

RECEIVED

OCD-HOBBS

ATS-08-739

DEC 16 2008 UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
HOBBS
APPLICATION FOR PERMIT TO DRILL OR REENTERFORM APPROVED
OMB No. 1004-0137
Expires July 31, 20105. Lease Serial No.
LC-062170-A
6. If Indian, Allottee or Tribe Name
-----1a. Type of work: ☒ DRILL ☐ REENTER7. If Unit or CA Agreement, Name and No.
-----1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone8. Lease Name and Well No. **<37540>**
MARGARITA # 12. Name of Operator
McELVAIN OIL & GAS PROPERTIES (REED FISCHER 303-893-0933 **<22044>**)9. API Well No.
30-025-393113a. Address 1050 17th STREET SUITE 1800
DENVER, COLORADO 802653b. Phone No. (include area code)
303-893-093310. Field and Pool, or Exploratory
WILDCAT-DEVONIAN

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

At surface 990' FSL & 990' FEL SECTION 8 T21S-R38E LEA CO. NM
At proposed prod. zone SAME **Unit P**11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 8 T21S-R38E

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

Approximately 15 miles Southeast of Hobbs New Mexico

12. County or Parish
LEA CO.13. State
NM15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

990'

16. No. of acres in lease
24017. Spacing Unit dedicated to this well
4018. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

990'

19. Proposed Depth
8000'
8200'20. BLM/BIA Bond No. on file
NATION WIDE COB00000921. Elevations (Show whether DF, KDB, RT, GL, etc.)
3562' GL22. Approximate date work will start*
WHEN APPROVED23. Estimated duration
28 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must 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 **Joe T. Janica** Name (Printed/Typed) Joe T. Janica Date 08/29/08
Title Permit EngineerApproved by (Signature) **/s/ Don Peterson** Name (Printed/Typed) **/s/ Don Peterson** Date DEC 12 2008
Title FOR FIELD MANAGER Office CARLSBAD FIELD OFFICEApplication 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)

LEA COUNTY CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

McELVAIN OIL & GAS PROPERTIES, INC.

1050 17TH STREET, SUITE 1800
DENVER, COLORADO 80265-1801

TELEPHONE 303-893-0933

FAX 303-893-0914

December 10, 2008

Via Facsimile (575) 234-5927

Bureau of Land Management
Attention: Betty Hill
Carlsbad, New Mexico

RE: Landowner Surface Agreement
Margarita #1 Well, Lea County, NM

Dear Ms. Booth:

This letter is to notify you that McElvain Oil & Gas Properties, Inc. does have a surface agreement in place with WFM RANCH LTD. et al covering the drilling and operation of the captioned well. Paige McNeill notified McElvain Oil & Gas Properties, Inc. today that the surface owner executed McElvain's Surface Use and Compensation Agreement.

Sincerely,

McElvain Oil & Gas Properties, Inc.



James C. Joda
General Counsel

cc: Reed Williams
Linnea Hill

RECEIVED**OCD-HOBBS**Form 3160-5
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010**NOTES AND REPORTS ON WELLS****Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**5. Lease Serial No.
LC-062170-A6. If Indian, Allottee or Tribe Name
na**SUBMIT IN TRIPLICATE** - Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

McElvain Oil & Gas Properties, Inc.

3a. Address

1050 - 17th Street, Suite 1800
Denver, Colorado 80265

3b. Phone No. (include area code)

(303) 893-0933 xtn 330

7. If Unit of CA/Agreement, Name and/or No.
na8. Well Name and No.
Margarita # 1

9. API Well No.

30-025-39311

10. Field and Pool or Exploratory Area
Wildcat - Littman Field Area4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
990' FSL & 990' FEL (SESE - Unit "P") Section 8, T21S-R38E11. Country or Parish, State
Lea County, New Mexico

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change Casing</u>
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Design on APD from
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	I-80 to L-80 Grade Csg.

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

McElvain Oil & Gas Properties, Inc. is amending the proposed production casing design set out in our original APD dated 8-29-08 from an I-80 grade casing to an L-80 grade casing. The planned production casing design for this proposed well is as follows:

New 5.5", 17 #/ft, LT&C L80 casing hung from surface and set at the proposed TD of 8,200 feet.

Minimum performance properties for the new casing are as follows:

Collapse Resistance: 6,290 psi
Internal Yield Pressure: 7,740 psi
Joint Strength: 338,000 lbs

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
E. Reed Fischer

Title Senior Operations Engineer

Signature

Date 09/22/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Don Peterson

FOR

FIELD MANAGER

Date

DEC 12 2008

Conditions of approval, if any, are attached. Approval of this notice 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

Office

CARLSBAD FIELD OFFICE

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)

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-39311	Pool Code ✓	Pool Name WILDCAT-DEVONIAN
Property Code 37540	Property Name MARGARITA	Well Number 1
OGRID No. 22044(Operator Name McELVAIN OIL AND GAS PROPERTIES	Elevation 3562'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	8	21 S	38 E		990	SOUTH	990	EAST	LEA

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 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

SURFACE LOCATION

Lat - N32°29'20.43"
Long - W103°04'37.31"
NMSPC#- N 543913.190
E 928708.682
(NAD-83)

