

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS _____ WELL LOG _____ ELECTRIC LOGS _____ FILE WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/abd. _____

* Amended-Lease type, qtr/qtr, footages. (6-9-88)

Removed from Corp status. expired per OJA

DATE FILED ~~4-1-88~~ 6-02-88

LAND: FEE & PATENTED STATE LEASE NO. _____ PUBLIC LEASE NO. U-23520 INDIAN _____

DRILLING APPROVED: ~~4-11-88~~ 6-09-88

SPUDDED IN: _____

COMPLETED: 11-13-89 OJA PUT TO PRODUCING: _____

INITIAL PRODUCTION: _____

GRAVITY A.P.I. _____

GOR: _____

PRODUCING ZONES: _____

TOTAL DEPTH: _____

WELL ELEVATION: _____

DATE ABANDONED: OJA per BLM 11-13-89

FIELD: WILDCAT

UNIT: CABALLO UNIT

COUNTY: SAN JUAN

WELL NO. CABALLO UNIT 1-8 API # 43-037-31401

LOCATION ~~2510' FSL~~ FT. FROM (N) (S) LINE. ~~240' FEL~~ FT. FROM (E) (W) LINE. ~~NE SE~~ 1/4 - 1/4 SEC. 8

2030' FNL 30' FEL SE NE

| TWP. | RGE. | SEC. | OPERATOR | TWP. | RGE. | SEC. | OPERATOR |
|------|------|------|----------|------|------|------|--------------------------|
| | | | | 36S | 23E | 8 | QUINTANA PETROLEUM CORP. |

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

5. Lease Designation and Serial No.
Private Minerals

6. If Indian, Allottee or Tribe Name
N/A

7. Unit Agreement Name
Caballo Unit

8. Farm or Lease Name
Caballo Federal Unit

9. Well No.
#1-8

10. Field and Pool, or Wildcat
Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 8, T36S - R23E

12. County or Parrish 13. State

San Juan Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL [X] DEEPEN [] PLUG BACK []

b. Type of Well

Oil Well [X] Gas Well [] Other [] Single Zone [X] Multiple Zone []

2. Name of Operator 303/6221 APR - 1 1988 1050-17th St., Suite 400
Quintana Petroleum Corp. Denver, CO 80265

3. Address of Operator 303/322-7878 DIVISION OF P.O. Box 44065
Permitco Inc. - Agent OIL GAS & MINING Denver, CO 80201-4065

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 2510' FSL and 240' FEL

At proposed prod. zone

NE SE Sec. 8

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

25 miles southeast of Monticello, Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

240'

16. No. of acres in lease

200

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.

none

19. Proposed depth

6860'

20. Rotary or cable tools

Rotary

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

6399' GR

22. Approx. date work will start*

Immediately upon approval of this application.

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: Size of Hole, Size of Casing, Weight per Foot, Setting Depth, Quantity of Cement. Includes rows for 12-1/4" and 8-3/4" hole sizes.

Quintana Petroleum Corp. proposes to drill a well to 6860' to test the Ismay and Desert Creek formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive 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 [Signature] Title Consultant for Quintana Petroleum Corp. Date 3/28/88

(This space for Federal or State office use)

Permit No. Approval Date APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

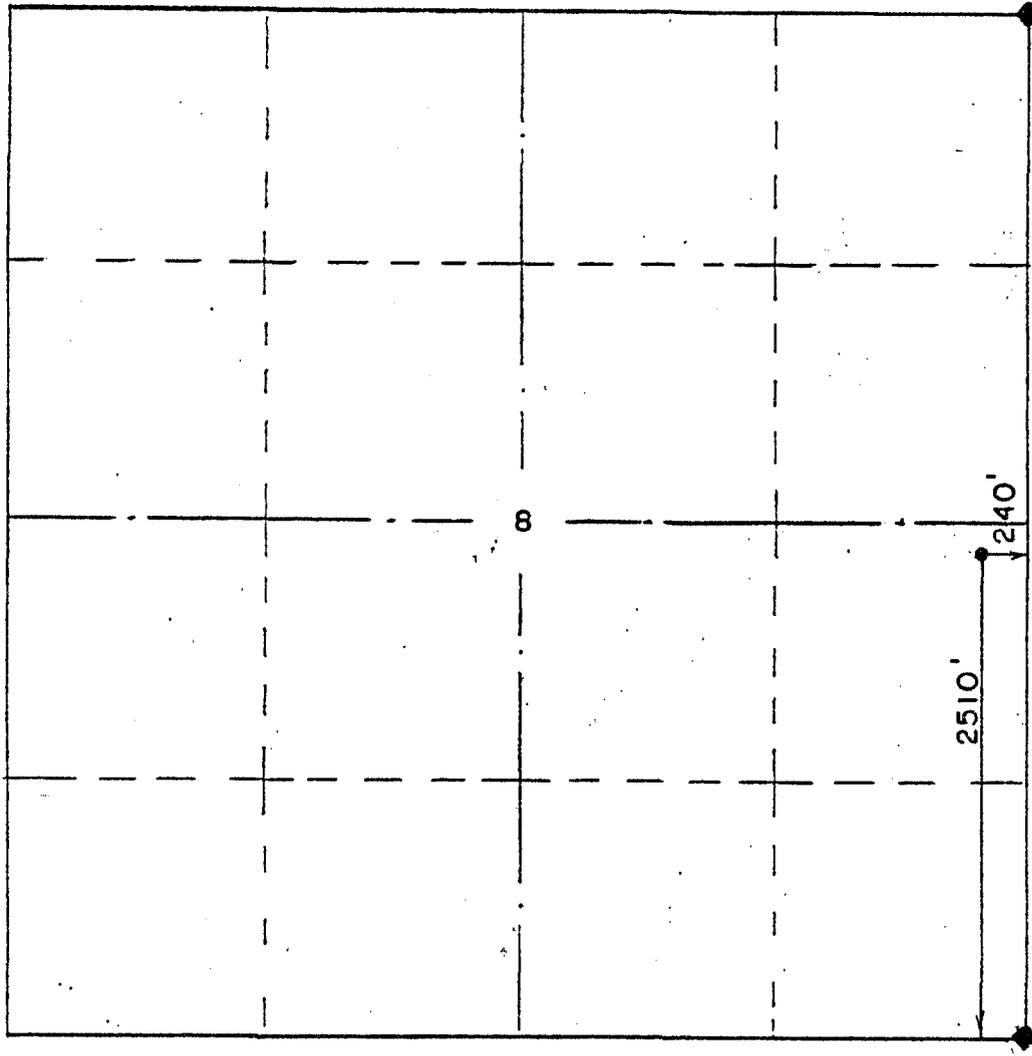
Approved by Title DATE 4-11-88 BY: [Signature]

