

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

CONFIDENTIAL

Meridian Oil Inc.

HUERFANO UNIT

(SF-078557)

218

D

29

26-N

10-W

SAN JUAN

800

NORTH

800

WEST

6498

Gallup

Gallegos

320.00

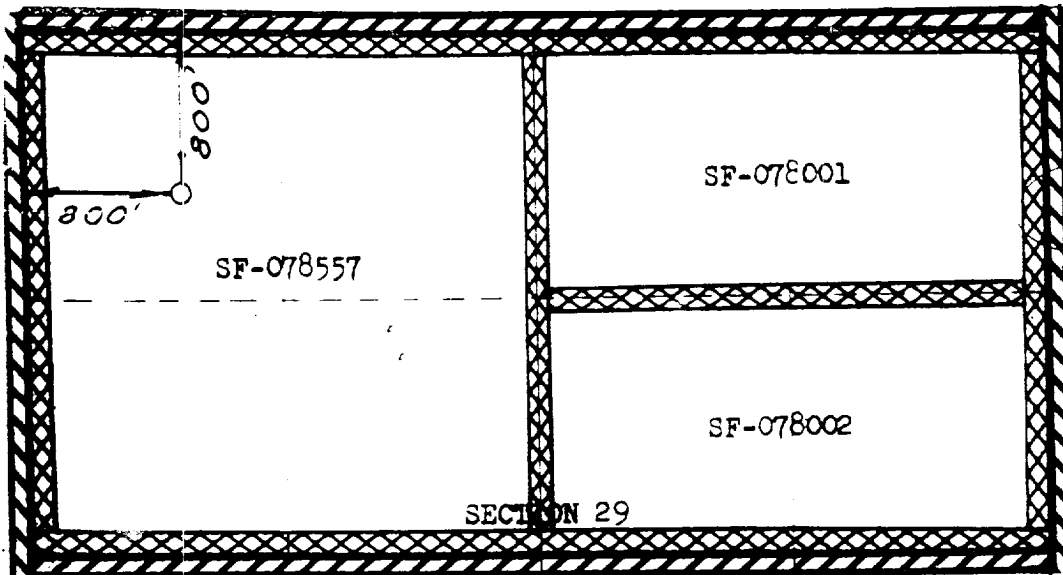
- Outline the acreage dedicated to the same well.
- If more than one lease is indicated to the well, indicate each and identify the interests, including interest and royalty.
- If more than one lease of different ownership is indicated to the well, indicate the interests, including interest and royalty, as stated by communication, unitization, or otherwise.

☒ Yes ☐ No If answer is "No" type in "No" and date.

Unitization

If answer is "No" list the owners and their respective interests in the well, and state the date of unitization, if any, and the date of forced-pooling, or otherwise, or until a non-standard unit is formed, and the date of the Commission's decision.

No allowable well will be assigned to the well until all interests in the well are unitized, or until a non-standard unit is formed, and the date of the Commission's decision.



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

Peggy Bradford

Peggy Bradford

Regulatory Affairs

Meridian Oil Inc.

5-5-92

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OIL CON. DIV.
DIST.

JANUARY 29, 1971

David C. Lisen

MERIDIAN OIL - OPERATION PLAN
HUERFANO #218 HORIZONTAL RE-ENTRY

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GENERAL INFORMATION

Well Name: Huerfano Unit #218
Location: 800' FNL 800' FWL, Sec. 29, T26N-R10W
County, State: San Juan County, NM
Field: Basin Dakota
Formation: Gallup-Niobrara
Elevation: 6498' GL

Completed: 3-09-71
Initial Potential: AOF = 4353 MCF/D
Q = 3587 MCF/D
SIP = 1489 psi
Total Depth: 6551'
PBTD: 6540'

CASING RECORD:

Hole Size	Casing Size	WT.	Grade	Thrds	Set @	TOC
12 1/4"	8 5/8"	24.0#	J-55	STC 8rd	215'	circ - surface
7 7/8"	4 1/2"	10.5#	K-55	STC 8rd	6550'	
				Stage Tool @	4541'	circ
				Stage Tool @	2114'	**

**Note: Stage tool did not open while circulating third stage. Casing was perforated at 2140' and cement was squeezed to surface.