OPERATOR CERTIFICATION

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

Signature

Date

Joe T. Janica

08/29/08

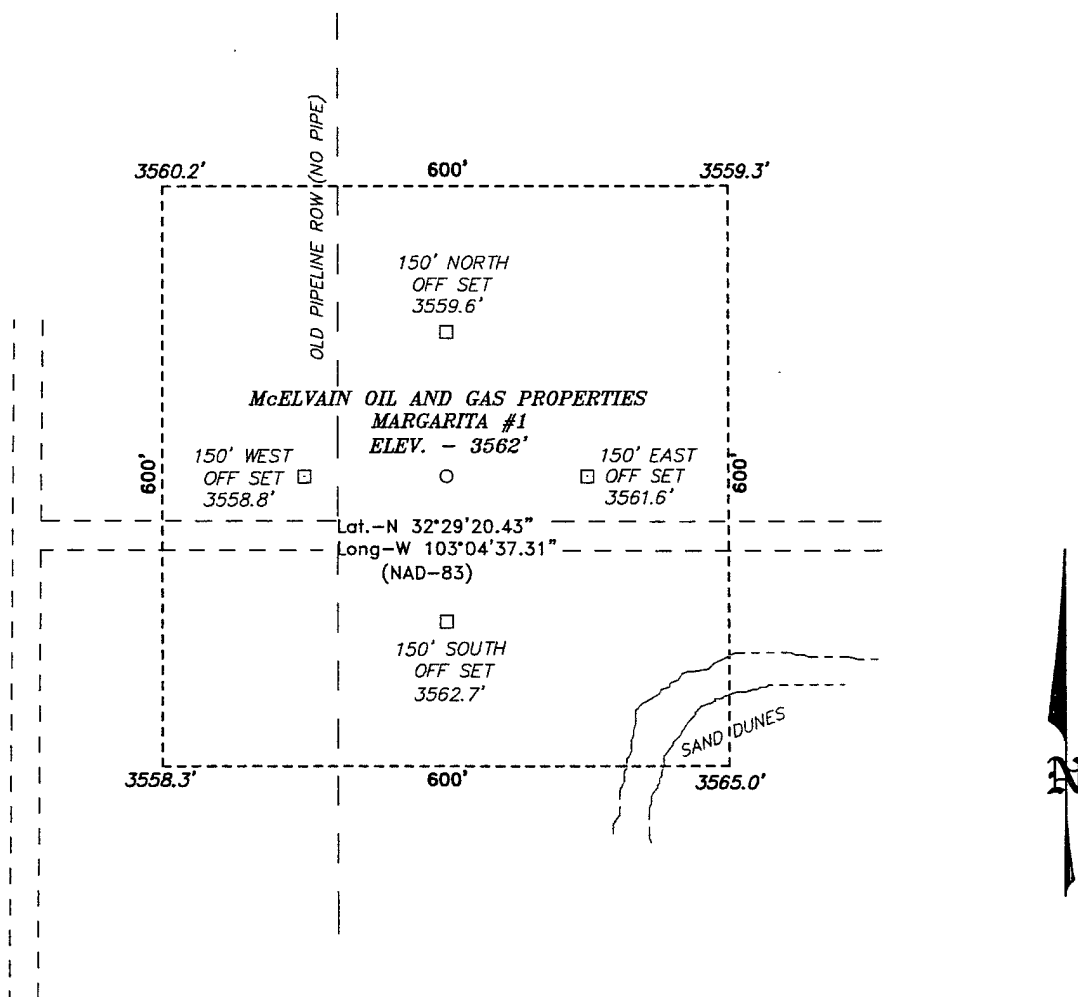
Printed Name

SURVEYOR CERTIFICATION

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

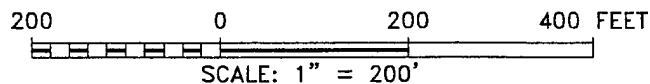
JUNE 20, 2008	
Date Surveyed	NEW MEXICO
Signature & Seal of Professional Surveyor	REGISTERED
No. 7977	1987
Certificate No. Gary L. Jones	7977
BASIN SURVEYS	

SECTION 8, TOWNSHIP 21 SOUTH, RANGE 38 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



Directions to Location:

FROM MILE MARKER 37 OF STATE HWY 8; TO SOUTH 0.6 MILES TO GATE #25; THENCE EAST 0.2 MILES; TURN LEFT AT MONTEREY BATTERY AND GO NORTH 0.4 MILES; THENCE TURN RIGHT PASSED WINDMILL AND GO WEST 27 MILES; THENCE RIGHT AND GO SOUTH 0.4 MILES; THENCE 0.3 MILES SOUTHWEST; THENCE 0.6 MILES SOUTH THENCE TURN LEFT AND GO EAST 300' TO PROPOSED LOCATION.



McELVAIN OIL AND GAS PROPERTIES

REF: MARGARITA #1 / WELL PAD TOPO

THE MARGARITA #1 LOCATED 990'

FROM THE SOUTH LINE AND 990' FROM THE EAST LINE OF
SECTION 8, TOWNSHIP 21 SOUTH, RANGE 38 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

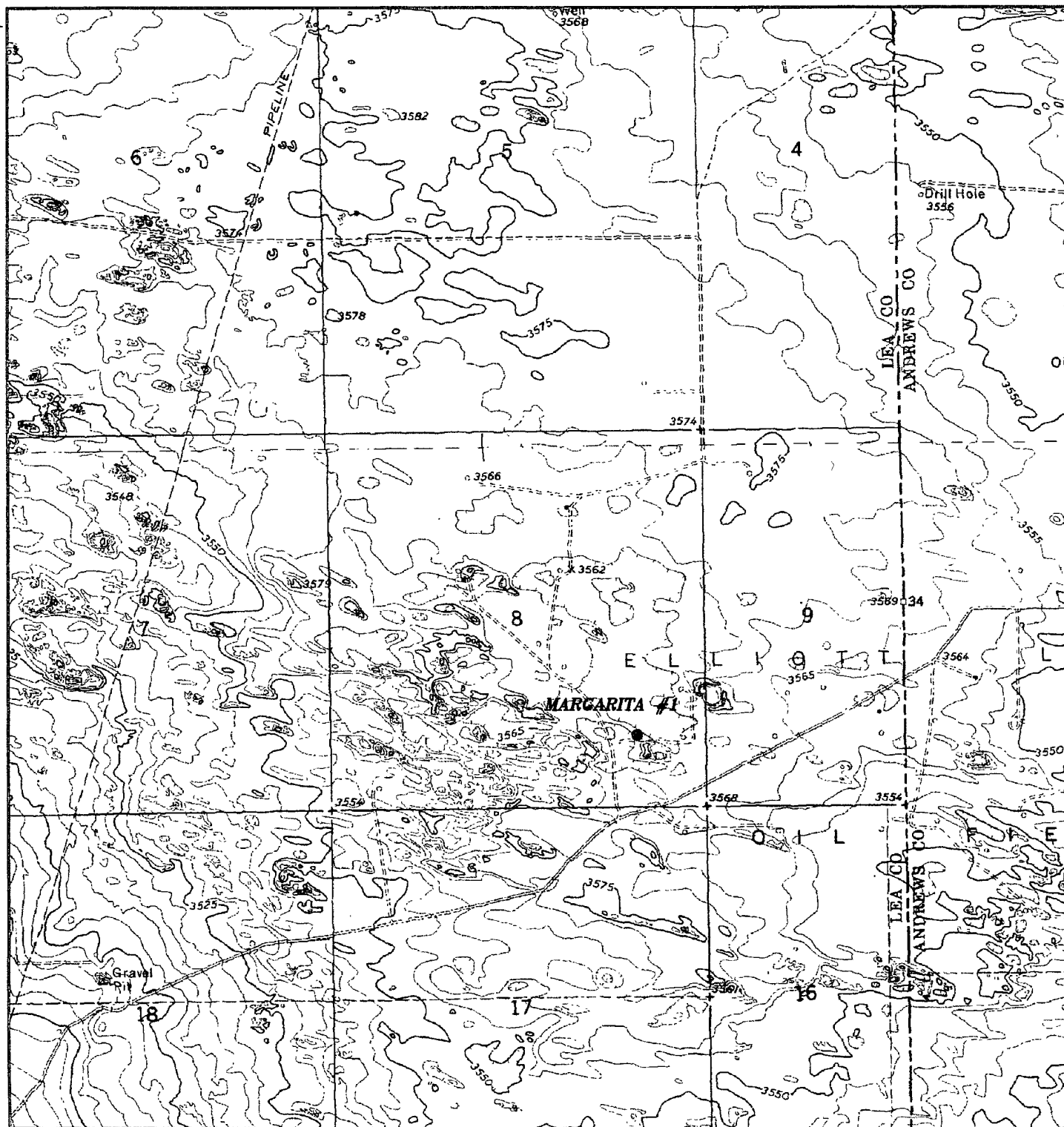
BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 19874 Drawn By: J. SMALL

