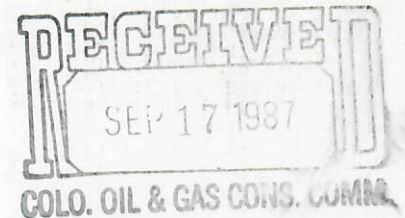




CHEVRON U.S.A. INC.
CHEVRON FEDERAL 1-29
SEC. 29, T9N, R86W
ROUTT COUNTY, COLORADO
MULTIPOINT SURFACE USE PLAN



1. EXISTING ROADS

- A. See Attachment H. We do not plan to change, alter or improve upon any existing state or county roads.
- B. From Steamboat Springs, Colorado go northwest on Highway 129 approximately 10 to 11½ mi. respectively to one of two existing county roads. Turn west for approximately 4.25 miles to a junction. Continue in a northwesterly direction to end of county road, beginning of private, approximately 4.5 miles. Go north approximately 2 miles to Routt National Forest and proposed access road.

2. PLANNED ACCESS ROAD

From the proposed access road entrance the proposed access road is to go approximately 4.5 miles north and west. Existing and planned access roads in the Unit will be maintained in accordance with Routt County and Forest Service requirements. See Construction Specification.

3. LOCATION OF EXISTING WELLS

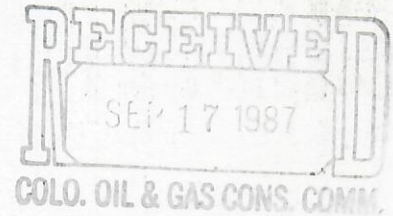
There are no existing wells within 1 mile of the proposed location.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. See Attachment G.
- B. Disturbed areas no longer needed for operations will be graded back to as near original state as possible. Drainage channels will be returned to original state and the areas will be reseeded as prescribed by the Forest Service.
- C. A blooie pit 8' x 10' x 5' deep will be constructed 150' diagonally from the center hole. A line will be placed on the surface from the center hole to the burn pit. The pit will be fenced on four sides to protect livestock.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water supplied to the location will be hauled by truck on existing roads in the area on adjacent private land.



6. SOURCE OF CONSTRUCTION MATERIALS

- A. All gravel, cement, etc., needed on the access road and location will come commercially from the Steamboat Springs, Colorado area. Access road needed is shown on Attachment H.

7. METHODS FOR HANDLING WASTE DISPOSAL

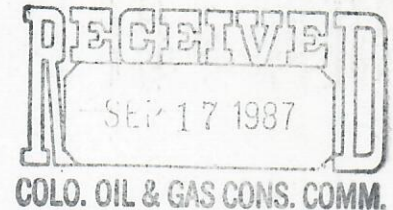
- A. Cuttings will be settled out in the reserve pit. The reserve pit will be lined, if required; it will be fenced with a wire mesh fence, topped with at least one strand of barbed wire.
- B. Drilling fluids will be retained in reserve tanks utilizing maximum recirculation during drilling operations. Following drilling, the liquid waste will be evaporated and the remainder worked into the deep subsoil of the pit, and the pit filled in and returned to natural grade.
- C. In the event fluids are produced, any oil will be retained until sold in tankage and any water produced will be retained until its quality is determined. The quality and quantity of water produced will then determine the necessary disposal procedure.
- D. Sewage will be disposed of in a 1,000 gallon fiber glass insulated holding tank, which is to be placed in the vicinity of the trailers on the well location. Arrangements will be made for the sewage to be transported from the wellsite to the City of Steamboat Springs for disposal in the city disposal system. The sewage will be hauled by an authorized hauling firm.
- E. Trash will be contained in a portable metal container and hauled periodically to an approved disposal dump.
- F. After the rig has moved from the wellsite, all waste material will be removed to an approved disposal dump.

8. ANCILLARY FACILITIES

Because of the accessibility to good roads and relatively close housing, we anticipate no need for ancillary facilities with the exception of two trailers to be located on the drilling location.

9. WELLSITE LAYOUT

- A. All available topsoil will be removed from the location and stockpiled. Location of mud tanks, reserve, burn and trash pits, pipe racks, living facilities and soil stockpiles will be located as shown on Attachment C.



- B. Pits will not be lined.
- C. Access to the well pad will be as indicated in Attachment G.