Conditions of approval, if any:

*See Instructions On Reverse Side

WELL SPACING: RGS-2-3

WELL LOCATION AND ACREAGE DEDICATION PLAT



1"=1000'
 ◆ brass cap

9
 16

WELL LOCATION DESCRIPTION:
 Quintana Petroleum, Caballo Federal 1-8
 2510' FSL & 240' FEL
 Section 8, T.36 S., R.23 E., SLM
 San Juan County, Utah
 6399' grd. elevation
 References: North 125', 6405' grd.
 East 160', 6406' grd.

The above plat is true and correct to my knowledge and belief.

16 March 1988

REGISTERED LAND SURVEYOR
 No. 5795
 GERALD G. HIDDLESTON
 Gerald G. Hiddleston, LS
 STATE OF UTAH

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

CABALLO UNIT FEDERAL #1-8

2510' FSL and 240' FEL
Section 8, T36S - R23E
San Juan County, Utah

Prepared For:

QUINTANA PETROLEUM CORP.

By:

PERMITCO INC.
P.O. Box 44065
Denver, Colorado 80201-4065
303/322-7878

Copies Sent To:

- 2 - BLM - Moab, Utah
- 1 - Div. of State Lands - Natural Resources - Moab, Utah
- 1 - Div. of Oil, Gas & Mining - SIC, Utah
- 3 - Quintana Petroleum Corp. - Denver, CO

QUINTANA PETROLEUM CORPORATION

1050 SEVENTEENTH STREET
SUITE 400
DENVER COLORADO 80265
(303) 628-9211

March 21, 1988

Bureau of Land Management
P. O. Box 7
Monticello, UT 84535

Re: Caballo Unit Federal #1-8
Caballo Unit Federal #2-9
Caballo Unit Federal #1-15
Caballo Unit Federal #1-16
San Juan County, Utah

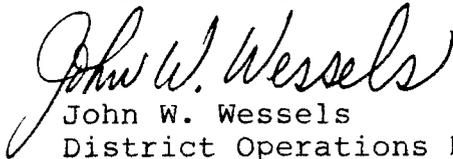
Gentlemen:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of Quintana Petroleum Corporation when necessary for filing county, state and federal permits including Onshore Order No. 1 Right-of-Way applications, etc. for the referenced wells.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Quintana Petroleum Corporation agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-mentioned wells.

Very truly yours,


John W. Wessels
District Operations Manager

cc: Permitco - Lisa Green
BLM
P. O. Box 970
Moab, UT 84532

jp

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2510' FSL and 240' FEL
Sec. 8, T36S-R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

1. The surface formation and estimated formation tops to be encountered are as follows:

| <u>Formation</u> | <u>Depth</u> | <u>Subsea</u> |
|--------------------|--------------|---------------|
| Quaternary Eolians | Surface | |
| Chinle | 2258' | +4158' |
| Shinarump | 2921' | +3495' |
| Hermosa | 5133' | +1283' |
| Ismay | 6491' | - 75' |
| Hovenweep Shale | 6601' | - 185' |
| Lower Ismay | 6654' | - 238' |
| Gothic Shale | 6708' | - 292' |
| Desert Creek | 6725' | - 309' |
| Chimney Rock Shale | 6839' | - 423' |
| T.D. - Akah | 6860' | - 444' |

2. The estimated depths at which oil, gas, water or other mineral bearing zones are expected to be encountered are as follows:

| <u>Substance</u> | <u>Formation</u> | <u>Anticipated Depth</u> |
|------------------|------------------|--------------------------|
| Oil | Ismay | 6491' |
| Oil | Desert Creek | 6725' |

All fresh water and prospectively valuable minerals (as described by BIM at onsite) encountered during drilling, will be recorded by depth cased and cemented. All oil and gas shows will be tested to determine commercial potential.



Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO.
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Caballo Unit Federal 1-8
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 San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

3. Pressure control equipment will consist of a 10", 3000# BOP. (See BOP Diagram attached.)

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

4. a. Casing

The proposed casing program is as follows:

| <u>Purpose</u> | <u>Depth</u> | <u>Hole Size</u> | <u>O.D.</u> | <u>Wt.</u> | <u>Grade</u> | <u>Type</u> | <u>New or Used</u> |
|----------------|--------------|------------------|-------------|------------|--------------|-------------|----------------------------|
| Conductor | 0-40' | 17-1/2" | 16# | -- | | | |
| Surface | 0-2258' | 12-1/4" | 9-5/8" | 36# | K-55 | ST&C | New |
| Produc. | 0-6000' | 8-3/4" | 5-1/2" | 15.5# | K-55 | LT&C | New |
| Produc. | 6000-TD | 8-3/4" | 5-1/2" | 17.0# | K-55 | LT&C | New |

- b. Cement

The cementing program will be as follows:

| | |
|----------------|---|
| <u>Surface</u> | <u>Type and Amount</u> |
| 0-2258' | 621 sx Lite with 2% CaCl ₂ and 1/4#/sk Flocele, followed by 200 sx Class B w/2% CaCl ₂ or sufficient to circulate to surface. |

| | |
|-------------------|------------------------|
| <u>Production</u> | <u>Type and Amount</u> |
|-------------------|------------------------|

Will be designed upon completion - sufficient to cover zones of interest.

Anticipated cement tops will be reported as to depth, not the expected number of sacks.



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DRILLING PROGRAM

c. Auxiliary Equipment will be as follows:

1. Kelly cock.
2. Float above the bit.
3. A sub with a full opening valve will be on the floor when the kelly is not in use.
4. Monitoring of the system will be done visually.

5. Drilling fluid will be as follows:

| <u>Interval</u> | <u>Mud Type</u> | <u>Mud Wt.</u> | <u>Visc.</u> | <u>F/L</u> | <u>PH</u> |
|-----------------|------------------|----------------|--------------|------------|-----------|
| 0-2258' | Gel/Lime | 8.3-8.6 | 27-35 | N/C | 8.5-9.0 |
| 2258-5100' | Water w/Gel/Lime | | | | |
| | Sweeps | 8.4-8.6 | 27-35 | N/C | 8.5-9.0 |
| 5100-T.D. | Dispersed | 9.0-10.5 | 35-45 | 8-10cc | 10+ |

Bloolie line will be misted to reduce fugative dust when air drilling.

6. Coring, logging and testing programs are as follows:

- a. No cores are anticipated.
- b. The logging program will consist of the following: A Dual Induction SFL or Dual Laterolog MSFL and BHC Sonic/GR will be run from T.D. to base of Surface casing. A CNL Lithodensity will be run over selected zones.
- c. Drill Stem Tests may be run in the Ismay and Desert Creek formations if shows warrant.



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CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

Whether the well is completed as a dry hole or as a producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager.

7. Abnormal conditions, bottom hole pressures and potential hazards.
 - a. The maximum bottom hole pressure to be expected is 3800 psi.
8. Anticipated Starting Dates and Notifications of Operations
 - a. Quintana Petroleum Corp. plans to spud the Caballo Unit Federal #1-8 immediately upon approval of this application and intends to complete the well within approximately one month after the well has reached T.D.
 - b. Written notification in the form of a Sundry Notice will be submitted to the Div. of Oil, Gas & Mining within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.
 - d. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Div. of Oil, Gas & Mining.
 - e. Should the well be successfully completed for production, the Div. of Oil, Gas & Mining will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.



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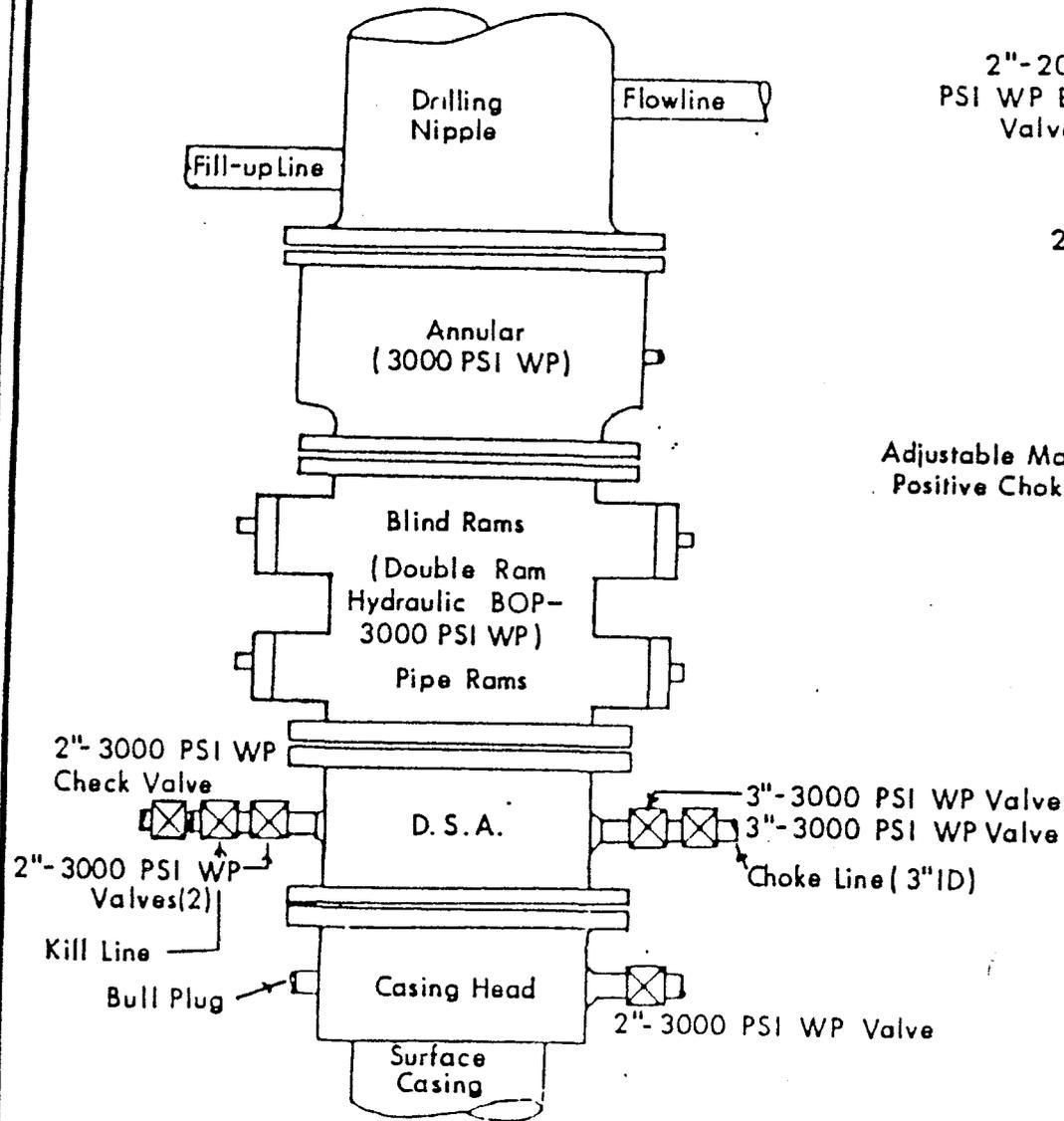
CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