TUBING RECORD:

- 2 3/8" - 4.7#, J-55 (6490') - set @ 6500'
- Seating Nipple @ 6499'

FORMATION TOPS

Kirtland	Surface	Gallup	5395'
Pictured Cliffs	1835'	Greenhorn	6247'
Mesa Verde	3625'	Graneros	6304'
Point Lookout	4315'	Dakota	6403'

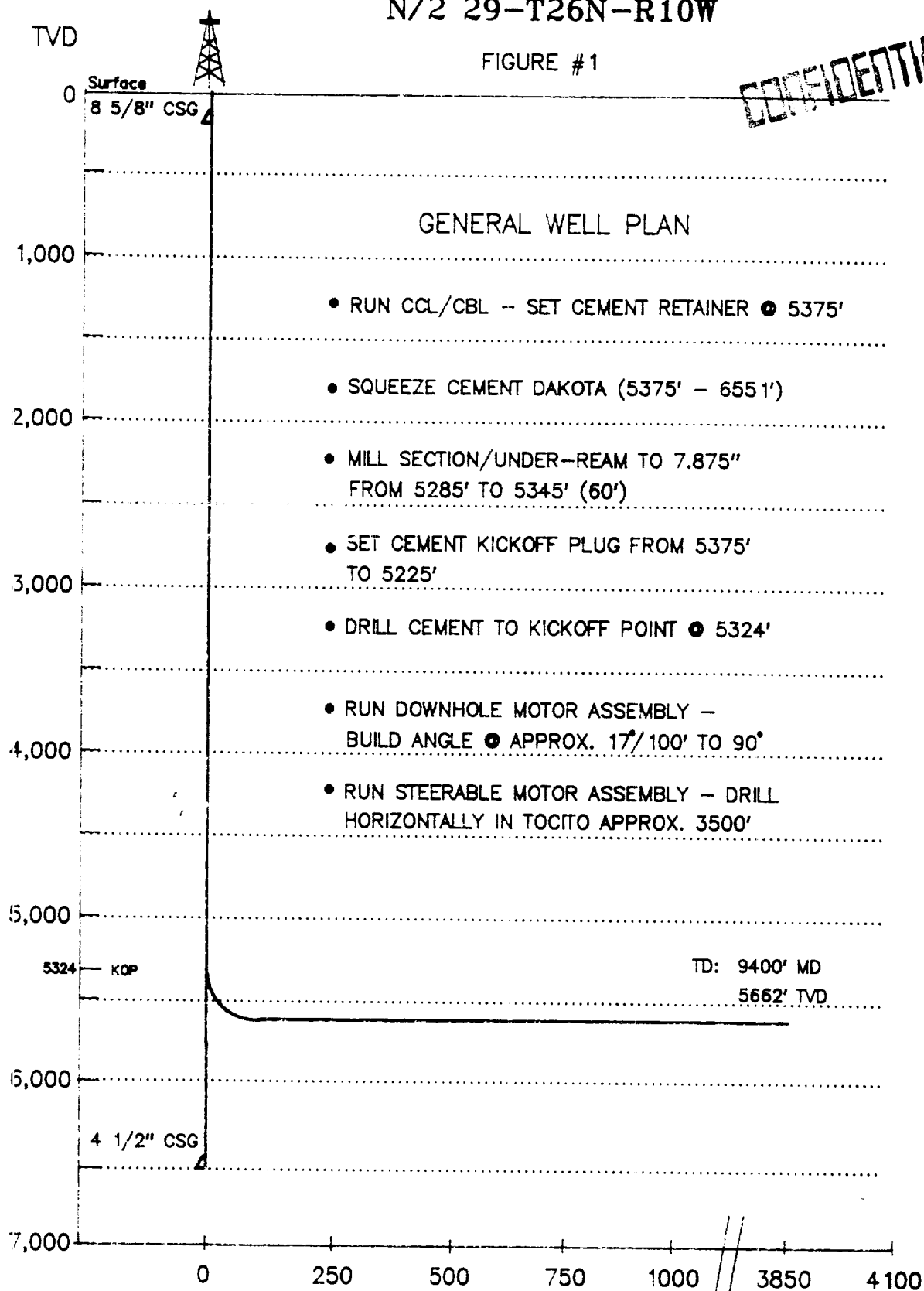
LOGGING RECORD

Dual Induction
Density Neutron

HUERFANO UNIT #218 RECOMPLETION N/2 29-T26N-R10W