10. PLANS FOR RESTORATION OF SURFACE

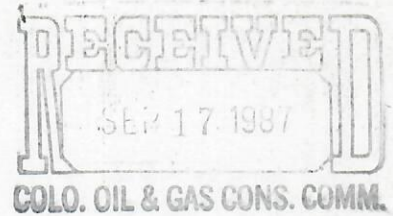
- A. All surface areas not required for producing operations will be graded to as near original condition as possible and contoured to maintain possible erosion to a minimum. Any rock encountered in excavation will be disposed of beneath backfill to return surface to its present appearance and provide soil for seed growth.
- B. The topsoil will be evenly distributed over the disturbed areas. Reseeding will be performed as directed by the Forest Service.
- C. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.
- D. Any oil accumulation on the pit will be removed, burned or overhead flagged as dictated by then existing conditions.
- E. The well will be completed during 1987. Rehabilitation will commence following completion of the well. If the wellsite is to be abandoned, all disturbed areas will be recontoured to the natural contour as is possible.

11. SURFACE OWNERSHIP

- A. The wellsite and access road will be constructed within Forest Service boundaries. The operator shall contact the BLM office at (303) 824-8261 and the Forest Service office at (303) 879-1870 between 24 and 48 hours prior to construction activities.

12. OTHER INFORMATION

- A. The well is located on the narrow crest of a steep sided ridge. Vegetation consists of grasses, ferns, aspen, pine and spruce, and other mountain vegetation. The soil is fine loamy sand.
- B. Surface use activities other than the oil well facilities consist of livestock grazing, hunting and camping.
- C. There are no water bodies or occupied dwellings near the wellsites. Archaeological, historical and cultural sites may be determined during the field inspection. An archaeological survey has been conducted on the disturbed areas and a copy of this report sent to the BLM and Forest Service.



13. COMPANY REPRESENTATIVE

Mr. B. L. Haynes
P.O. Box 599
Denver, CO 80201
(303) 930-3403

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 Chevron U.S.A. Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9-15-87

Date

A handwritten signature in dark ink, appearing to read "B. L. Haynes".

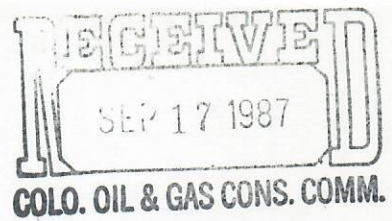
B. L. Haynes
Drilling Manager

JLW:mm

Enclosure: Construction Specification (includes Attachments A through F)
Attachment G
Attachment H



DRILLING PROGRAM



Field Sand Mountain Well Chev. Fed. 1-29 Exp/~~Dev~~ Expl.

Location NW NW Sec. 29 T9N R86W Routt County, Colorado

Drill X Deepen _____ Elevations: GL 8800 EST KB 8820 EST

Directional/Straight Hole: Proposed Measured TD 7700' TVD 7700'
KOP N/A Build N/A Max. Angle N/A Avg. Angle N/A
Target Location N/A Bearing from Surface N/A

1. Conductor Hole

Hole Size 26 Proposed Depth 100' Casing Size, Weight & Grade 16", 65#, H 40

2. Surface Hole

Hole Size 12 1/2 Proposed Depth 1000' BOPE Chevron Diverter
Mud Program: Type MW FV WL Other
GEL-Water ± 8.6 ppg ± 30 sec N/C

Potential Hazards: Lost Circulation

Electric Logging Program: None

Core/DST Program: None

Casing Program:

Size	Grade	Weight	Thread	Section Length
<u>9-5/8</u>	<u>N-80</u>	<u>47</u>	<u>LT&C</u>	<u>1000'</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Cement Program: Lead Slurry
Tail Slurry Class 'H' to Surface - Tailored for Depth/Temperature
WOC Time 12 hrs. Casing Test 1500 psi Shoe test MWE 9.0 P

3. Intermediate Hole

Hole Size N/A Proposed Depth _____ BOPE _____
Mud Program: Type MW FV WL Other

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Potential Hazards: _____

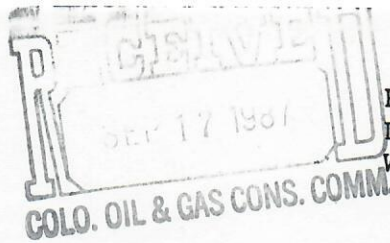
Electric Logging Program: _____

Core/DST Program: _____

Casing Program:

Size	Grade	Weight	Thread	Section Length
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Cement Program: Lead Slurry
Tail Slurry
WOC Time _____ hrs. Casing Test _____ psi Shoe test MWE _____ P