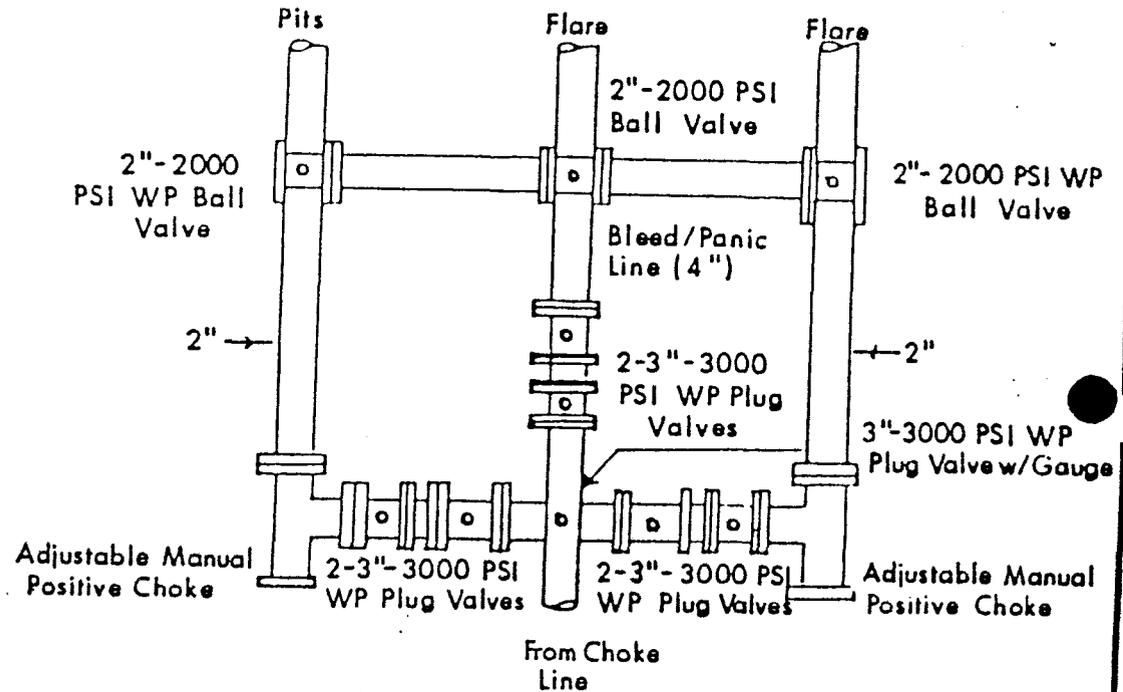
- f. A "Subsequent Report of Abandonment" will be filed with the Div. of Oil, Gas & Mining within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the surface owner.
- g. Approval to vent/flare gas during initial well evaluation will be obtained from the Div. of Natural Resources - State of Utah, Moab. This preliminary approval will not exceed 30 days. Approval to vent/flare beyond this initial test period will require approval from the Div. of Natural Resources.
- h. Upon completion of approved plugging, a regulation marker will be erected. The marker will be constructed as follows: Above ground pipe. The top of the marker will be closed or capped.
- i. The following minimum information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

"Well number, location by 1/4 1/4, section, township and range". "Lease number".

BOP SCHEMATIC
3000 PSI WORKING PRESSURE



PLAN VIEW CHOKER MANIFOLD



The hydraulic closing unit will be located more than 30' from the wellhead. Choke & bleed/panic lines will go to the pit and flare. All connections in choke line and manifold will be flanged or welded. All flanges should be ring joint gasket type. All turns in lines shall be constructed using targeted 90° tees or block ells. All lines shall be anchored.

Quintana

Denver, Colorado

BOPE SCHEMATIC

ONSHORE ORDER NO.
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San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

1. Existing Roads

- a. The proposed well site is located 25 miles southeast of Monticello, Utah.
- b. Directions to the location from Blanding, Utah are as follows:

Go north on Highway 191 for 8.9 miles. Turn east onto the Devils Canyon Road (Alkali #204) and proceed 3.0 miles in a southeasterly direction to a fork in the road. Turn right onto the new access road and proceed 50' to the location.
- c. The roads in the area are primarily county roads. See Map #1.
- d. Improvement to the existing access will not be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. An encroachment permit will be obtained from the San Juan County Road Department, 801/587-2231, ext. 43.

