

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL

WELL ☒

GAS

WELL ☐

OTHER ☐

2. NAME OF OPERATOR

Merrion Oil & Gas Corp.

3. ADDRESS OF OPERATOR

P. O. Box 840, Farmington, New Mexico 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

330' FSL and 2264' FWL

At proposed prod. zone

API # 30-006-20008

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

16 miles North of Fence Lake, New Mexico, on Highway 32

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

8,747.24

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

N/A

19. PROPOSED DEPTH

3005'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

7,194' GR

22. APPROX. DATE WORK WILL START*

October, 1987

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.3 or 36	375'	175 sx
8-3/4"	4-1/2"	10.5	3,005'	350 sx

Propose to drill 12-1/4" hole to 375' KB. Set approximately 375' of 9-5/8" J-55 casing at 375' KB with 175 sx (207 cu.ft.) Class 'B', 2% CaCl₂. Wait on cement 10 hours. Pressure test casing to 1200 psi. Drill 8-3/4" hole to TD at 3,005'. If deemed necessary will run drill stem tests. Will run open hole logs. If well appears productive will set 4-1/2" J-55 10.5 lb/ft production casing at 3,005' with 350 sx (427 cu.ft.) class 'A', with 2% gel. Estimated top of cement 1600'. Will perforate and stimulate as necessary to test well. Additional drilling program details attached.

"Approval of this

not warrant that

holds legal title

or title to the land

Cement to surface

RECEIVED
OCT 13 1987
OIL CON. DIV.
DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present production zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE Operations Manager

DATE 9/22/87

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED

AS AMENDED

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

*See Instructions On Reverse Side

AREA MANAGER

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

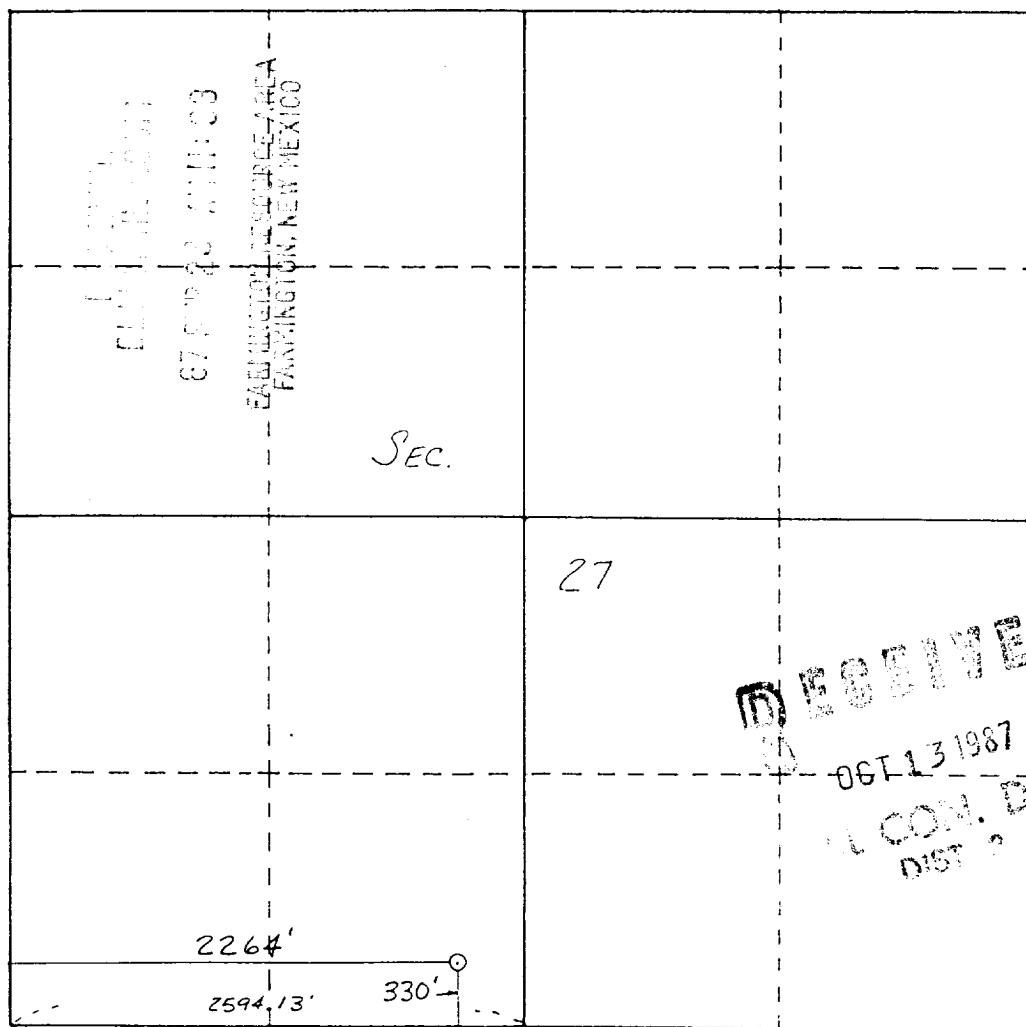
Operator MERRION OIL & GAS CORP.			Lease GALESTINA CANYON		Well No. 1
Unit Letter N	Section 27	Township 8 N	Range 18 W	County Cibola	
Actual Footage Location of Well: 330 feet from the South line and 2264 feet from the West line					
Ground Level Elev. 7194	Producing Formation N/A	Pool Wildcat	Dedicated Acreage: 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Steven S. Dunn

