

OCD-ARTESIA

Form 3160-3
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR 01 2010

NMOCD ARTESIA

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007ATS-10-134
EA-10-325

RM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-0610
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Cameron Oil & Gas Co.		7. If Unit or CA Agreement, Name and No. S W Henshaw Premier Unit, #017
3a. Address P.O. Box 1455 Roswell, NM 88202		8. Lease Name and Well No.
3b. Phone No. (include area code) 575-627-3284		9. API Well No. 30.015.37669
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 2310' FNL & 2310' FEL At proposed prod. zone same		10. Field and Pool, or Exploratory Henshaw; Grayburg, West
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 18-T16S-R30E		12. County or Parish Eddy
13. State NM		14. Distance in miles and direction from nearest town or post office* 9 miles N. of Loco Hills, NM
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 2310'	16. No. of acres in lease 840	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 424'	19. Proposed Depth 2,800'	20. BLM/BIA Bond No. on file NM-2722
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3749' GL	22. Approximate date work will start* 02/01/2010	23. Estimated duration 2-3 weeks

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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) | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>George R. Smith</i>	Name (Printed Typed) George R. Smith	Date 01/14/2010
Title POA agent for Cameron Oil & Gas Co.		

Approved by (Signature) /s/ Don Peterson	Name (Printed Typed)	Date FEB 25 2010
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.

*(Instructions on page 2)

Roswell Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

POWER OF ATTORNEY

DESIGNATION OF AGENT

CAMERON OIL & GAS CO., INC., hereby names the following person as its agent

Name of Agent: George R. Smith d/b/a Energy Administrative Services Company

Agents Address: P.O. Box 458, Roswell, NM 88202

Agent's Telephone Number: (575) 623-4940

GRANT OF SPECIAL AUTHORITY

CAMERON OIL & GAS CO., INC., grants its agent the authority to act for it with respect to the following only:

- 1 Executing forms required to be filed with the Bureau of Land Management of the Department of Interior of the United States of America.
2. Executing forms required to be filed with the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.

EFFECTIVE DATE

This power of attorney is effective immediately.

RELIANCE ON THE POWER OF ATTORNEY

Any person, including the agent, may rely upon the validity of this power of attorney or a copy of it unless that person knows it has terminated or is invalid.

SIGNATURE AND ACKNOWLEDGMENT

CAMERON OIL & GAS CO., INC.

By: David Sweeney

Name: David Sweeney

Title: Vice President

Date: January 7, 2009

Address: P.O. Box 1455, Roswell, NM 88202

Telephone: (575) 627-3284

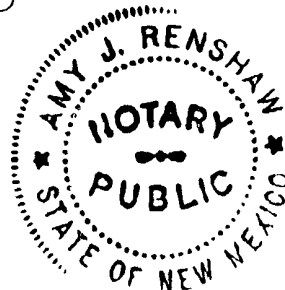
STATE OF NEW MEXICO

COUNTY OF CHAVES

This instrument was acknowledged before me on January 7, 2009 by David Sweeney, of CAMERON OIL & GAS CO., INC., acting on behalf of said corporation.

Signatory of notary: Amy J. Renshaw

My commission expires: July 7, 2009



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

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37669	Pool Code 30599	Pool Name Henshaw; Grayburg, West ✓
Property Code 24686	Property Name S W HENSHAW PREMIER UNIT	Well Number 017
OGRID No. 181109	Operator Name CAMERON OIL & GAS COMPANY	Elevation 3749'

Surface Location

U/L or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
G	18	16-S	30-E		2310	NORTH	2310	EAST	EDDY