2. Planned Access Roads

- a. There will be no new access, other than an approach built off the county road. The wellpad sit directly west of the right-of-way fenceline.
- b. The maximum total disturbed width will be 30 feet.
- c. The grade will be 5% or less.

SURFACE USE PLAN

2. Planned Access Routes (cont.)

- d. No turnouts will be necessary. The ditch along the county road will be filled temporarily during drilling operations and later replaced with a culvert if production is established unless otherwise requested by the San Juan County Road Dept.
- e. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the surface owner.
- f. The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drilling rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #1).

- a. Water Wells - none
- b. Injection or disposal wells - none
- c. Producing Wells - one
- d. Drilling Wells - none

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be neutral to blend in with the terrain.



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SURFACE USE PLAN

4. Production Facilities (cont.)

- b. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the largest tank.
- c. If the well is productive, a production facility layout will be submitted showing the proposed facilities.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.
- f. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the State of Utah - Natural Resources Office, Moab, Utah.
- g. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.
- h. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

SURFACE USE PLAN

5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from a private source.
- b. Water will be trucked to location over the county roads in the area.
- c. No water well is to be drilled on this lease.
- d. Use of water for this operation will approved by obtaining a temporary use permit from the Utah State Engineer, in Price, Utah, 801/637-1303.
- e. Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

6. Source of Construction Material

- a. Road surfacing material will be obtained from a commercial source. Pad construction material will be native.
- b. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. Methods for Handling Waste Disposal

- a. The reserve pit will not be lined unless pourous material is encountered. At least half the capacity will be in cut. If rock is encountered in the pit area the State of Utah - Natural Resources Office will be notified for inspection of the pit to determine the necessity of a pit liner.
- b. Three sides of the reserve pit will be fenced with three strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.
- c. All trash will be contained in a trash cage and hauled to an approved landfill upon completion of drilling operations.

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SURFACE USE PLAN

7. Methods for Handling Waste Disposal (cont.)

- d. At the request of Quintana Petroleum, no burning will be permitted at this location.
- e. Produced waste water will be confined to a unlined pit for a period not to exceed 90 days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for approval.

8. Ancillary Facilities

- a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. See Diagram #1 for rig layout. See Diagram #2 for cross section of drill pad. See Diagram #3 for cuts and fills.
- b. The location of mud tanks; reserve, trash cage; pipe racks; living facilities and soil stockpiles will be shown on Diagram #1 and #3. The location will be laid out and constructed as discussed during the predrill conference.
- c. Approximately 6 inches (or the maximum amount) of topsoil material will be removed from the location and stockpiled on the south side of the wellpad. In addition, a berm will be constructed along the west edge of the wellpad to prevent any drainage into the draw or nearby stockpond.
- d. A diversion ditch will be constructed along the north edge of the wellpad diverting any runoff to the drain on the western side of the pad.
- e. Access to the well pad will be from the east edge of the pad. Topsoil along the access will be reserved in place.

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SURFACE USE PLAN

10. Reclamation

- a. Immediately upon completion of drilling, the location and surrounding area will be cleared of all remaining debris, materials, trash and junk not required for production.
- b. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- c. The disturbed wellpad area will not be recontoured and left level for use by the landowner.
- d. The stockpiled topsoil will be spread evenly over the disturbed area. Brush will not be scattered over the location and will be left stockpiled near the location.
- e. Seed will be drilled at a time specified by the surface owner.

The following seed mixture was requested by the surface owner:

| <u>Species</u> | <u>Lbs./acre</u> |
|--------------------|------------------|
| Crested Wheatgrass | 7.5 |

- f. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed.

11. a. Surface Ownership

Brigham Stevens
c/o John Shumway
P.O. Box 225
Blanding, Utah 84511
801/678-2556

b. Mineral Ownership

Same as above



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A Petroleum Permitting Company

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SURFACE USE PLAN

12. Other Information

- a. There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used.
- b. "Sundry Notice and Report on Wells" will be filed for approval for all changes of plans and other operations.
- c. The dirt contractor will be provided with an approved copy of the surface use plan.
- d. All persons in the area who are associated with the project will be informed by the operator that they will be subject to prosecution for disturbing archaeological sites or collecting artifacts. If subsurface cultural material is exposed during construction, work at that spot will stop immediately and the BLM, San Juan Resource Area Office will be contacted (801/587-2141.) The operator will be responsible for the cost of evaluation of the discovery and proper mitigation measures. Any decision as to proper mitigation shall be made by the authorized officer after consulting with the operator.
- e. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- f. An archeological study was conducted by LaPlata Archeological Consultants. No significant cultural resources were found and clearance is recommended. A copy of this report will be submitted directly by LaPlata Archeological Consultants.