4. Oil String/Liner Hole

Hole Size 8-3/4 Proposed Depth 7700 BOPE Chevron Class III - 3000 W.P.
Mud Program: Type MW FV WL Other
GEL-Water-Chem. ± 8.8 ± 40 ± 10 cc

Potential Hazards: Lost Circulation
Electric Logging Program: See attached Geologic Program
Core/DST Program: See attached Geologic Program

Casing Program:	Contingent on log, core, and DST analysis			
Size	Grade	Weight	Thread	Section Length
<u>7</u>	<u>K-55</u>	<u>26</u>	<u>LT&C</u>	<u>7700'</u>

Cement Program: Lead Slurry Class 'H' w/16% GEL (± 12.6 ppg) Tailored for depth & temp.
Tail Slurry Class 'H' (±16.4 ppg) Tailored for depth and temperature
WOC Time 12 hrs. Casing Test 2000 psi

5. Auxiliary Equipment

Mud Logging Unit @	Spud	Rotating Head @	-
Geolograph @	Spud	Degasser @	<u>1000'</u>
Visulogger @	-	Desilter @	<u>Spud</u>
Adj. Choke @	<u>1000'</u>	Centrifuge @	<u>Spud</u>
PVT & Flowmeter @	Spud	Mud Cleaner @	<u>Spud</u>
Trip Tank @	Spud	H ₂ S Safety Equip. @	-

Other: Upper and lower Kelly Cock valves, Inside BOP, Full opening Drill pipe safety valve @ Spud

6. Drill String Design

Surface Hole:
BHA 12½ Bit, 1-9" DC, Stab, 5-9" DC, 6-6 3/4" DC's.
Drill Pipe 4½ designed for 100,000 lb overpull per API RP7G

Intermediate Hole:
BHA -
Drill Pipe -

Oil String/Liner Hole:
BHA 8-3/4 Bit, 2-6 3/4 DC, Stab., 1-6 3/4 DC, Stab., 15-6 3/4 DC
Drill Pipe 4½" designed for 100,000 lb overpull per API RP7G

7. Other

Inspect BHA after 200 rotating hours.
In "straight" holes run inclination surveys every 300-500 feet.
Gyro Surveys N/A
Check drilling breaks for flow below 1000 feet.
Fill drill pipe every 20 stds when running float.