Date: 06-24-2008 Disk: JMS 19874

Survey Date: 06-20-2008

Sheet 1 of 1 Sheets



MARGARITA #1

Located 990' FSL and 990' FEL
Section 8, Township 21 South, Range 38 East,
N.M.P.M., Lea County, New Mexico.

**basin
surveys**

focused on excellence
in the oilfield

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

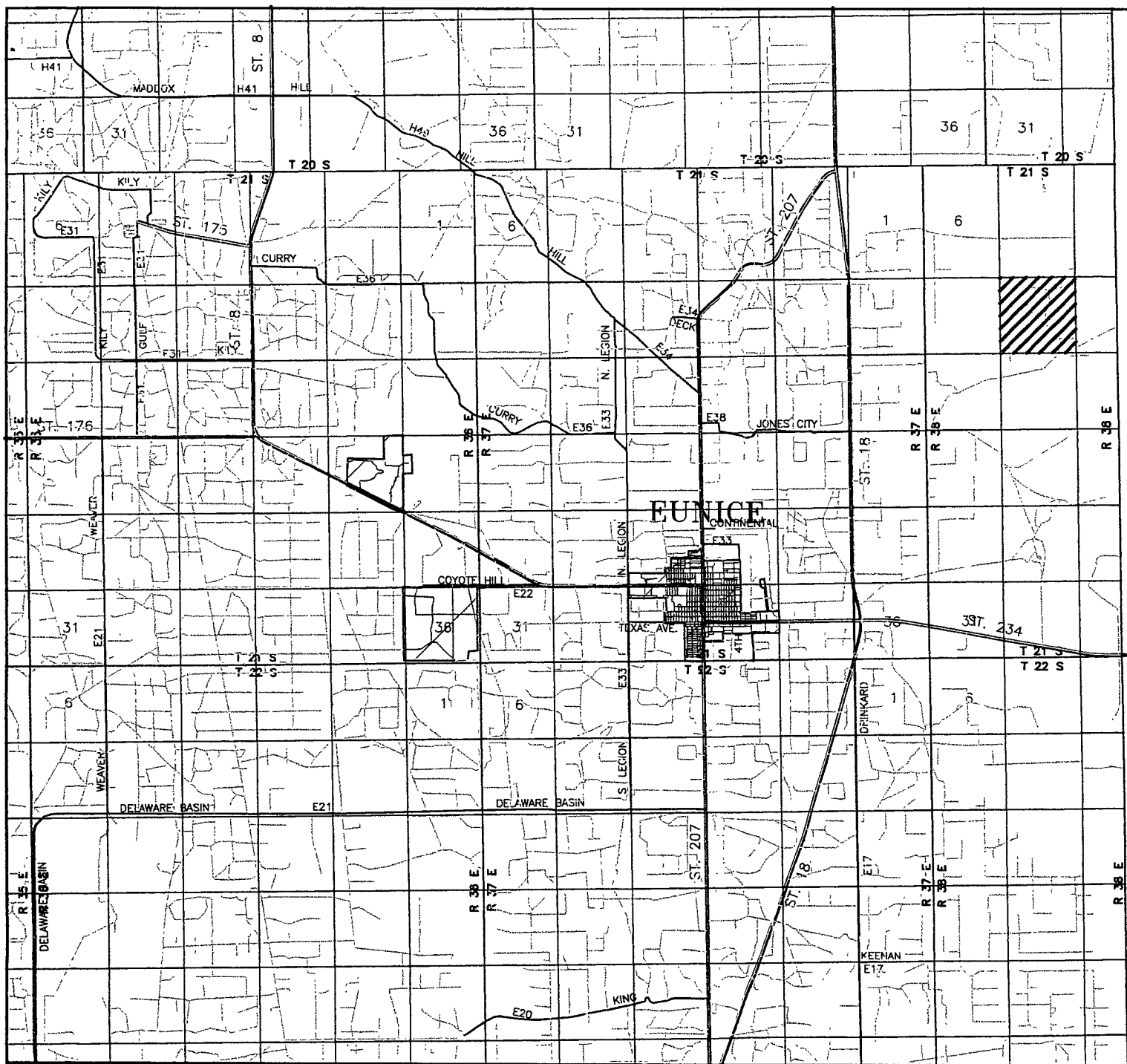
W.O. Number: JMS 19874

Survey Date: 06-20-2008

Scale: 1" = 2000'

Date: 06-24-2008

**McELVAIN OIL
AND GAS
PROPERTIES**



MARGARITA #1

Located 990' FSL and 990' FEL

Section 8, Township 21 South, Range 38 East,
N.M.P.M., Lea County, New Mexico.

basin
surveys

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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 19874

Survey Date: 06-20-2008

Scale: 1" = 2 MILES

Date: 06-24-2008

McELVAIN OIL
AND GAS
PROPERTIES

APPLICATION TO DRILL

McELVAIN OIL & GAS PROPERTIES
MARGARITA #1
UNIT "P" SECTION 8
T21S-R38E LEA CO. NM

In response to questions asked under Section II of Bulliten NTL-6, the following information on the above will be provided.