13. Lessee's or Operator's Representative and Certification

Permit Matters

PERMITCO INC.
Lisa L. Green
P.O. Box 44065
Denver, CO 80201-4065
303/322-7878

Drilling & Completion Matters

QUINTANA PETROLEUM CORP.
1050-17th St.
Suite 400
Denver, CO 80265
303/628-9211 (W) -
303/969-9468 (H) - Scott Kimbrough



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CONFIDENTIAL-TIGHT HOLE

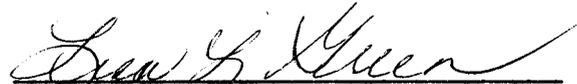
SURFACE USE PLAN

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 Quintana Petroleum Corp. and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

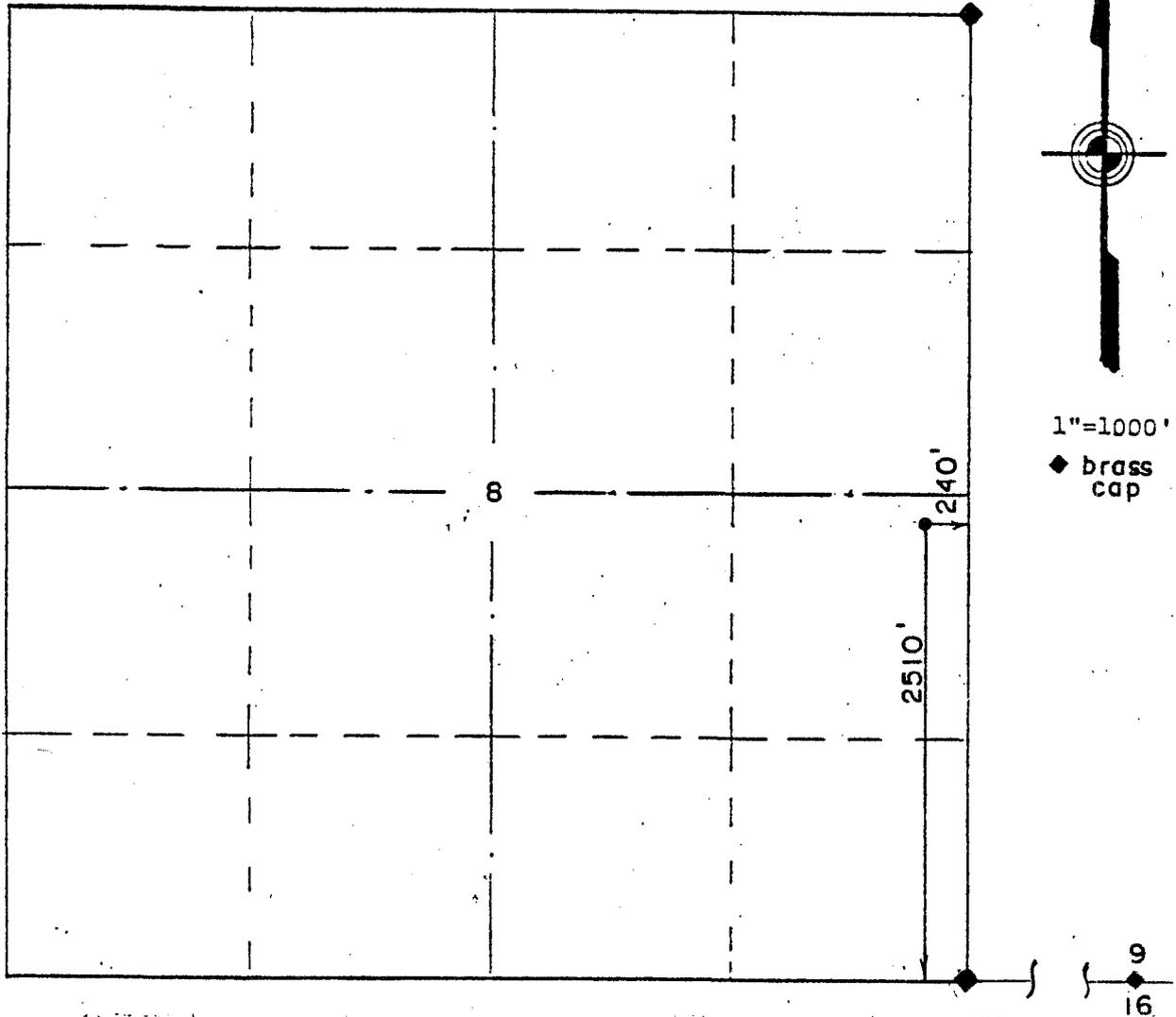
This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

March 28, 1988
Date: _____



Lisa L. Green - PERMITCO INC.
Authorized Agent for:
QUINTANA PETROLEUM CORP.