Name Steven S. Dunn
Operations Manager

Position

Merrion Oil & Gas Corp.

Company

9/22/87

Date

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 knowledge and belief.

Date Surveyed

William E. Hinkle
Registered Professional Engineer
and Land Surveyor

Certificate No.

MEAS. DIST. 5188.26'

MERRION OIL & GAS CORPORATION

DRILLING TECHNICAL PROGRAM

ATTACHMENT TO FORM 3160-3

Galestina Canyon No. 1
330' FSL and 2264' FWL
Sec. 27, T8N, R18W
Cibola County, New Mexico

1. ESTIMATED FORMATION TOPS

FORMATION	DEPTH
Top Mancos	Surface
Top Dakota	50 ft.
Top Morrison	300 ft.
Top Shinarump	860 ft.
Top San Andres	1,860 ft.
Top Glorietta	2,070 ft.
Top Yeso	2,250 ft.
Top Pre-Cambrian	3,000 ft.
Total Depth	3,005 ft.

2. WELL CONTROL SYSTEM

- A. Proposed blowout preventer system (schematic drawings attached) is double ram BOPs with choke manifold.
- B. Minimum required working pressure rating for BOP stack is 2000 psi.
- C. BOP pressure testing will be conducted at time of installation and prior to drillout of surface casing shoe. The pipe and blindrams will be activated at minimum on each trip for a bit and recorded in driller's log.

3. DRILLING MUD PROGRAM

- A. Surface hole will be drilled with fresh water - gel system, lime added to provide viscosity as needed.
- B. 8-3/4" hole will be drilled with a low solids, non-dispersed mud using fresh water, gel, and other products to control PH, viscosity, weight, and water loss characteristics as necessary. Cottonseed hulls and cedar fiber will be stocked on location for use in restoring lost circulation.
- C. Mud trip monitoring will be done visually.

4. HAZARDS

- A. No abnormal pressure is anticipated. However, BOPs will be used under surface casing to total depth.
- B. No hole problems are anticipated based on the previously drilled well in this area.
- C. No H2S is expected to be encountered. However, should H2S be found during drilling, detection and warning equipment will be installed.
- D. Hole deviation is not expected to be a problem. Single shot surveys giving hole inclination will be run a minimum of every 500 feet.

5. LOGGING AND TESTING

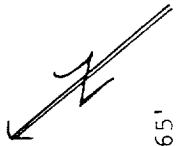
- A. An IES Induction Log will be run from TD to surface. A Compensated Density Log will be run a minimum of 2000' to cover zones of interest.
- B. Drill stem tests will possibly be run if drilling sample or mud shows warrant.