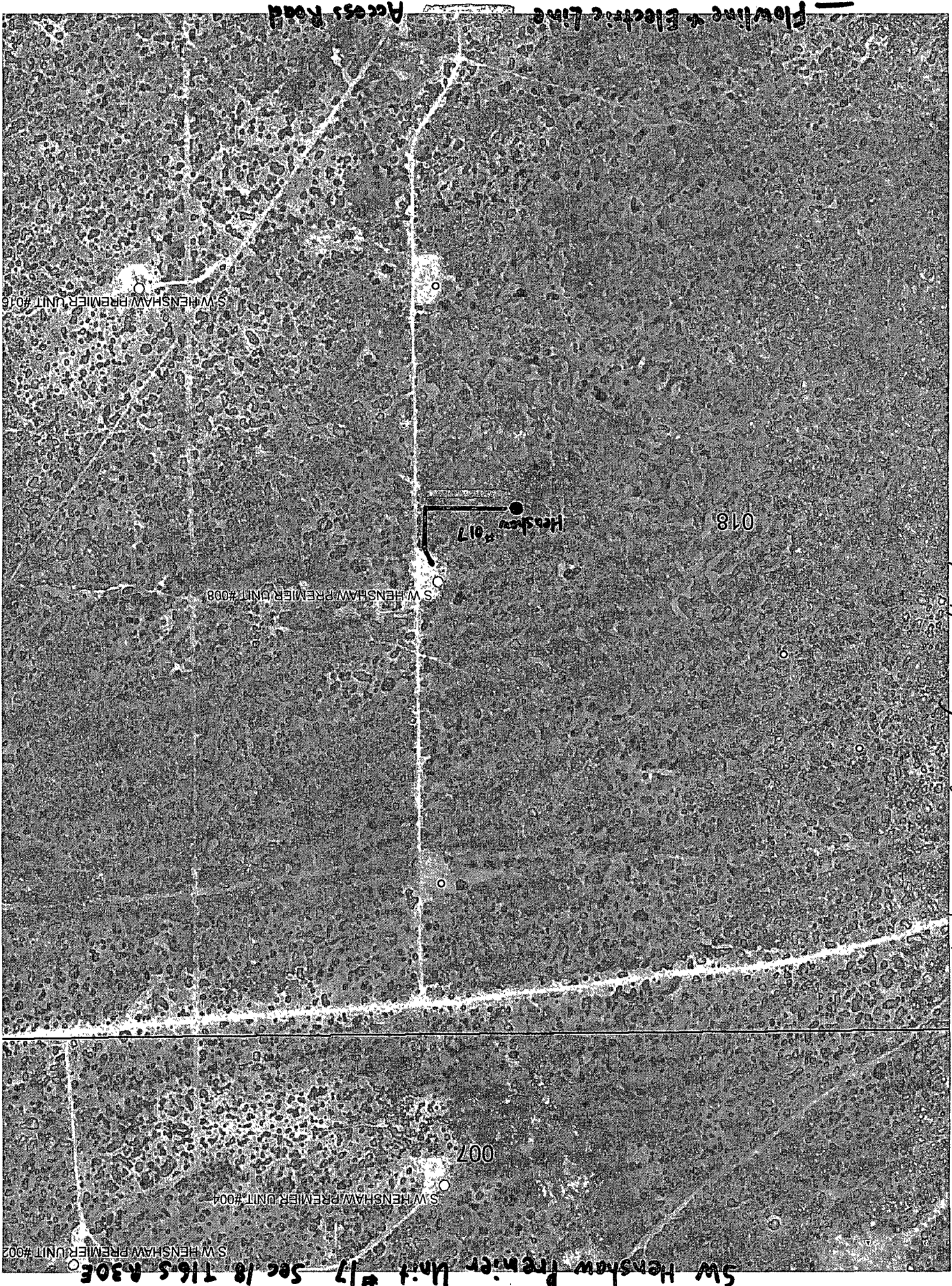
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
Dedicated Acres 40	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**

LOT 1 30.35 AC. LOT 2 30.38 AC. LOT 3 36.40 AC. LOT 4 36.43 AC.	<p style="margin-top: 20px;"> GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=699433.0 N X=599270.8 E LAT.=32.922399° N LONG =104.009820° W </p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <h3 style="text-align: center; margin: 0;">OPERATOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;"> <i>George R. Smith</i> Signature </div> <div style="text-align: center;"> 1/14/10 Date </div> </div> <div style="margin-top: 10px;"> Printed Name George R. Smith </div> </div> <div style="border: 1px solid black; padding: 5px;"> <h3 style="text-align: center; margin: 0;">SURVEYOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">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> <div style="text-align: center; margin-top: 10px;"> DECEMBER 2, 2009 </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;"> Date Surveyed Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> 09-11-106 </div> <div style="text-align: center;"> DSS 12-07-09 </div> </div> <div style="margin-top: 10px;"> Certificate No. GARY G. EIDSON 12641 RONALD J. EIDSON 3239 </div> </div>
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Map Approved by George Smith as per phone conversation 1-29-10