WELL LOCATION AND ACREAGE DEDICATION PLAT

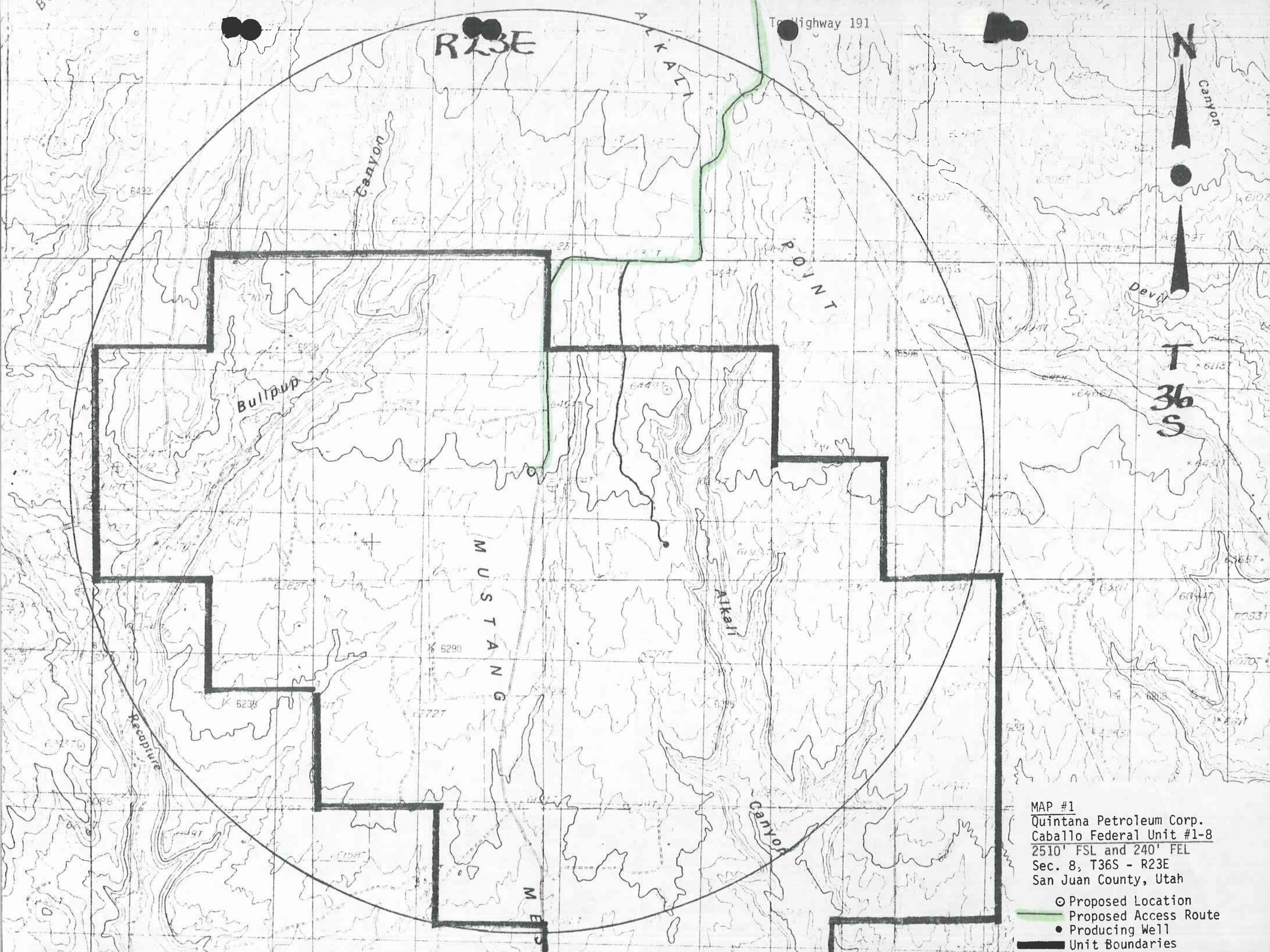


WELL LOCATION DESCRIPTION:
 Quintana Petroleum, Caballo Federal 1-8
 2510' FSL & 240' FEL
 Section 8, T.36 S., R.23 E., SLM
 San Juan County, Utah
 6399' grd. elevation
 References: North 125', 6405' grd.
 East 160', 6406' grd.

The above plat is true and correct to my knowledge and belief.

16 March 1988

REGISTERED LAND SURVEYOR
 No. 5705
 GERALD G. HIDDLESTON
 Gerald G. Hiddleston, LS
 STATE OF UTAH



R23E

To Highway 191

T
36
S

Bullpup
Canyon

M
U
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n
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o
n

Alkali
Canyon

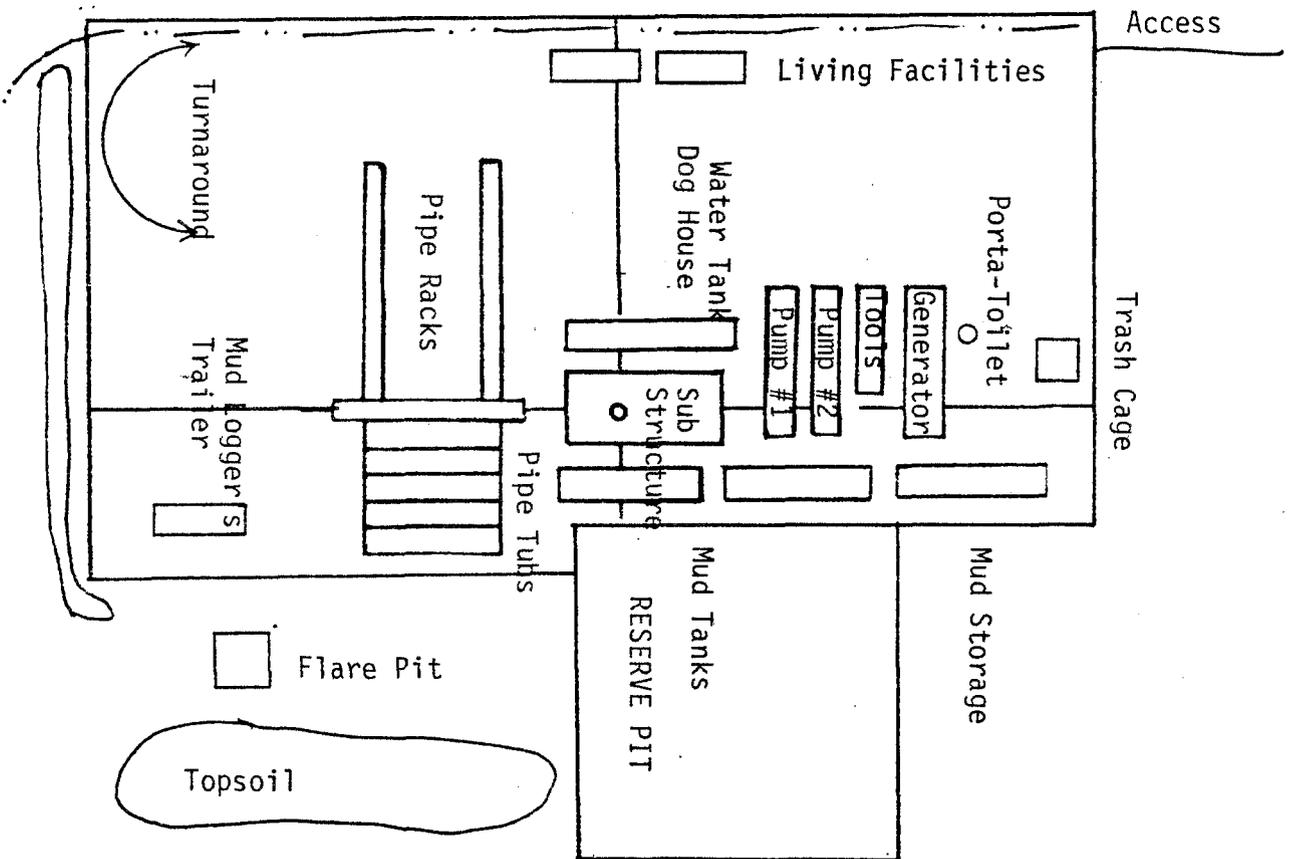
MAP #1
Quintana Petroleum Corp.
Caballo Federal Unit #1-8
2510' FSL and 240' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