MERRION OIL & GAS CORPORATION

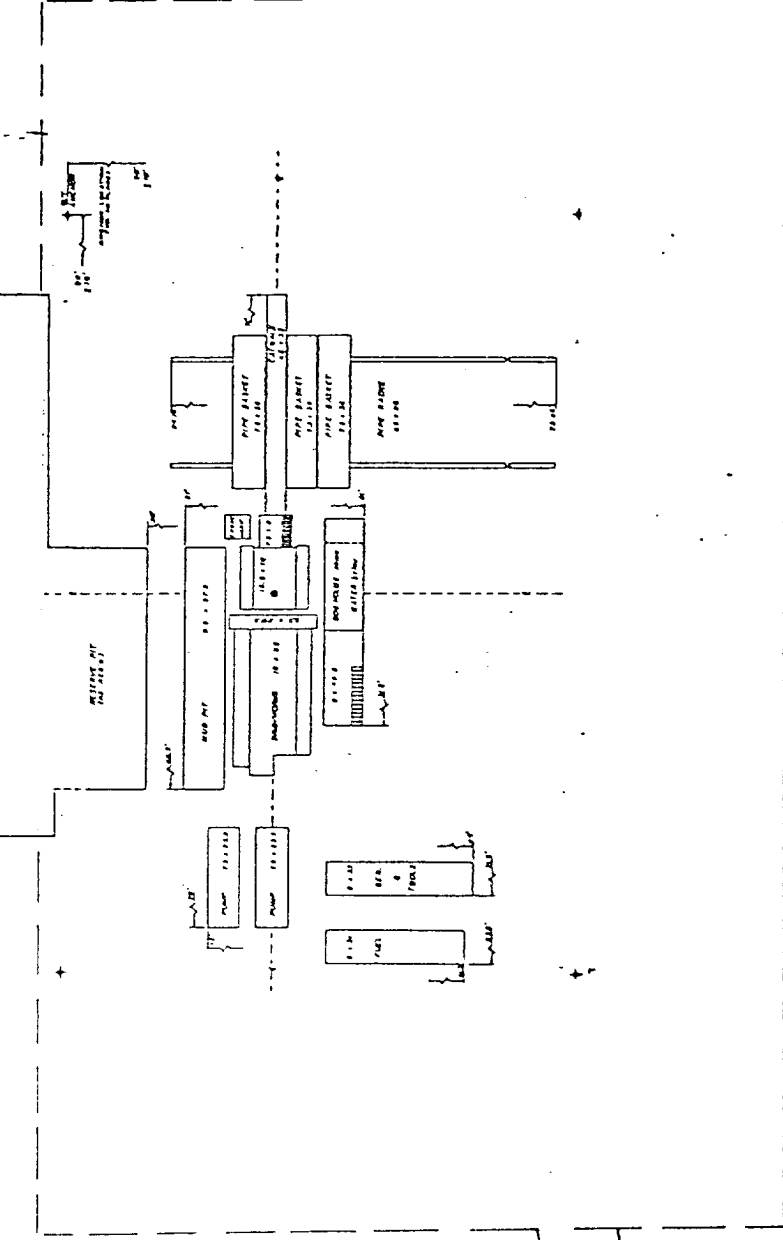
LOCATION LAYOUT

DRILLING WELL

Galestina Canyon No. 1
330' FSL and 2264' FWL
Sec. 27, T8N, R18W
Cibola county, New Mexico



Location Size: 300' x 165'

