASE NO.:	NM 2748
WELL NAME & NO.:	43-Gissler B
SURFACE HOLE FOOTAGE:	330' FSL & 1800' FWL
BOTTOM HOLE FOOTAGE:	' F L & ' F L
LOCATION:	Section 11, T. 17 S., R 30 E., 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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☐ **Special Requirements**
 - Cave/Karst
 - VRM
 - Cultural
- ☐ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☒ **Production (Post Drilling)**
 - Pipelines
- ☐ **Reserve Pit Closure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

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)

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 (505) 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 to be stripped is approximately 6 inches in depth. 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 100' X 50' on the South side of the well pad.

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 (505) 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

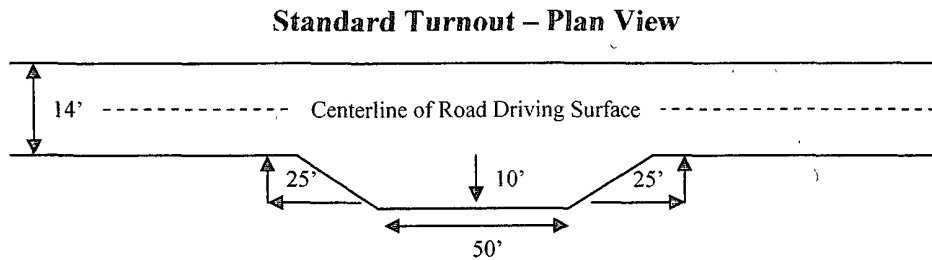
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

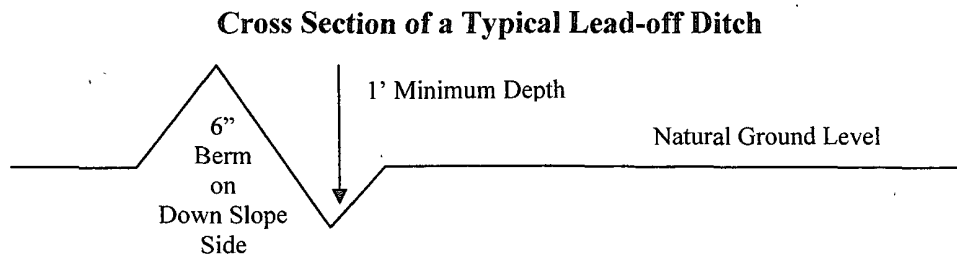
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



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.



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:

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

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

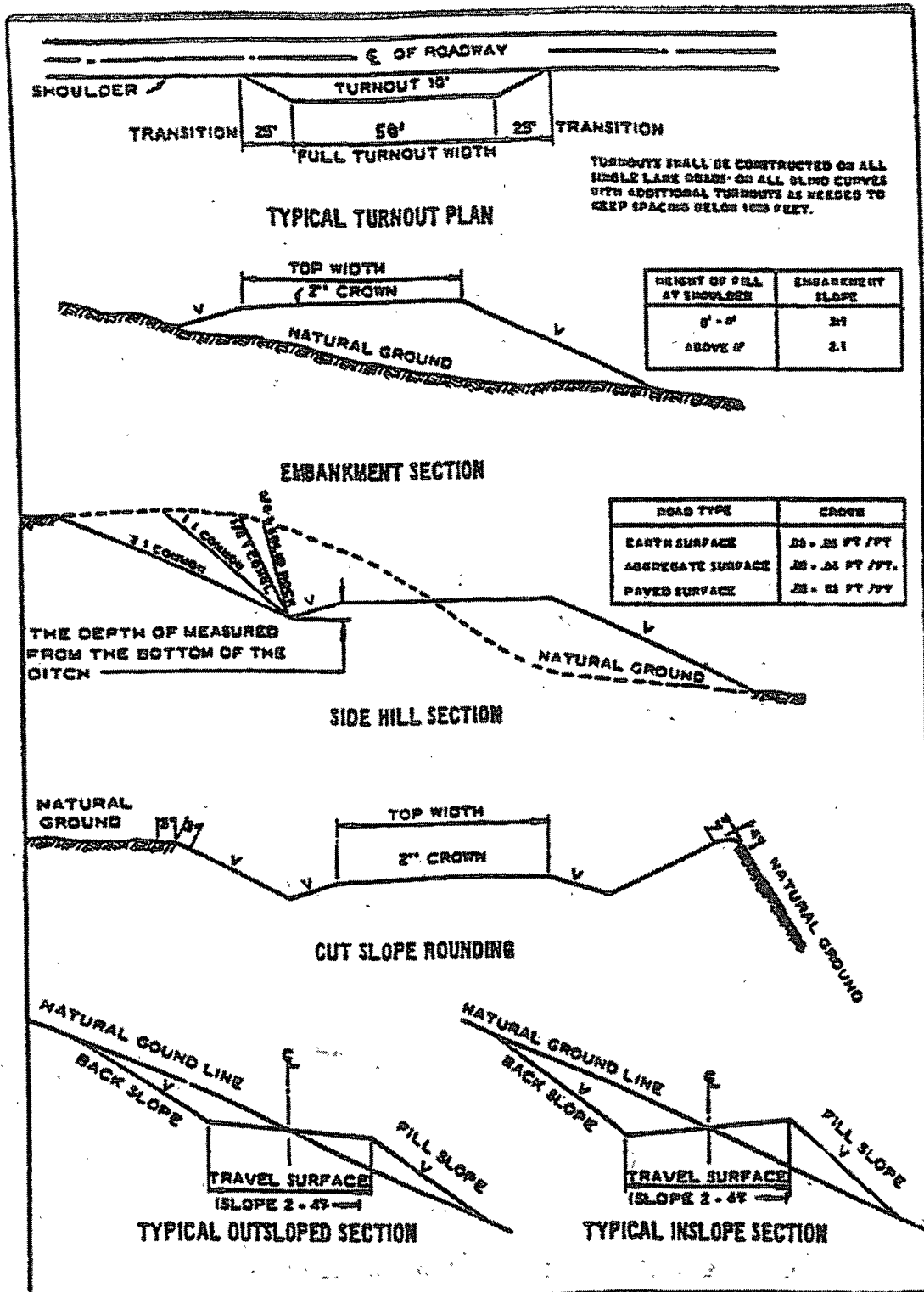
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. BOPE tests

☒ **Eddy County**

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

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **Measurements between 500-2000 ppm in the gas stream. 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

**Possible lost circulation in the Grayburg and San Andres formations.
Possible water flows in the Salado and Artesia Groups.**

1. The 10-3/4 inch surface casing shall be set **at approximately 400 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.

- a. For the surface casing: If cement does not circulate to the surface, the appropriate BLM office shall be notified and a tag with 1" will be performed at four positions 90 degrees apart to verify cement depth. BLM Petroleum Engineer Technician to witness tags. If depth is greater than 100' or water is standing in the annulus, remedial cementing will be done. If no water and TOC tag is less than 100', when 100% excess cement of the annulus volume was run on the primary job, ready-mix can be used to bring cement to surface.
- 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.

Intermediate 7" casing to be kept liquid filled while running into hole to meet minimum BLM requirements for collapse.

2. The minimum required fill of cement behind the 7 inch production casing is:
 - a. **First stage to DV tool, 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 above DV tool, cement shall:**
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office.
3. 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.

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.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

LB 7/03/08

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

VRM Facility Requirement

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full

expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline

route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder 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 will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

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 2, for Sandy 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:

<u>Species</u>	<u>lb/acre</u>
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sand love grass (<i>Eragrostis trichodes</i>)	1.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

*Pounds of pure live seed:

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

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.