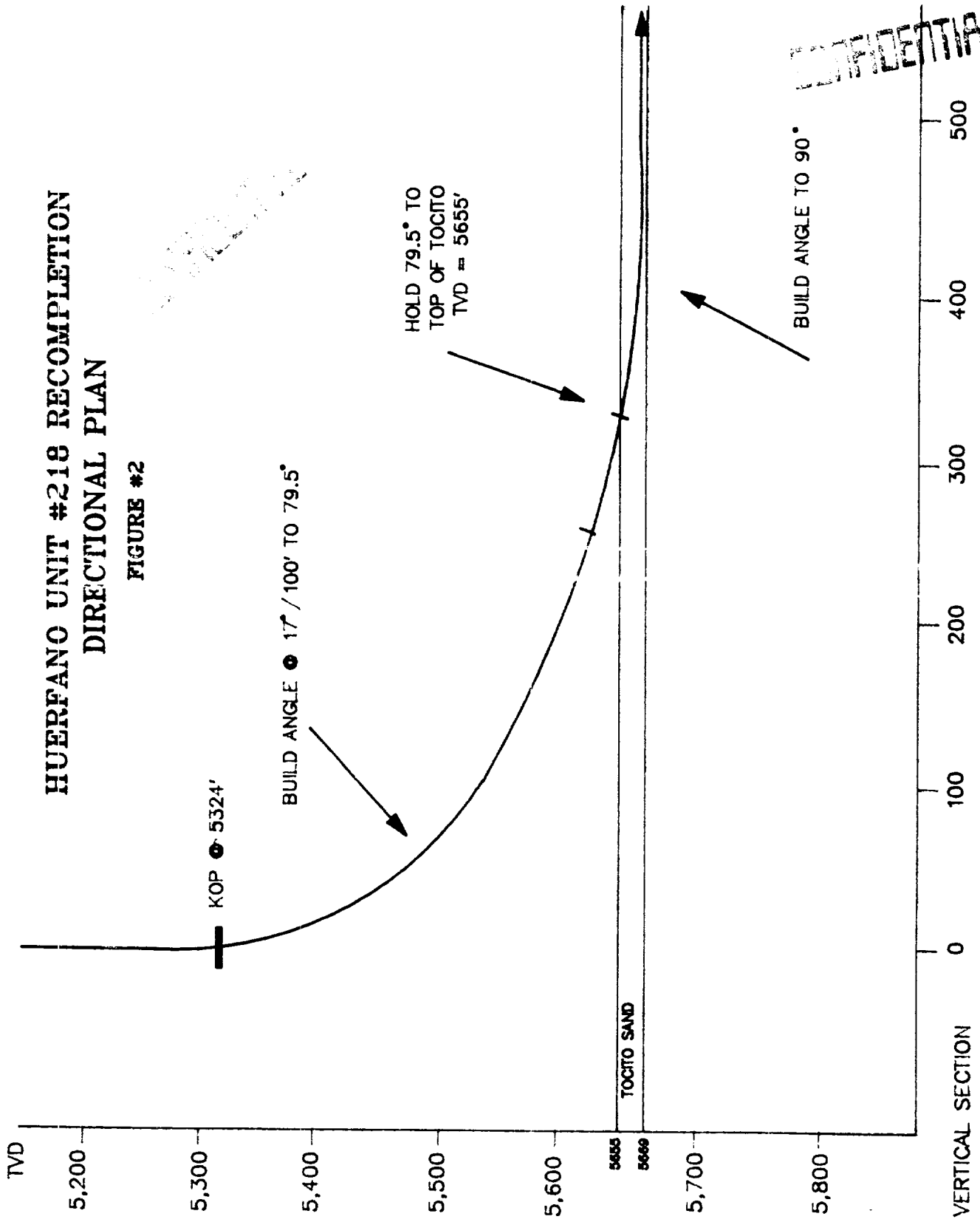
FIGURE #1

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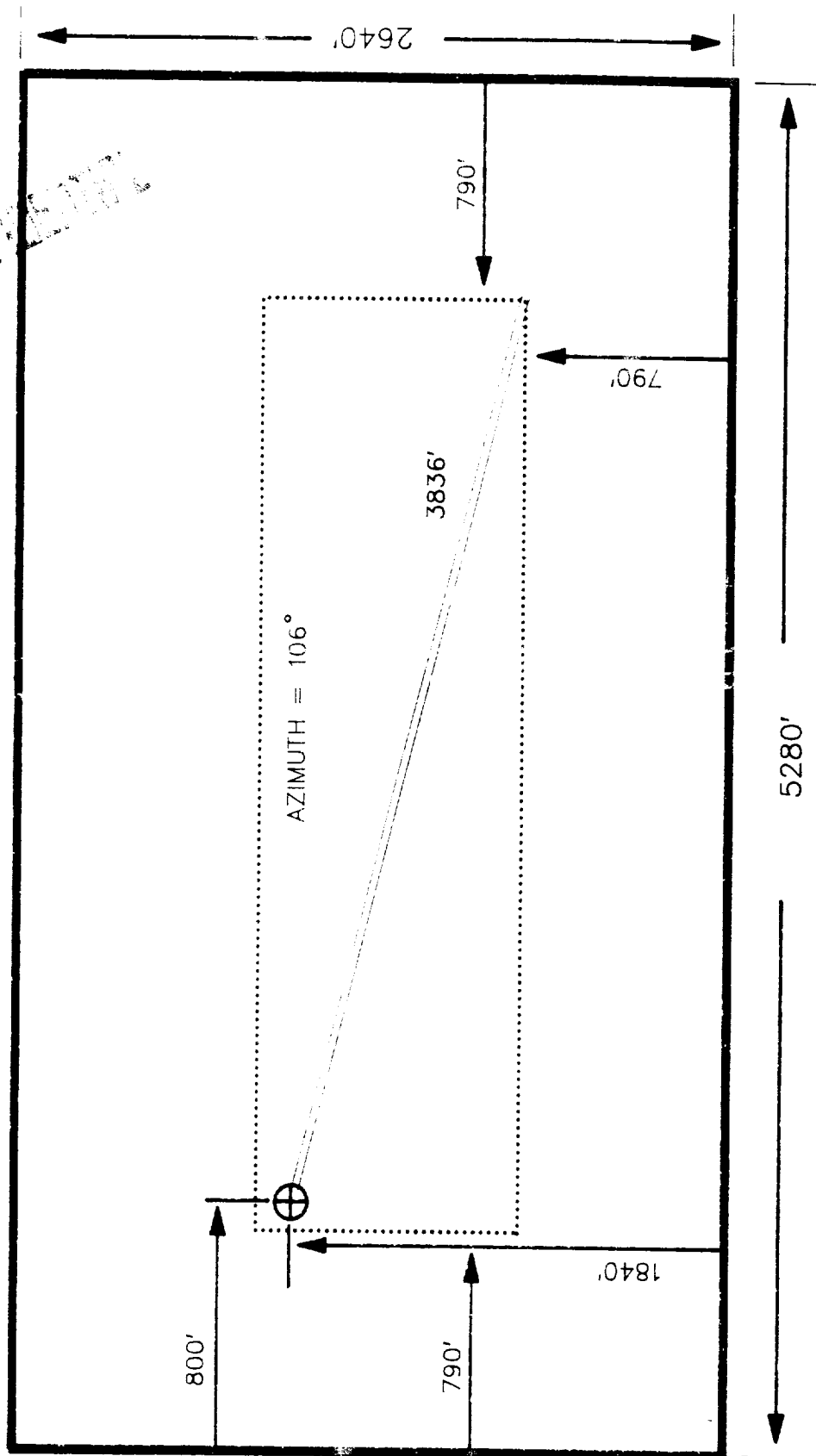
HUERFANO UNIT #218 RECOMPLETION DIRECTIONAL PLAN