1. LOCATION: 990' FSL & 990' FEL SECTION 8 T21S-R38E LEA CO. NM
2. ELEVATION ABOVE SEA LEVEL: 3562' GL
3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits.
4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. PROPOSED DRILLING DEPTH: 8200'
6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Rustler Anhydrite	1714'	Blainebry	6159'
Yates	3014'	Tubb	6629'
Queen	3840'	Drinkard	6969'
Grayburg	4134'	Abo	7229'
San Andres	4394'	Devonian	7879'
Glorieta	5724'	TD	8200'
7. POSSIBLE MINERAL BEARING FORMATIONS:

Queen	Oil	Tubb	Oil
San Andres	Oil	Drinkard	Oil
Blainebry	Oil	Abo	Oil
		Devonian	Oil
8. CASING PROGRAM:

HOLE SIZE	INTERVAL	OD OF CASING	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-80'	20"	NA	NA	NA	Conductor	New
12 1/4"	0-1740'	8 5/8"	24#	8-R	ST&C	K-55	New
7 7/8"	0-8200'	5 1/2"	17#	8-R	LT&C	I-80	New

Casing Design Factors:

Collapse	1.125	Burst	1.0	Body Yield	1.5	Joint Strength	8-R	1.8
							Butress	1.6

*Replaced
per survey
9/22/88
WWT*

APPLICATION TO DRILL

McELVAIN OIL & GAS PROPERTIES
MARGARITA #1
UNIT "P" SECTION 8
T21S-R38E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 80' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Run and set 1740' of 8 5/8" 24# K-55 ST&C casing. Cement with 450 Sx. of Class "C" cement + additives, mix at 13.5ppg, Yield 1.7, tail in with 200 Sx. of Class "C" cement + additives, mix at 14.8ppg, Yield 1.34. Circulate cement to surface.
<i>See COA</i> →		
5 1/2"	Production	Run and set 8200' of 5 1/2" 17# I-80 LT&C casing. Cement with 800 Sx. of 50/50 Class "C" cement + additives mix at 11.8 ppg, Yield 2.44, tail in with 650 Sx. of 50/50 Class "C" POZ + additives, mix at 14.2 ppg, Yield 1.29, estimate top of cement 1500' from surface.

11. PRESSURE CONTROL EQUIPMENT:

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

4 One remote choke

12. MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC	FLUID LOSS	TYPE MUD SYSTEM
40-1740'	8.4-8.7	29-38	NC	Fresh water spud mud add paper to control seepage, and high viscosity sweeps to clean hole.
1740-6650'	10.0-10.2	29-38	NC	Brine water use paper to control seepage and high viscosity sweeps clean hole.
6650'-8200'	10.1-10.2	32-38	10cc or less	Same as above add salt Gel to control use a drispac system to control water loss.

Sufficient mud material will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DST's, cut cores, run open hole logs and casing the mud system may have to be altered to meet these needs.

APPLICATION TO DRILL

McELVAIN OIL & GAS PROPERTIES
MARGARITA #1
UNIT "P" SECTION 8
T21S-R38E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, SNP, LDT, MSFL, Gamma Ray and Caliper from TD back to 8 5/8" casing shoe.
- B. Cased hole log: Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4150± PSI, and Estimated BHT 175±°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 28 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