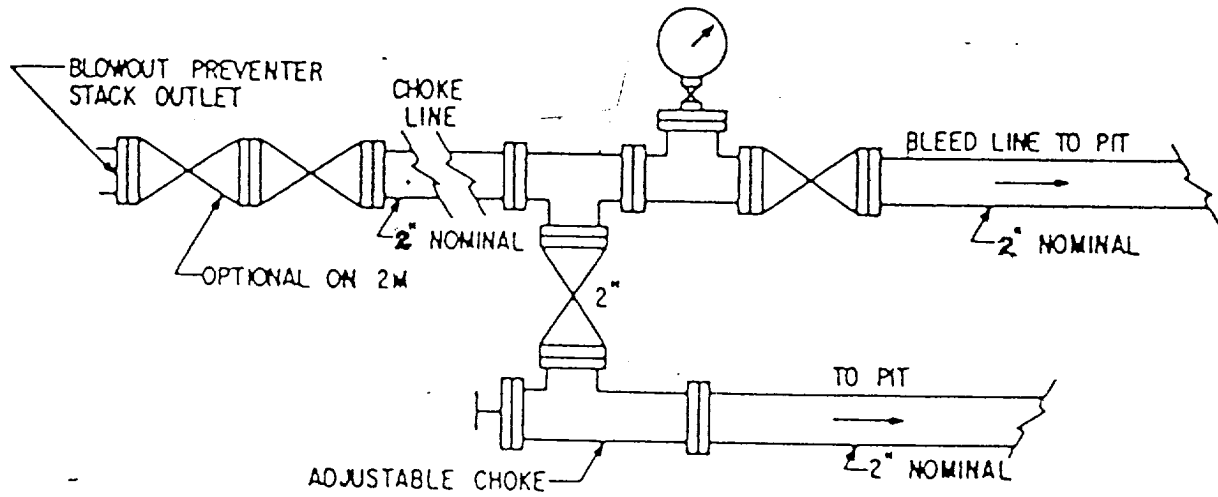


ACCESS
ROAD

MERRION OIL & GAS CORPORATION

CHOKE MANIFOLD SCHEMATIC

Galestina Canyon No. 1
330' FSL and 2264' FWL
Sec. 27, T8N, R18W
Cibola County, New Mexico

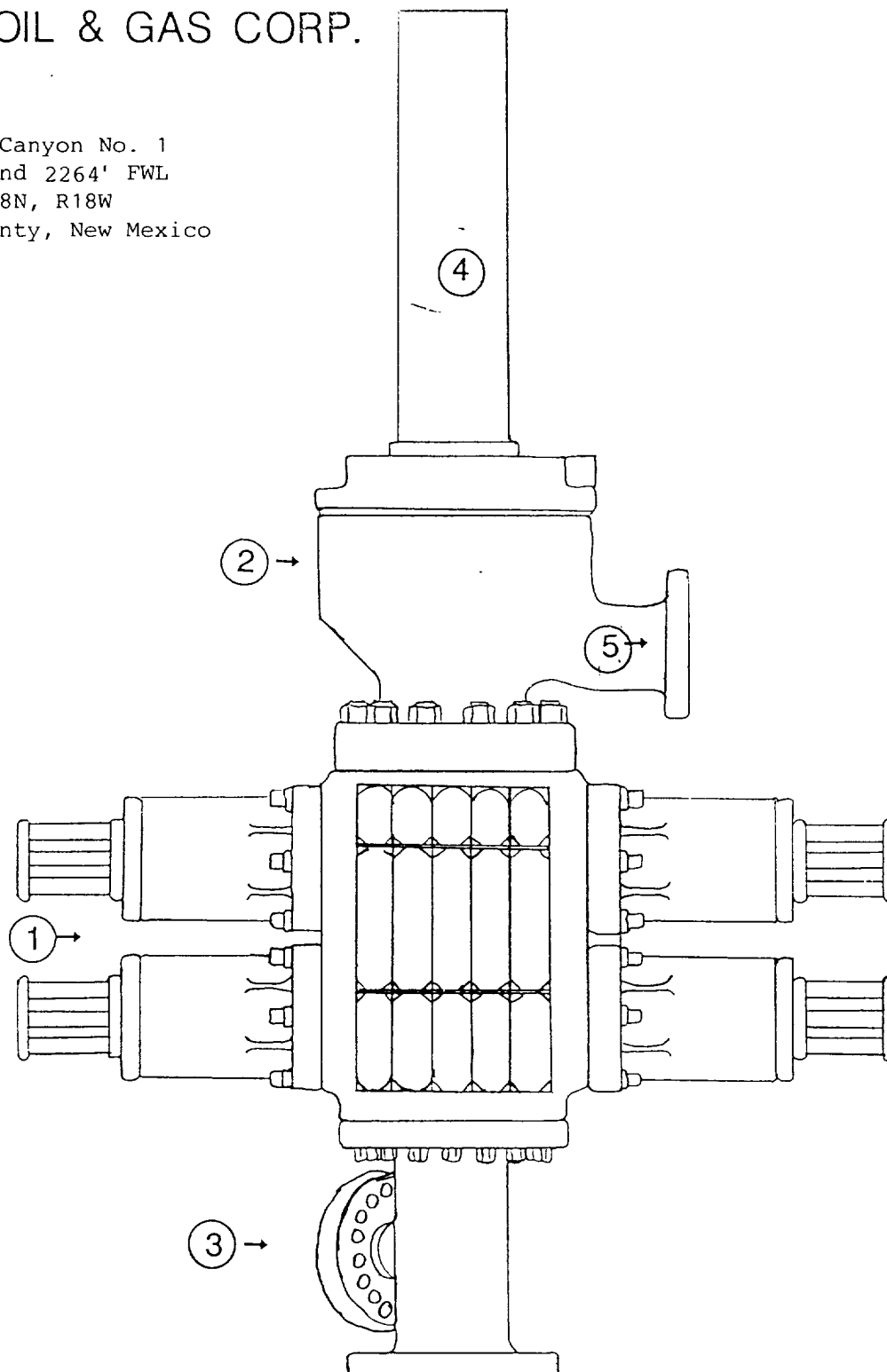


FOR 2,000 and 3,000 PSI RATED

WORKING PRESSURE

MERRION OIL & GAS CORP.