FIGURE #2



HUERFANO UNIT #218 RECOMPLETION
N/2 29-T26N-R10W

FIGURE #3



MERIDIAN OIL - OPERATION PLAN
HUERFANO #218 HORIZONTAL RE-ENTRY

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PRELIMINARY OPERATIONS

- 1) Move completion rig on location - Rig up.
- 2) Pull top section of wellhead - Rig up 6" (3M psi) BOP's. Pressure test BOP stack to 200 psi for 10 minutes and 2500 psi for 30 minutes. Maximum allowable pressure = 3000 psi. (See attached BOP / choke manifold diagrams)
- 3) Set cement retainer at 5375'.
- 4) TIH with 2 3/8" tubing. Establish circulation (Freshwater) ~~at~~ Total Depth.
- 5) Sting into cement retainer and spot cement plug (5400' -6551'):
Slurry: Class 'B' neat
Volume: 127 cu ft
Sacks: 108 sacks
Water: 5.20 gal / sack
Weight: 15.6 ppg
- 6) ~~TOOH to top of plug at 5400' +/- 10'.~~ Reverse circulate out. Wait on cement 4 hours.
- 7) Load hole with gelled water - Visc = 60 sec/qt, YP = 40. TOOH -

SECTION MILLING OPERATIONS

The section milling operations will be turn-keyed.

- 1) Mill section from 5285' to 5345' (60').
- 2) Under-Ream section to original hole size (7.875").
- 3) Set cement kick-off plug on top of CIBP @ 5375' to 5225'. Pull above plug to 5225' and reverse circulate.

Cement Properties

Slurry: Class 'G' with 0.5% D65 (Turbulence inducer)

Slurry (# sacks):	56.0
Slurry Volume (cuft):	56.0
Excess Slurry (%):	100
Slurry Weight (ppg):	17.0
Slurry Yield (cuft / sack):	0.99
Water Required (gal / sack):	4.25
Setting Time @ 120 degrees F (hours):	2.0

- 4) Drill out with packed assembly - Drill 3 7/8" hole to kick-off point at 5325'. Unload hole with air/mist system.

MERIDIAN OIL - OPERATION PLAN
HUERFANO #218 HORIZONTAL RE-ENTRY

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ANGLE BUILD SECTION

Angle will be built at approx. 17 degrees / 100' to 80 degrees. As planned the well will reach 80 degrees approx. 15' above the Tocito sand.

- 1) Trip in hole with Angle Build assembly. At KOP - Run in hole with the steering tool on wireline (provided by the directional drilling company) - Latch tool into motor assembly and orient motor to kickoff azimuth of 106 degrees.
- 2) Establish air/mist circulation.
 - * Through the Angle build section - Surveys should be taken every 15' - 30' or as necessary to maintain tight control of inclination and minimize excessive doglegs.
- 3) Continue to build angle to 79.5 - 80.0 degrees (TVD should be approx. 5650').

ANGLE HOLD SECTION

Once angle has been built to approx. 80 degrees pick up Angle Hold assembly and drill approximately 1000' to 3600' of lateral hole.

- 1) Trip in hole with Angle Hold assembly - establish air / mist circulation.
- 2) Run in hole with steering tool - seat tool and orient motor to drill. Drill ahead to Total Depth - surveying as required to stay in zone.

COMPLETION OPERATIONS

The well will be completed by running 2 3/8" perforated tubing in the Tocito sand.