SW Henshaw Premier Unit #17 Sec 18 T16S R30E

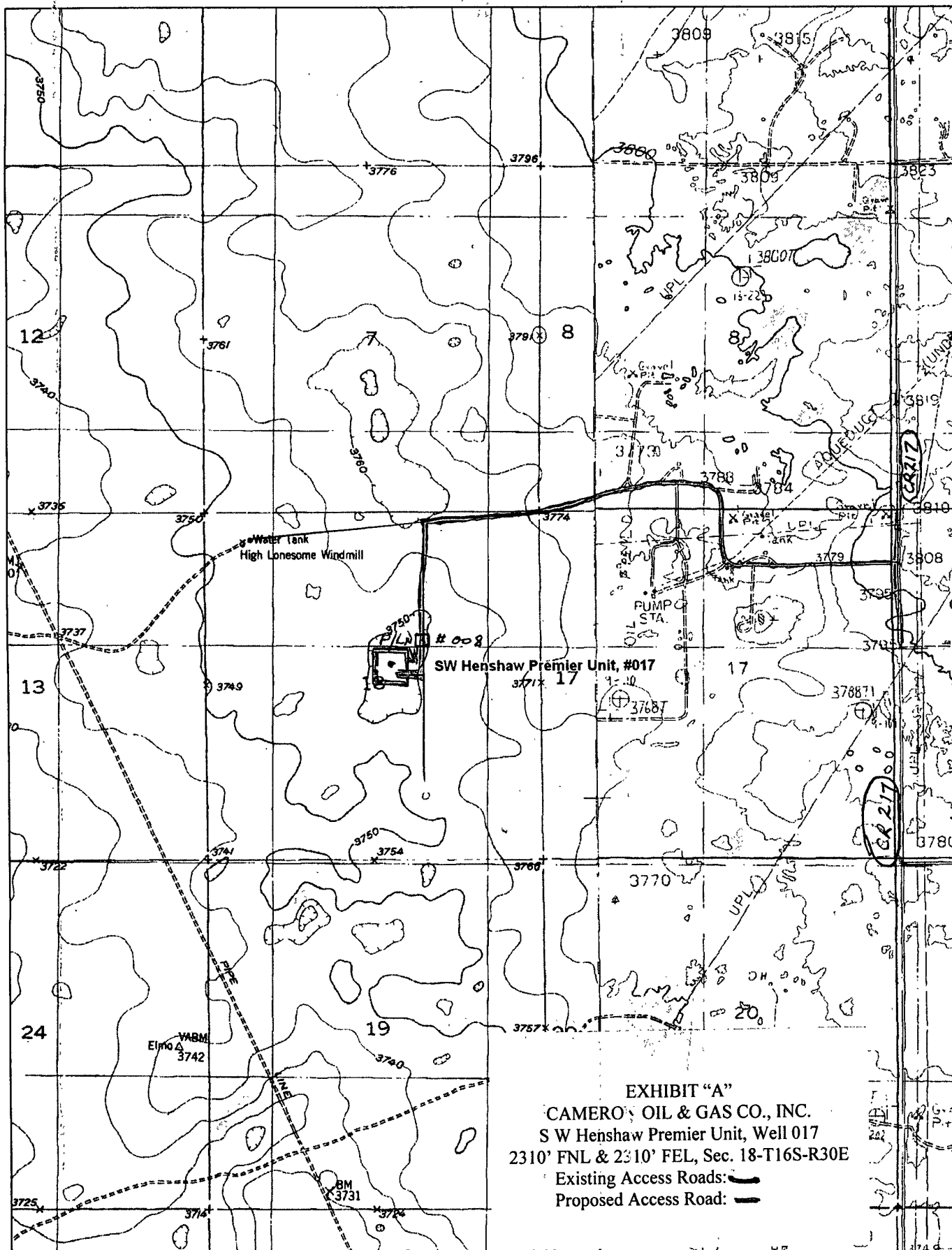
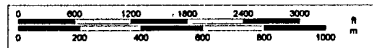


EXHIBIT "A"
 CAMERO OIL & GAS CO., INC.
 S W Henshaw Premier Unit, Well 017
 2310' FNL & 2310' FEL, Sec. 18-T16S-R30E
 Existing Access Roads: —
 Proposed Access Road: —

DELORME

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 www.delorme.com

Scale 1 : 24,000
 1" = 2000 ft



TN
 MN
 91°E

APPLICATION FOR DRILLING
CAMERON OIL & GAS CO., INC.
 S W Henshaw Premier Unit, Well No. 017
 2310' FNL & 2310' FEL, Sec. 18-T16S-R30E
 Eddy County, New Mexico
 Lease No.: NM-0610
 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Cameron Oil & Gas Co., Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Red Shale	430'	Queen	1,945'
Salt	545'	Penrose	2,175'
Yates	1,182'	Premier	2,722'
		T.D	2,800'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water possible between 80' - 375'.

Oil: Possible in the Premier below 2,722'

Gas: None expected.

4. Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	COLLAPSE DESIGN FACTOR	BURST DESIGN FACTOR	TENSION DESIGN FACTOR
12 1/4"	8 5/8"	24.0#	J-55	ST&C	450'	1.2	1.18	2.0
7 7/8"	5 1/2"	15.5#	J-55	ST&C	2,800'	1.2	1.18	2.0

5. Proposed Control Equipment

Proposed Control Equipment: A 3M Shaffer Type LWS Double Gate BOP will be installed on the 8 5/8" casing. Casing and BOP will be tested as a 2M system as per Onshore Oil & Gas Order #2 before drilling out with the 7 7/8". The Pipe Rams will be operated and checked daily, plus each time drill pipe is out of hole. This will be documented on driller's log. See Exhibit "E".

6. Cement Program

CASING	DEPTH	QUANTITY OF CEMENT	TOC	YEILD
8 5/8"	450'	285 sx "C" + 2 % CACL2 + .25% R-38	Surface	1.34
5 1/2"	2,800'	415 sx "C" + .2% C-15 + .25% R-38	2000'	1.33

See CoA

7. Mud Program:

MUD PROGRAM				
DEPTH		Mud Weight	Vis	W/L Control
0' - 450'	Fresh water mud / gel	9.5 - 10 ppg	34	No W/L control
450' - 2,800'	Fresh water mud/gel	9.5 - 10 ppg	34	<10 @ TD for logs

8. Auxiliary Equipment:

Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

9. Testing, Logging, and Coring Program:

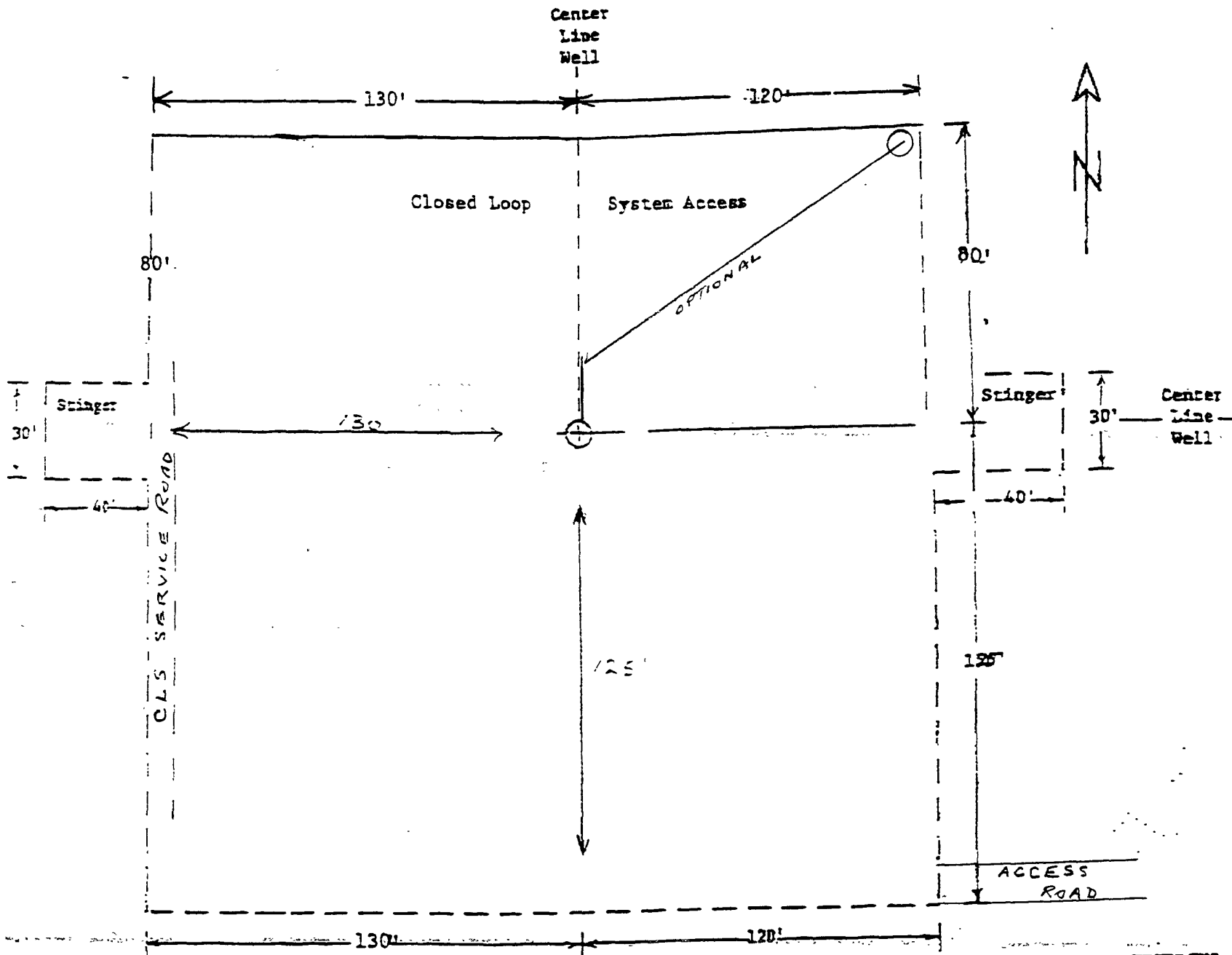
Drill Stem Tests: None required.