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

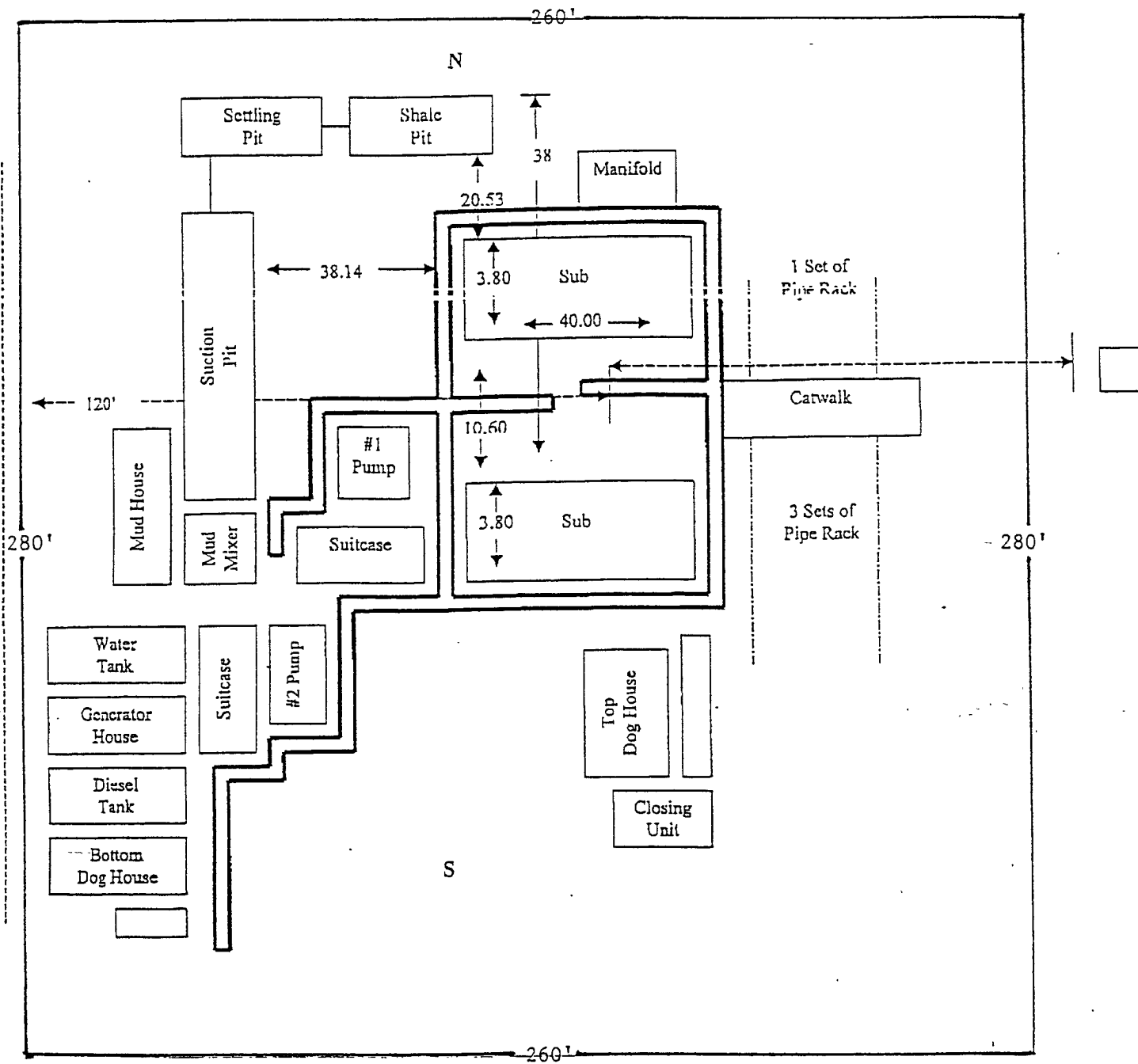
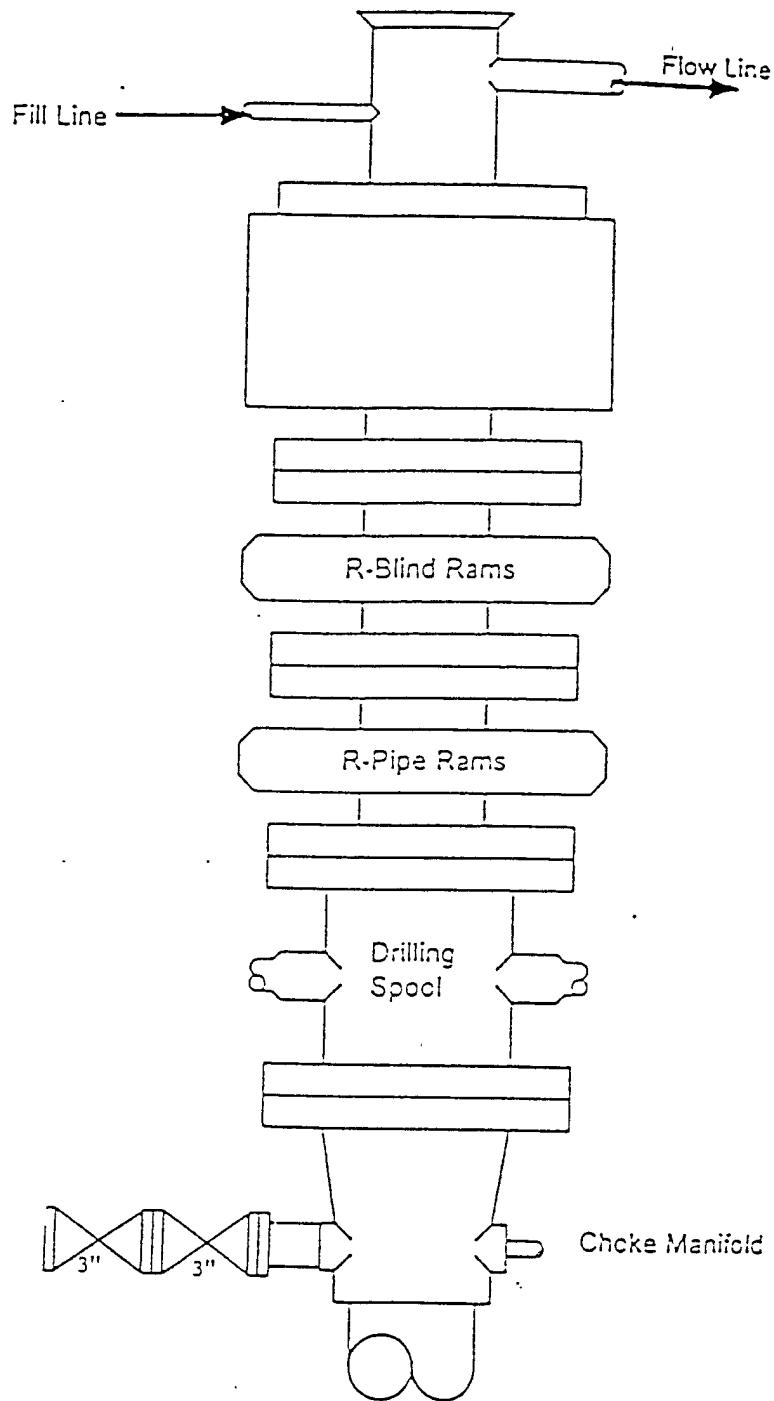


EXHIBIT "D"
RIG LAY OUT PLAT

McELVAIN OIL & GAS PROPERTIES
MARGARITA #1
UNIT "P" SECTION 8
T21S-R38E LEA CO. NM



Type 900 Series
3000 psi WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON
McELVAIN OIL & GAS PROPERTIES
MARAGARITA #1
UNIT "P" SECTION 8
T21S-R38E LEA CO. NM