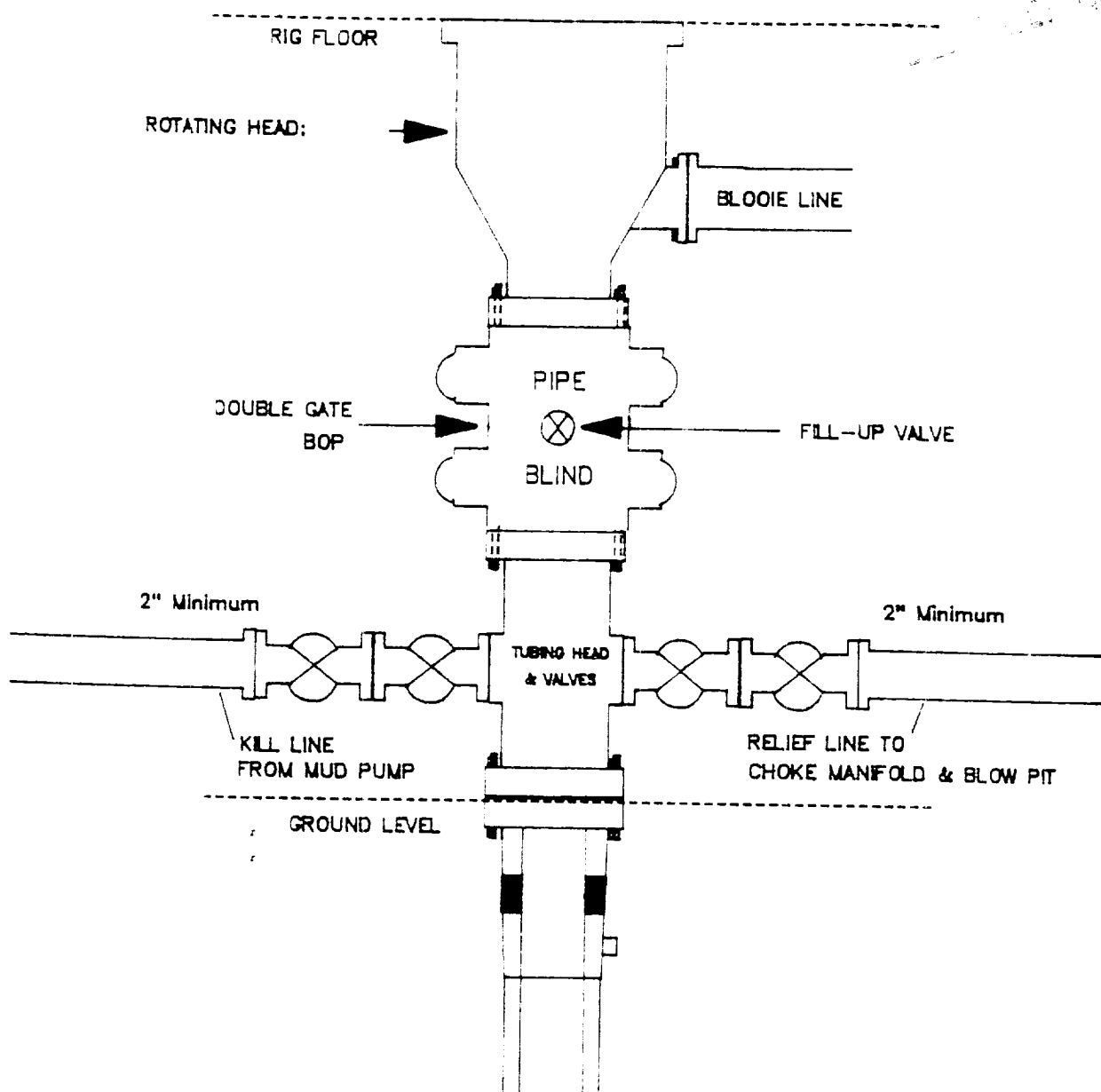
- 1) KILL WELL with KCL water (Fluid volume based on measured pressures on surface).
- 2) Run 600' - 1000' of perforated 2 3/8" tubing to total depth. Blank tubing to surface 2 3/8").
- 3) Unload hole with air/mist.
- 4) Rig down - Move off.