Logging: T.D thru pay: GR-Compensated Neutron Density-positivity log. — See COA

T.D. to surface: GR-Neutron

Coring: None required.

- 10.** No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, the proposed mud program will be modified to increase the mud weight. The estimated evacuated BHP = 1,456 psi with a temperature of 88°.
- 11. H₂S:** None expected. None in the previous drilling of wells in the area, but the Mud Log Unit will be cautioned to use a gas trap and monitor to detect H₂S and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas. The well will be shut down until a mud separator and flare line can be installed on the choke manifold, if the gas monitor approaches 10.
- 12.** Anticipated starting date: February 1, 2010.
Anticipated completion of drilling operations: Approximately 2-3 weeks.



UNITED DRILLING, INC.

LOCATION PLAT

RIG

EXHIBIT "D"

CAMERON OIL & GAS CO., INC.

S W Henshaw Premier Unit, Well No. 017

Pad & Closed Loop Layout

3000 psi System

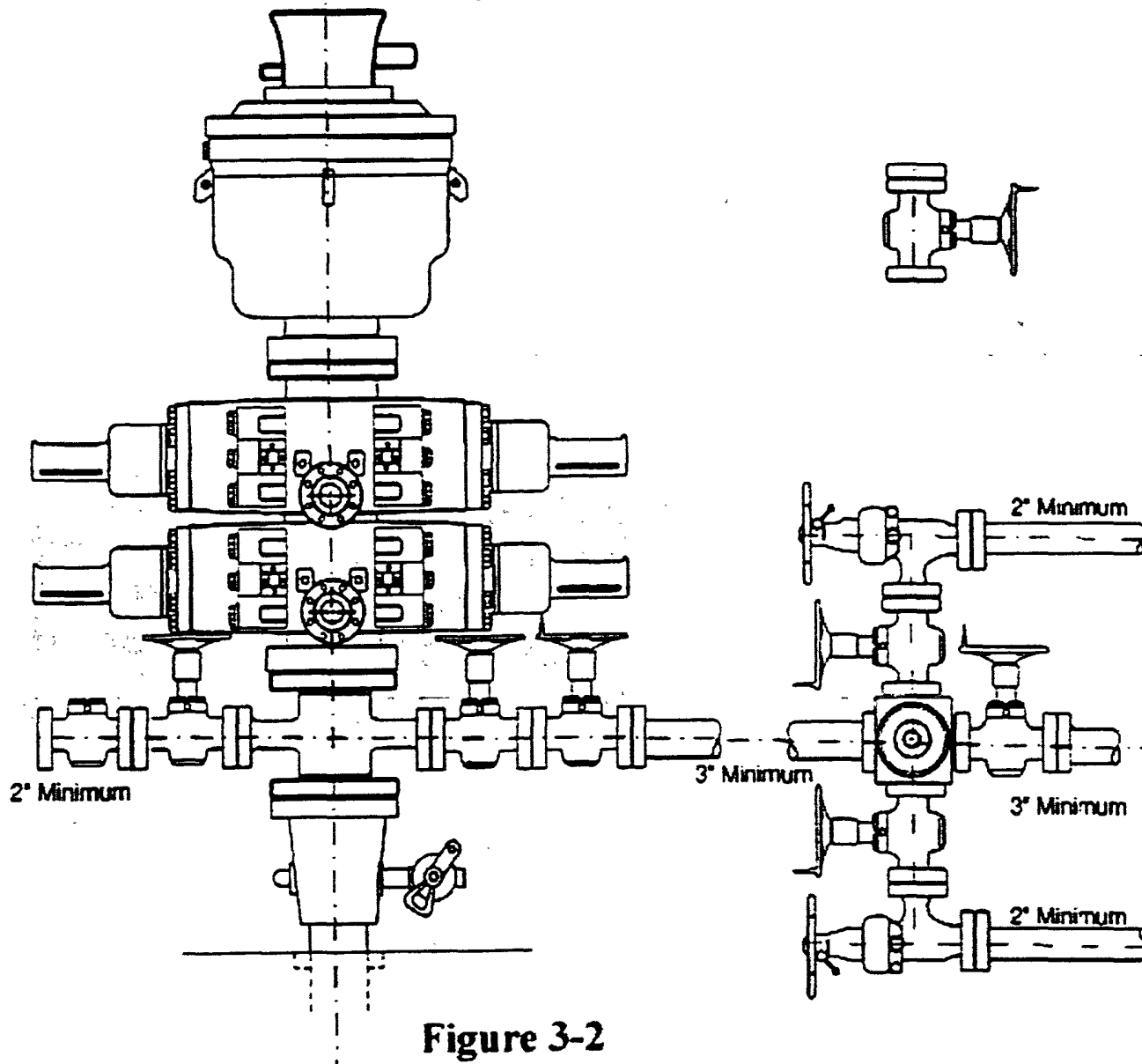
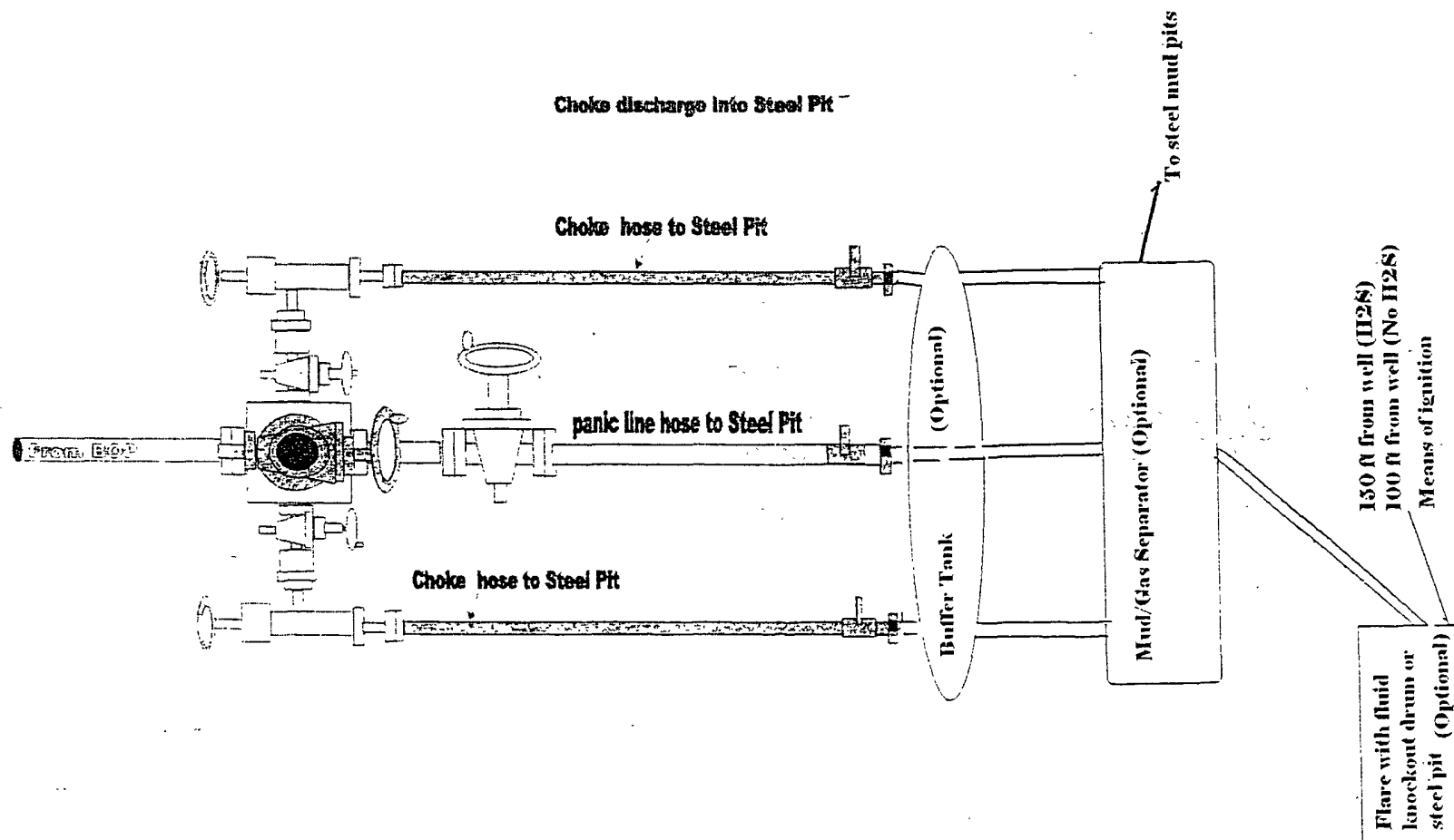