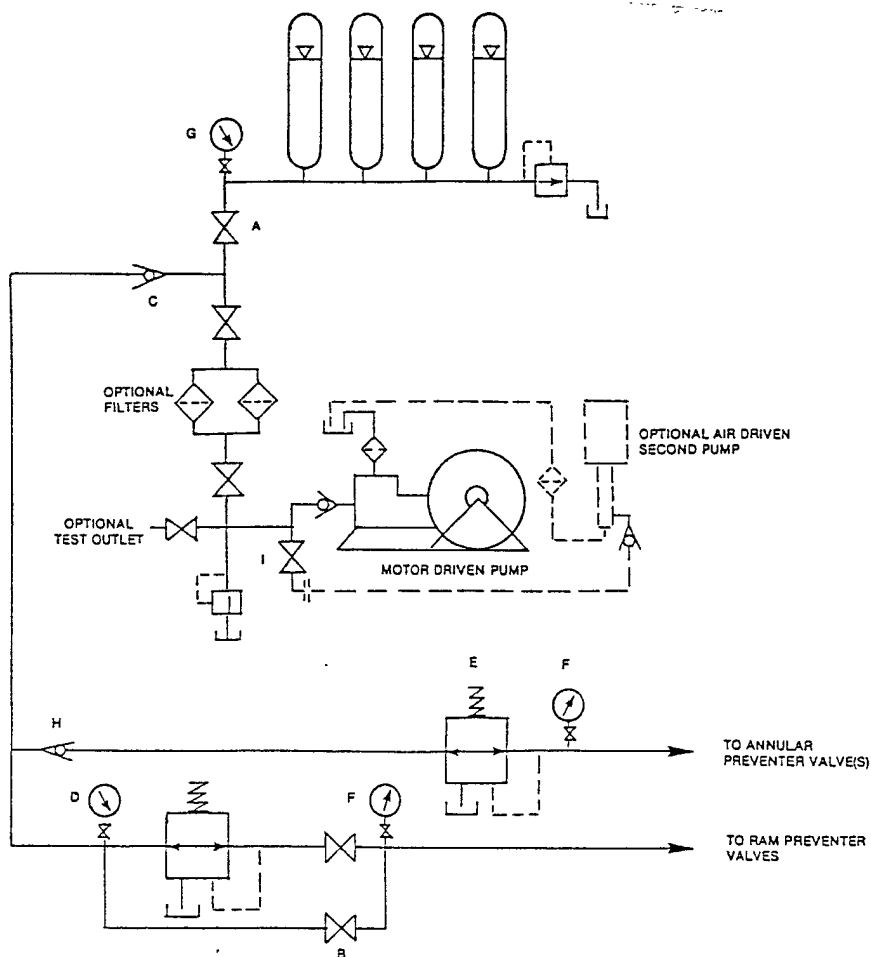


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

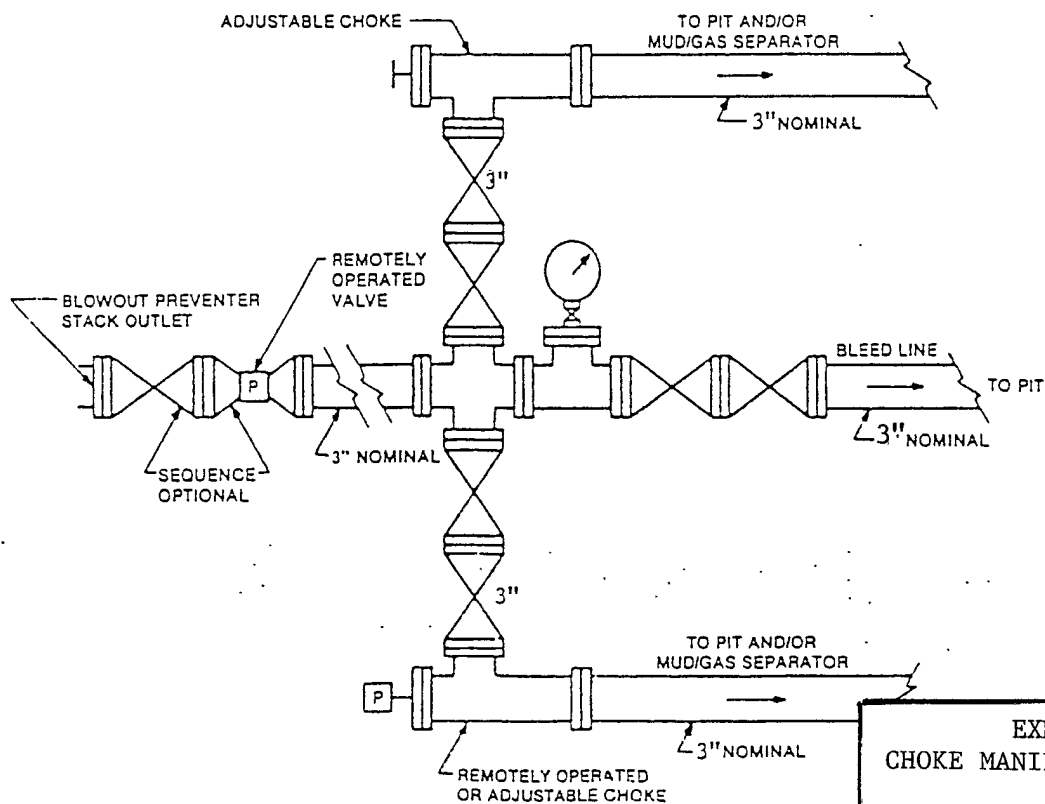


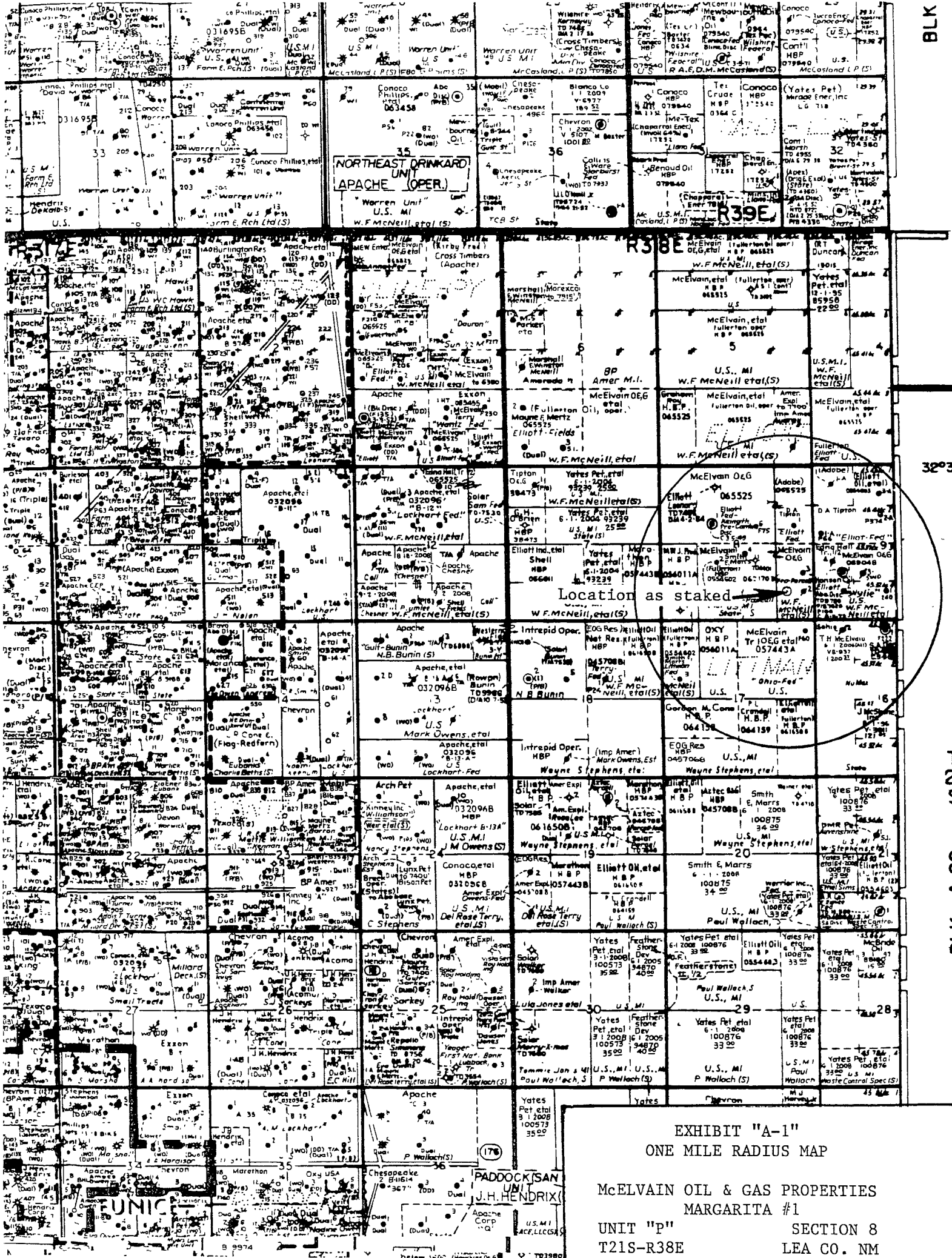
FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

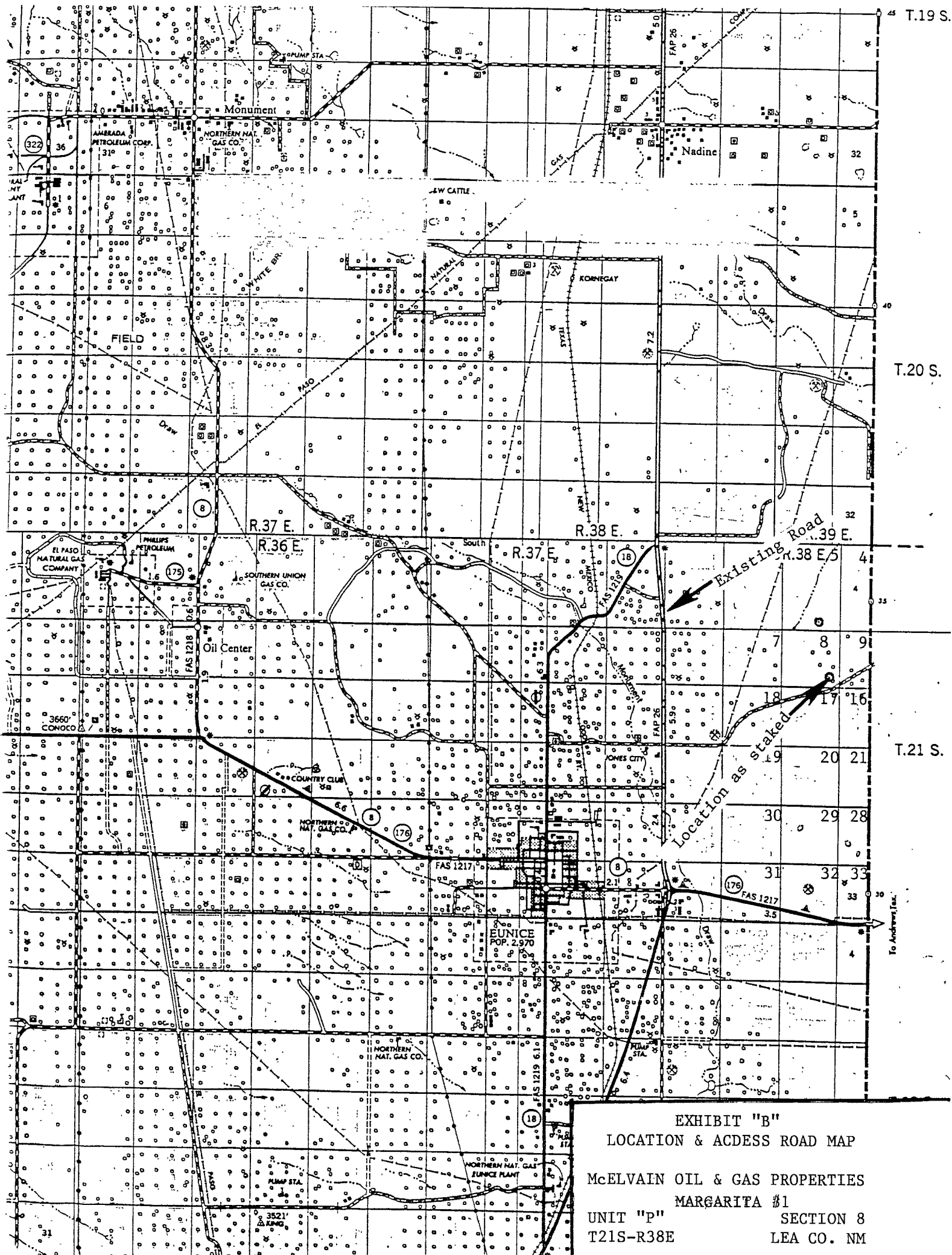
EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