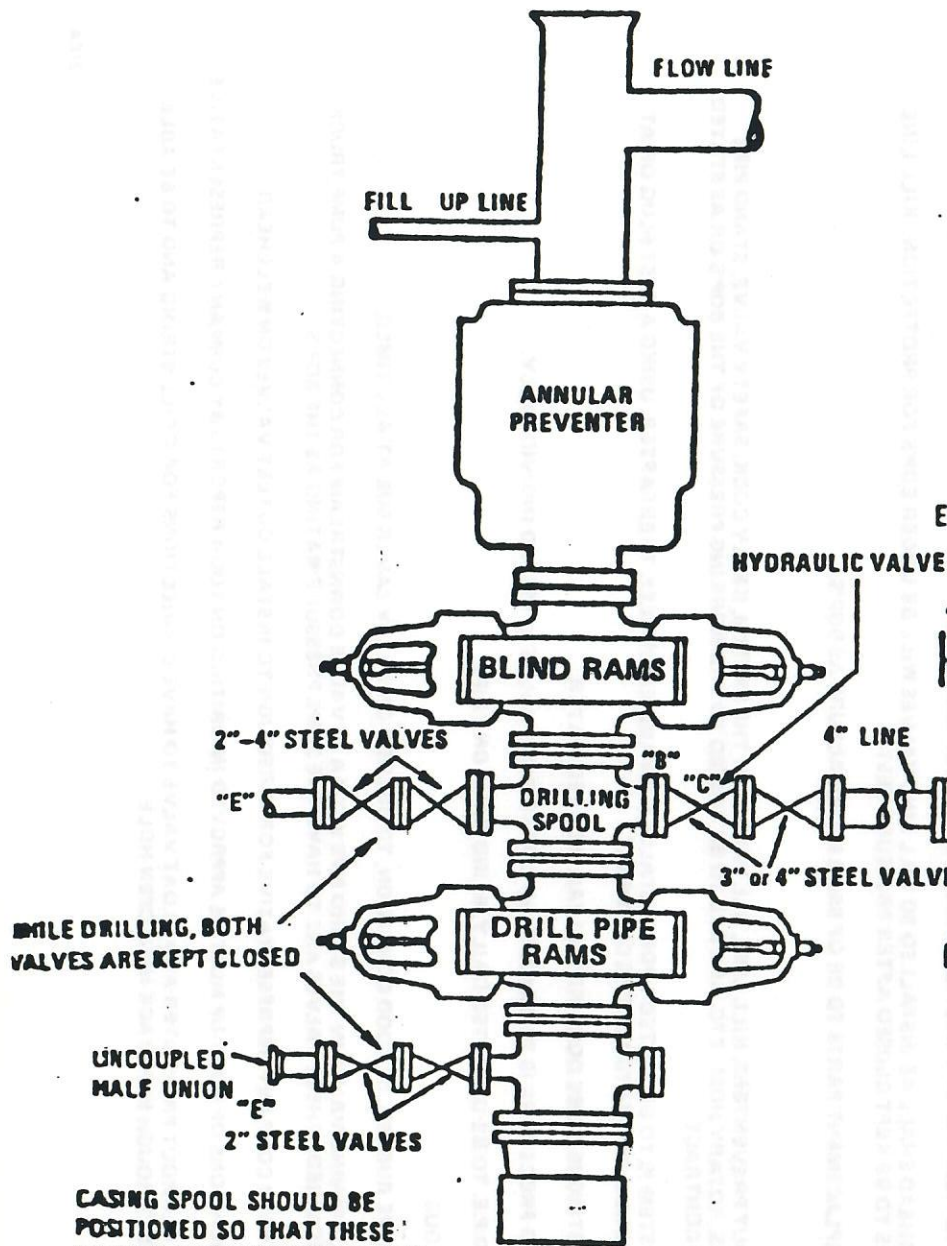
8. General Remarks

Attached

9. Geologic Program

Attached

Prepared By MaHara Date 8/28/87 Drilling Superintendent L Lee Date 8/28



WHILE DRILLING, BOTH VALVES ARE KEPT CLOSED

UNCOUPLED HALF UNION

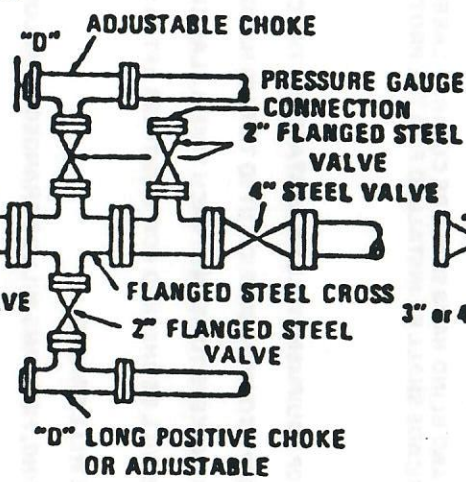
2" STEEL VALVES

CASING SPOOL SHOULD BE POSITIONED SO THAT THESE VALVES ARE DIRECTLY UNDER THE BARREL OF THE RAM PREVENTER.

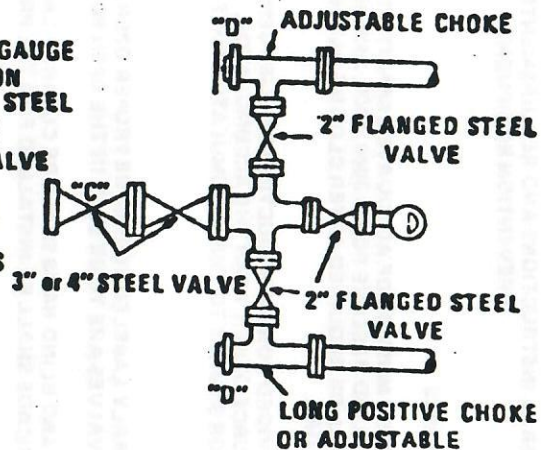
**FIGURE 4
THREE PREVENTER HOOKUP
CLASS III**

(PRESSURE RATING 3-5000 PSI AS REQUIRED)

EMERGENCY FLOW HOOKUP



ALTERNATE CHOKE MANIFOLD

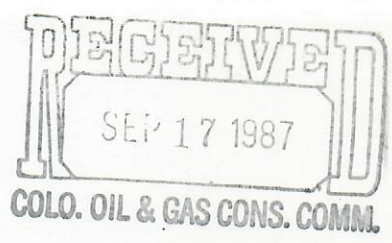


AN EXTRA SET OF DRILL PIPE RAMS AND BONNET SEALS WILL BE ON LOCATION AT ALL TIMES.