Galestina Canyon No. 1
330' FSL and 2264' FWL
Sec. 27, T8N, R18W
Cibola County, New Mexico



① 10' 3000# MANUAL LOCK RAM DOUBLE GATE BLOWOUT PREVENTER

② 10' 3000# ROTATING HEAD

③ SPOOL

④ FLOW NIPPLE

⑤ MUD RETURN LINE

BLM Surface Stipulations

Operator: MERRION OIL & GAS CORP.

Well Name: #1 GALESTINA CANYON

Legal Location: 330' FSL 2264' FWL

sec. 27 T. 8N R. 18W NMPM

Lease Number: NM-58735

Field Inspection Date: 9/21/87

1. The operator or his contractor will contact the BLM Farmington Resource Area Office, Fluids Surface Management Staff, at (505) 325-4572, approximately 48 hours prior to construction activities.
2. No construction or drilling activities shall be conducted between November 1 and March 31 because of elk/deer/bald eagle winter habitat areas. Contact BLM wild-life biologist (Dave Renwald) at 325-3581, with any questions.
3. The Fluids Surface Management Staff shall be notified upon site completion, prior to moving on drilling rig. (505) 325-4572.
4. A _____ (ft.) tree screen will be left on the _____ sides of the location.
5. Pits and/or pad will be constructed long and narrow, or to conform to natural contour of terrain, so as to avoid the edge of hazard by an amount that prevents pit failure.
6. Pits will be lined with an impervious material.
7. Earthen berm(s) will be placed on the _____ side(s) of the location between the reserve pit and the wash.
8. The _____ corner of the well pad will be rounded off to avoid _____.
9. The wash shall be diverted around the _____ side of the well pad.
- X 10. Diversion ditch(es) will be constructed on the SW side of the location above/below (circle one) the cut slope, draining to the NORTH.
11. A culvert of sufficient size will be placed where the drainage crosses access road.
- X 12. The proposed access road shall utilize the upgraded 2-track trail approximately _____ (ft. or mi) as agreed upon during on-site inspection. ~~Remainder of planned access road will follow flagged route.~~
13. The access road shall be rerouted around the _____ edge of the well pad during construction and drilling activities for safety reasons. Upon completion of drilling and cleanup, the road will be returned to its original alignment.
- X 14. The cut slope shall not exceed a 4:1, (3:1) 2:1, or 1:1 ratio (circle). Hydro mulching or netting _____ is X is not required on the slopes.
- X 15. Paint color JUNIPER seed mix #1.
16. Woven wire shall be required on all pits (See Standard Stipulation I.E.).

17. No hardwood tree with a diameter of ten inches or more at the base or any Ponderosa pine, Douglas-fir or aspen tree is to be removed or damaged without approval from the Authorized Officer.

18. Due to an active raptor nest no drilling or construction activities shall be conducted between March 1 and June 30. Contact BLM Wildlife Biologist at 325-3581, with any questions.

19. No surface disturbance shall occur until a paleontological resource investigation has been conducted by a BLM paleontologist or a professional paleontologist acceptable to BLM. The results of this investigation will dictate site specific stipulations for avoidance or salvage of any potentially significant paleontological resources.