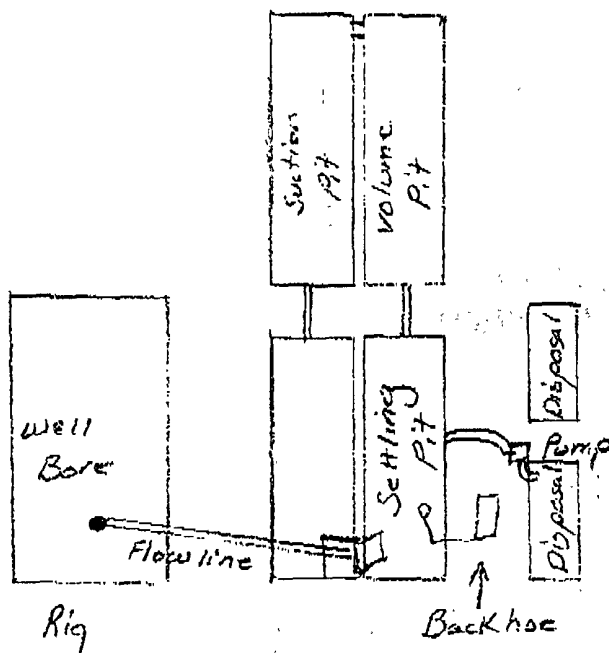
Figure 3-2

EXHIBIT "E"
CAMERON OIL & GAS CO., INC.
S W Henshaw Premier Unit, Well No. 017
BOP Specifications



2000# BOP manifold system
 (Suggested configuration)

CONNECTION INSPECTION SERVICE, LLC
212 SOUTH GRIMES STREET
P.O. BOX 1201
HOBBS, NM 88241
(575) 392-4964



Cameron Oil & Gas, Inc.
Lease: Southwest Henshaw #17
David Sweeney

Description of Procedure:

- 2 – 250 Barrel Pits, 1 used for a settling pit, 2nd used for volume of drilling fluid.
- 1 – Backhoe, used for the removal of cuttings from settling pit to disposal bins.
- 1 – Diaphragm pump, used for transferring fluid from disposal bins to suction pit.
- 1 or 2 Roll Off Bins (depending on depth and mud amount) Disposal Bins

MULTI POINT SURFACE USE AND OPERATIONS PLAN

CAMERON OIL & GAS CO., INC.
S W Henshaw Premier Unit, Well No. 017
2310' FNL & 2310' FEL, Sec.18-T16S-R30E
Eddy County, New Mexico
Lease No.: NM-0610
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM topo map showing the location of the proposed well as staked. The well site location is approximately 38 road miles east of Artesia, NM. Traveling east of Artesia on U.S. Hwy 82 there will be approximately 36 miles of existing paved road and 1.9 miles of gravel oil field roads
- B. Directions: Travel east of Artesia, NM on U.S. Hwy 82 for 29 miles to County Rd #217, which is in Loco Hills. Turn north on County Rd. 217 for approximately 7.2 miles, then turn west on an oilfield road for 1.5 miles and turn south .45 mile to start of the access road on the west. The proposed access will run west for 261 feet to the SE corner of the proposed well pad.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed new access road will be approximately 12 feet wide and 261 feet long. The proposed and existing roads are color coded on Exhibit "A".
- B. Construction: The proposed access road will be constructed by grading and compacting with caliche as required and the surface will be properly drained. The existing access road will be bladed and compacted with additional caliche as needed.
- C. Turnouts: None will be required.
- D. Culverts: None.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: None required.
- G. Off lease right of way: None required for BLM.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Cameron Oil & Gas Co., Inc. has production facilities on the lease at this time.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES continued:

- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment will be installed on the drilling pad. A 2" surface poly flow line will be installed parallel to the access road back to the S W Henshaw Unit #008 flow line to the central tank battery. A 740 foot, 480 volt 15 KVA, secondary electric line will be installed to the power service at the Unit Well No. 8 also.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche required for surfacing the proposed access road and well site pad will be obtained from the nearest available pit. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings and liquids will be stored in a closed loop steel tanks during the drilling operations and delivered to Gandy Marley, Inc., Permit No. NM1-6, as needed and at closure.
- B. There will be no mud pits to be fenced.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 600' X 600'.
- B. Mat Size: 300' X 150', plus 80' X 300' pad to service the closed loop mud system on the north.
- C. Cut & Fill: The location will require a 1 foot cut on the northeast with fill to the southwest.
- D. The surface will be topped with compacted caliche.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. The location will be cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. There will be no unguarded pits containing fluids.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. Mud from the closed system will be disposed of as required.