Chevron U.S.A. Inc.
ROCKY MTN. PRODUCTION DIVISION

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 SEP 17 1987
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LE 81-7511
Revision 4 (1982)



GEOLOGIC PROGRAM

Field/Area Sand Mountain Expl/Dev Exploration

Well Name Chevron U.S.A. #1- 9 Federal

Location: Sec 29 TWP 29N Range 86W
 Co Routt State Colorado
 Surface _____
 Bottom Hole Same

Elevation: GL estimated _____ Surveyed _____
 KB estimated _____ Surveyed _____

Total Depth 7700' Fm at TD PreCambrian

Objectives: Primary Entrada
 Secondary Dakota Ss Shinarump Ss Niobrara Shale
Permo/Penn Sands

Coring:	Formation	Estimated Depth	Amount
Interval/on show	Dakota	6235'	60'
Interval/on show	Entrada	6820'	60'
Interval/on show	_____	_____	_____
Interval/on show	_____	_____	_____
Interval/on show	_____	_____	_____

Drill Stem Testing One DST in the Dakota and one in the Entrada if warranted.
Additional DST's will be taken at the discretion of the
Division Exploration Manager.

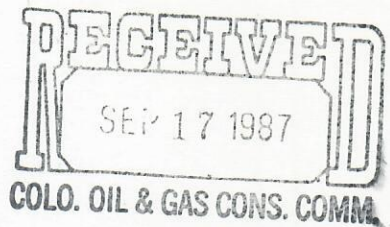
Mud Logging 2-man mud logging unit from surface to T.D.

Electric logging:	Surface	Intermediate	Total Depth
1) DIL-SP	_____	_____	_____
2) DIL-MSFL-SP +GR*	_____	_____	X
3) BHC w/GR, Cal. +	_____	_____	X
4) LDT-CNL w/GR, Cal.	_____	_____	X
5) FDC-CNL w/GR, Cal.	_____	_____	_____
6) Dipmeter 4-arm HDT	_____	_____	X
7) Velocity survey VSP	_____	_____	X
8) RFT	_____	_____	_____
9)	_____	_____	_____
10)	_____	_____	_____
11)	_____	_____	_____

All runs from TD to either base of surface casing or overlap with previous log run unless otherwise noted.

*If salty drilling mud is used, the DLL-MSFL should be run
 +Formation evaluation recommends running a full wave-form array sonic tool

CONFIDENTIAL



GEOLOGIC PROGRAM (Continued)

Tops:

Formation	Estimated Depth, datum	Sample Depth, datum	Log Depth, datum
Mesaverde	Surface		
Mancos Shale	2900'		
Niobrara Shale	3965'		
Frontier Ss	5775'		
Dakota Ss	6235'		
Morrison Sh & Ss	6385'		
Entrada Ss	6820'		
Chinle Silt & Sh	6890'		
Shinarump Ss	7065'		
Permo/Penn Ss	7590'		
PreЄ Gneiss	7630'		
TD	7700'		

Correlation Wells:

Correlative Zones with Subject Well

	Fm	Interval	
1) <u>DEA Johnson #3</u>	<u>Dakota</u>	<u>1725-1874</u>	Primary objective zones to be cored.
<u>Buck Mountain</u>	<u>Entrada</u>	<u>2308-2380</u>	
<u>Sec. 23, T9N R86W</u>	<u>Dakota</u>	<u>1725-1874</u>	Zone to be DST.
<u>Routt County, Colorado</u>	<u>Entrada</u>	<u>2308-2380</u>	
2) <u>Buckhorn Pet. #4-24</u>	<u>Dakota</u>	<u>N.P.</u>	Primary objective zones to be cored.
<u>Calif. Fed.</u>	<u>Entrada</u>	<u>N.P.</u>	
<u>Sec. 24, T9N R87W</u>	<u>Dakota</u>	<u>N.P.</u>	Zones to be DST.
<u>Routt County, Colorado</u>	<u>Entrada</u>	<u>N.P.</u>	

DIVISION OF INTEREST:

Working Interest Partners:

<u>Chevron</u>	<u>62.5 %</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>
<u>Nippon</u>	<u>37.5 %</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>	<u>_____</u>

Others Receiving Data:

REMARKS:

Prepared by T. L. Kingery

Date 7/2/87

Reviewed by _____

Date _____

Formation Evaluation Analyst

Approved _____

Date _____