X 20. SE LAYDOWN

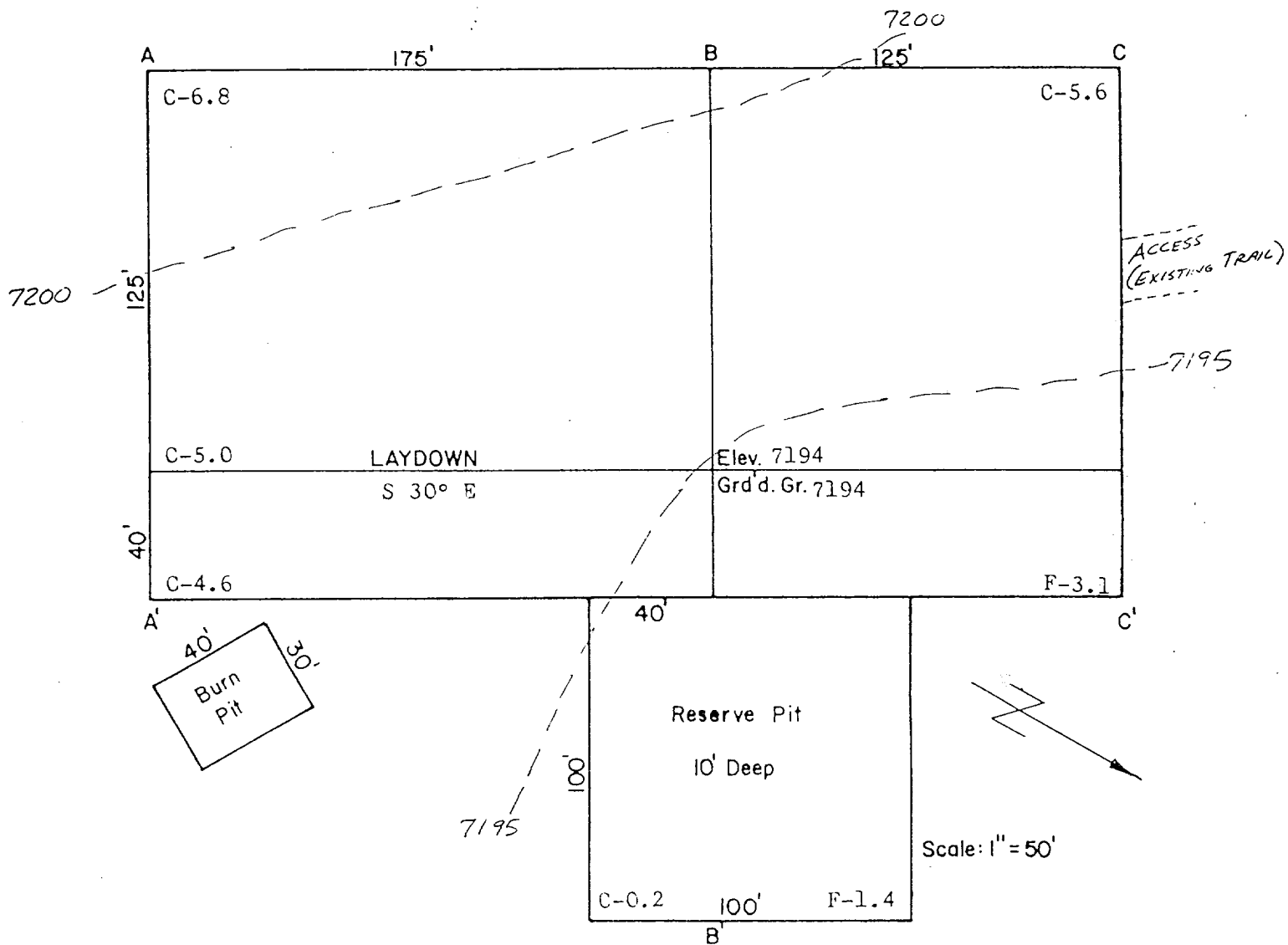
Operator's Representative _____

Bureau of Land Management Representative

Brian A. Lloyd

Note: If the land is privately owned, these requirements may be varied to comply with the operator - landowner agreement.

MERRION OIL & GAS CORP.
#1- GALESTINA CANYON
330' FSL & 2264' FWL
Sec. 27, T8N, R18W
Cibola Co., N.M.



A-A'	Vert.: 1" = 30'	Horiz.: 1" = 100'	C/L
7200			
7190			

B-B'	Vert.: 1" = 30'	Horiz.: 1" = 100'	C/L
7200			
7190			

C-C'	Vert.: 1" = 30'	Horiz.: 1" = 100'	C/L
7200			
7190			

Existing Road

4. Location of Existing and/or Proposed Facilities

A. Within a one mile radius of location, the following existing facilities are owned or controlled by lessee/operator:

- (1). Tank Batteries:
- (2). Production Facilities: None
- (3). Oil Gathering Lines: None
- (4). Gas Gathering Lines: None
- (5). Injection Lines: None
- (6). Disposal Lines: None

B. If production is obtained, new facilities will be as follows:

- (1). All production facilities will be located on the well location.
- (2). All well flow lines will be on the well site.
- (3). Drill pad size will be approximately 250 ft. long and 150 ft. wide.
- (4). No construction materials for battery site and pad will be necessary.
- (5). Any necessary pits will be fenced on three sides during drilling and the fourth side upon completion.
- (6). Rehabilitation whether well is productive or dry, will be made on all unused areas in accordance with BLM or appropriate agency recommendations.