McELVAIN OIL & GAS PROPERTIES
MARAGRITA #1
UNIT "P" SECTION 8
T21S-R38E LEA CO. NM

McELVAIN OIL & GAS PROPERTIES
Hydrogen Sulfide Contingency Plan
For Drilling/Workover/Facility

This well and it's anticipated facility are not expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. There are no private residences in the area but a contingency plan has been orchestrated. McELVAIN OIL & GAS PROPERTIES will have a company representative available to the rig personnel through out the drilling of this well. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be employed to assure the safety of all personnel.





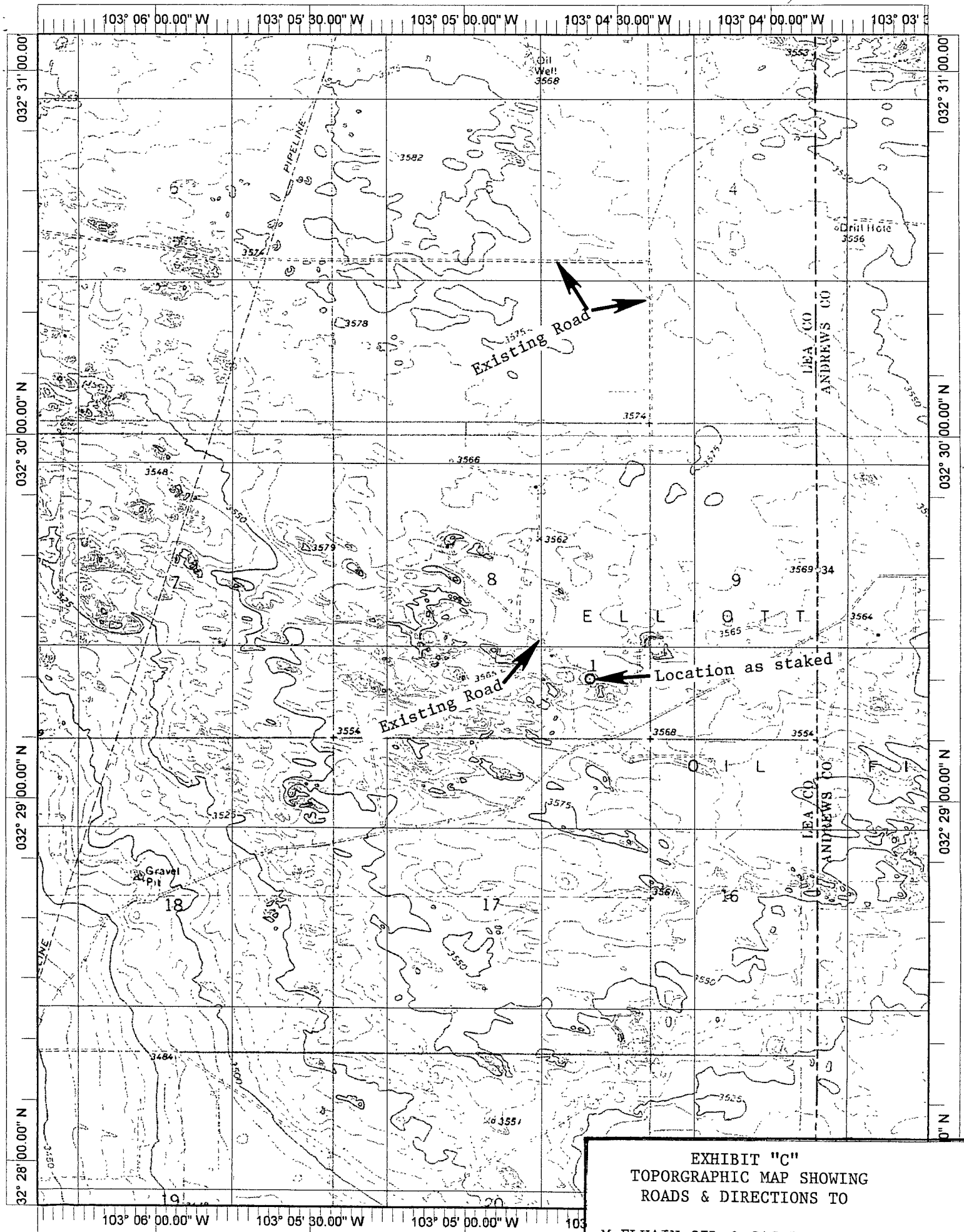


EXHIBIT "C"
 TOPORGRAPHIC MAP SHOWING
 ROADS & DIRECTIONS TO

McELVAIN OIL & GAS PROPERTIES
 MARGARITA #1
 UNIT "P" SECTION 8
 T21S-R38E LEA CO. NM

Datum: NAD27

Copyright (C) 1999, Maptech, Inc.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	McElvain Oil & Gas Properties
LEASE NO.:	LC-062170A
WELL NAME & NO.:	Margarita #1
SURFACE HOLE FOOTAGE:	990' FSL & 990' FEL
BOTTOM HOLE FOOTAGE:	' F L & ' F L
LOCATION:	Section 8, T. 21 S., R 38 E., NMPM
COUNTY:	Lea 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
 - Sand Dune Lizard
- ☒ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit – Closed-loop mud system
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
- ☐ **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)

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 1 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and 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 ft. from the source of the noise.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Hobbs Field Station at (575) 393-3612 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

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. RESERVE PITS

The operator has applied for a closed-loop system. The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

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

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

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

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

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.

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 for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

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

1. The **8-5/8** inch surface casing shall be set at **approximately 1740 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.
 - 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. **Wait on cement (WOC) time for a primary cement job 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.

Formation below the 8-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

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.
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 **3000 (3M) psi**.

3. 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.

WWI 111108

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

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.

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.

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

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.