MERIDIAN OIL - OPERATION PLAN
HUERFANO #218 HORIZONTAL RE-ENTRY

OTHER CONSIDERATIONS

- The North half (N/2) of Section 29 will be dedicated as a standard gas spacing unit and a non-standard oil spacing unit for the project.
- The wellbore will remain in the standard drilling window (no closer than 790' from the outer boundary of the N/2 of section 29).
- No abnormal pressure or temperature zones are anticipated.
- No hazardous zones are anticipated (H2S, etc.).
- Cementing vendor will provide the BLM a chronological log including the pump rate and pressure, and the slurry density and volume for all cement work performed.

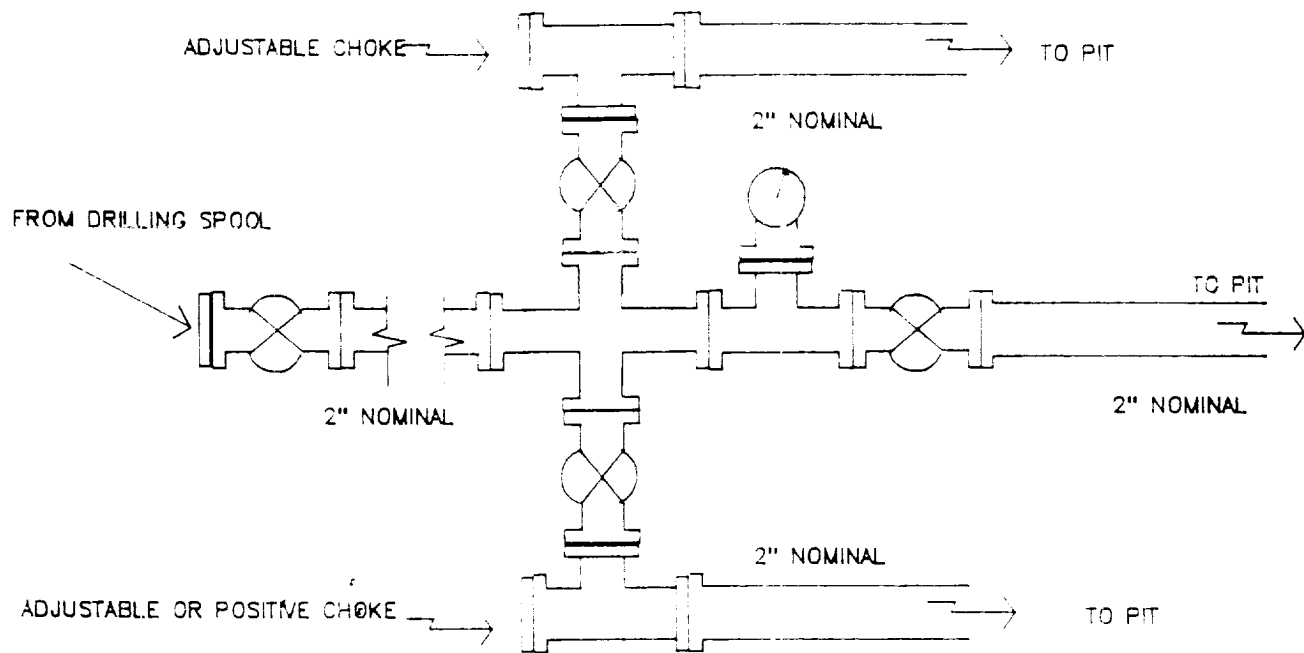
MERIDIAN OIL INC. Completion Rig BOP Configuration



Minimum BOP installation for Completion Operations. 7 1/16" Bore (6" Nominal), 3000psi working pressure double gate BOP to be equipped with blind and pipe rams.

MERIDIAN OIL INC.

Choke Manifold Configuration



Minimum choke manifold installation for a typical well from surface to Total Depth. 2", 2000psi working pressure equipment with two chokes.