5. Location and Type of Water Source

- A. The source of water will be water well in Section 28.
- B. Water will be transported by truck over existing roadways.
- C. No water well is to be drilled on this lease.

6. Construction Materials

- A. No construction materials are needed for drilling and access roads into the drilling location. The existing surface materials will be sufficient and will be provided by the Dirt Contractor as needed.
- B. No construction materials will be taken off Federal or Indian lands.

- C. No surface materials for construction of access roads are required.
- D. All major access roads presently exist as shown on topographic map.

7. Handling of Waste Materials and Disposal

- A. Drill cuttings will be placed in the reserve pit and covered, when appropriate.
- B. Drilling fluids will be disposed of in the reserve pit.
- C. Any fluids recovered during drilling tests or while making production tests will be collected in a test tank if possible. If a test tank is not available during drilling, fluids will be handled in reserve pit. Any excessive spills of oil, gas, salt waters or other noxious fluids will be cleaned up and removed.
- D. Latrine facilities will be provided for human waste.
- E. Garbage and non-flammable waste and salts and other chemicals produced during drilling or testing will be handled in trash pit. Flammable waste will be disposed of in burn pit if necessary. Drill fluids, water, drilling mud and tailings will be kept in reserve pit. Reserve pit will be fenced on three sides and the fourth side fenced upon removal of rig.
- F. After the rig moves out, location will be cleaned up and no dangerous materials will be left on location. Reserve pit will be fenced on three sides during drilling and after drilling completely fenced until such time as the pit is buried.

8. Ancillary Facilities

- A. No air strip, camp or other facilities will be built during drilling of this well.

9. Well Site Layout

- A. Drill pad layout attached.

The drill pad layout is a diagram of the proposed rig and equipment reserve pit, burn and trash pit, pipe racks and mud tanks. No permanent living facilities are planned. There will be a small trailer on site.

- B. The reserve pits will not be lined. Steel mud tanks may be used during drilling operations.

10. Plans for Restoration

- A. Backfilling, leveling and contouring are planned as soon as all pits have dried. Waste disposal and spoils material will be fenced, buried, or hauled away as soon as practical after drilling and completion work is finished. If production is obtained, the unused area will be restored as soon as possible.

- B. Any banked soil material, if removal required, will be spread over the area. Revegetation will be accomplished by planting seed mix as per surface managing agencies requirements.
- C. Three sides of the reserve pit will be fenced during drilling operations. As soon as practical after drilling the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from becoming entrapped; and the fencing will be maintained until burying and cleanup is accomplished.
- D. The rehabilitation operations will begin as soon as practical after the drilling rig is removed. Cleanup will be done as needed. Planting and revegetation is normally required to be done from July 15 to September 15, unless requested otherwise.

11. Other Information

- A. Soil - Sandy/Loam.

Vegetation - Sagebrush, Juniper, Pinon, and Grasses.

- B. The primary surface use is for grazing. The surface is owned by the Bureau of Land Management.
- C. The closest live water is:
The closest occupied dwellings:
There are no known archaeological, historical, or cultural artifacts that will be disturbed by this drilling.
- D. Restrictions: None. Operator has all rights.
- E. Drilling is planned for on or about October, 1987. Drilling operations should be completed within 16 days.

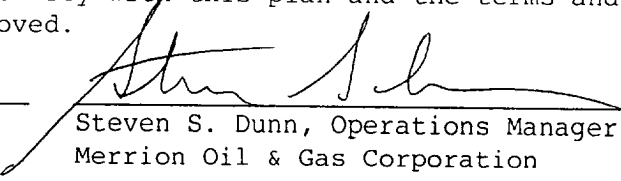
12. Lessee's or Operator's Representative

Steven S. Dunn, Operations Manager
Merrion Oil & Gas Corporation
P. O. Box 840
Farmington, New Mexico 87499
Telephone: (505) 327-9801

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this 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 Merrion Oil & Gas Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

SEP 22, 1987
Date


Steven S. Dunn, Operations Manager
Merrion Oil & Gas Corporation