11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road are located on a 1% slope to the southwest. The location has an elevation of 3749' GL.
- B. Soil: The topsoil at the well site is yellowish red non-calcareous fine sand. The soil is of the Kermit-Berino fine sands series.
- C. Flora and Fauna: The location has a poor grass cover of three awn, dropseed, blue-stem grass along with plants of mesquite, yucca, oak brush, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, deer, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None.
- E. Residences and Other Structures: None in the immediate vicinity except oilfield equipment on producing wells.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.
- H. There is no evidence of archaeological, historical or cultural sites in the staked area. Archaeological Survey Consultants, P. O. Box 2285, Roswell, NM 88202 has conducted an archaeological survey and their report has been submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

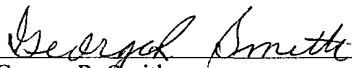
- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

David Sweeney, Vice President
CAMERON OIL & GAS CO., INC.
P.O. Box 1456
Roswell, NM 88202
Office Phone: 575-627-3284
Cell Phone: 575-420-1108

CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by CAMERON OIL & GAS 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.

January 13, 2010


George R. Smith
Agent for: CAMERON OIL & GAS CO., INC.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Cameron Oil & Gas Co
LEASE NO.:	NM0610
WELL NAME & NO.:	17 S W Henshaw Premier Unit
SURFACE HOLE FOOTAGE:	2310' FNL & 2310' FEL
BOTTOM HOLE FOOTAGE:	Same
LOCATION:	Section 18, T. 16 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**
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
 - Mitigation of historic oil spill
 - Unit Plan of Development
- ☐ **Construction**
 - Notification
 - V-Door Direction
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Logging Requirements
- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☒ **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)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Mitigation of historic oil spill: The access road route will cross a historic oil spill. Prior to construction of the access road, the environmental protection department will be contacted (Jim Amos: 575-234-5909) for instructions regarding the mitigation and cleanup of the spill.

Plan of Development

The operator is to submit a Unit Plan of Development (UPOD) annually to the BLM. Guidelines for UPOD are available upon request at the BLM Carlsbad Field Office.

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. V-DOOR DIRECTION: East

C. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil will be used for interim and final reclamation.

D. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

E. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

F. 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.

G. 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

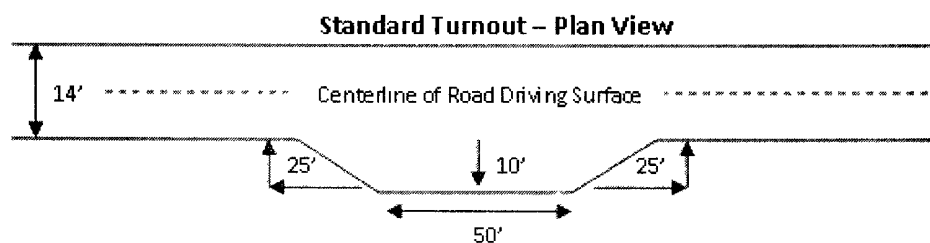
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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).

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.

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

Possible water/brine flows in the Salado and Artesia Groups.

Possible lost circulation in the Grayburg and San Andres Formations.

1. The 8-5/8 inch surface casing shall be set at approximately **450** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If the salt is encountered shallower than this depth, the casing is to be set 25 feet above the salt.**
 - 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. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - 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 **5-1/2** inch production casing is:
 - ☒ Cement should tie-back at least **200** feet into previous casing string. Operator shall provide method of verification. **May require additional cement as the excess calculates to 22%.**
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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi. Operator is using a 3M and testing as a 2M.**
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. Casing cut-off and BOP installation will not be initiated until the cement has had 4-6 hours of setup time in a water basin and 12 hours in the potash areas. This time will start after the cement plug is bumped. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.
 - b. The tests shall be done by an independent service company using a test plug.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.**
 - e. 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.

RGH 021210

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

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the grant 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.

(March 1989)

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant 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 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. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

6. 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 the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. 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 actions to prevent the loss of significant 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.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.
- See attached reclamation plans.

IX. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation 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 that is free of contaminants 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.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared; these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery 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>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

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