- ⊙ Proposed Location
- Proposed Access Route
- Producing Well
- ▬ Unit Boundaries

DIAGRAM #1
Rig Layout

Quintana Petroleum Corp.
Caballo Federal Unit #1-8
2510' FSL and 240' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

Scale: 1" = 60'



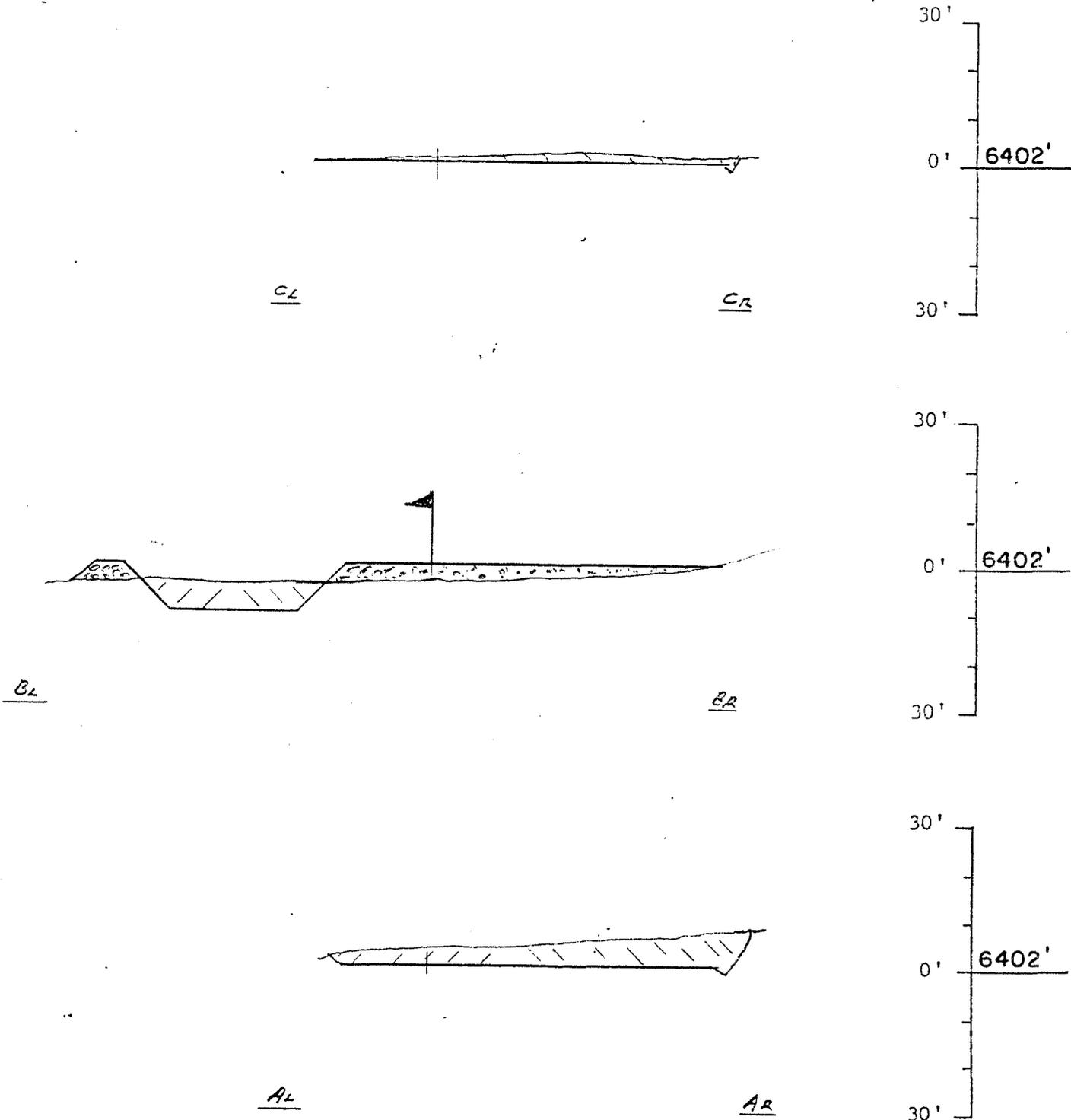
WELL PAD CROSS-SECTION

Quintana Petroleum Corp.
Caballo Federal 1-8

2510' FSL and 240' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

Cut */////*
Fill *○○○○*

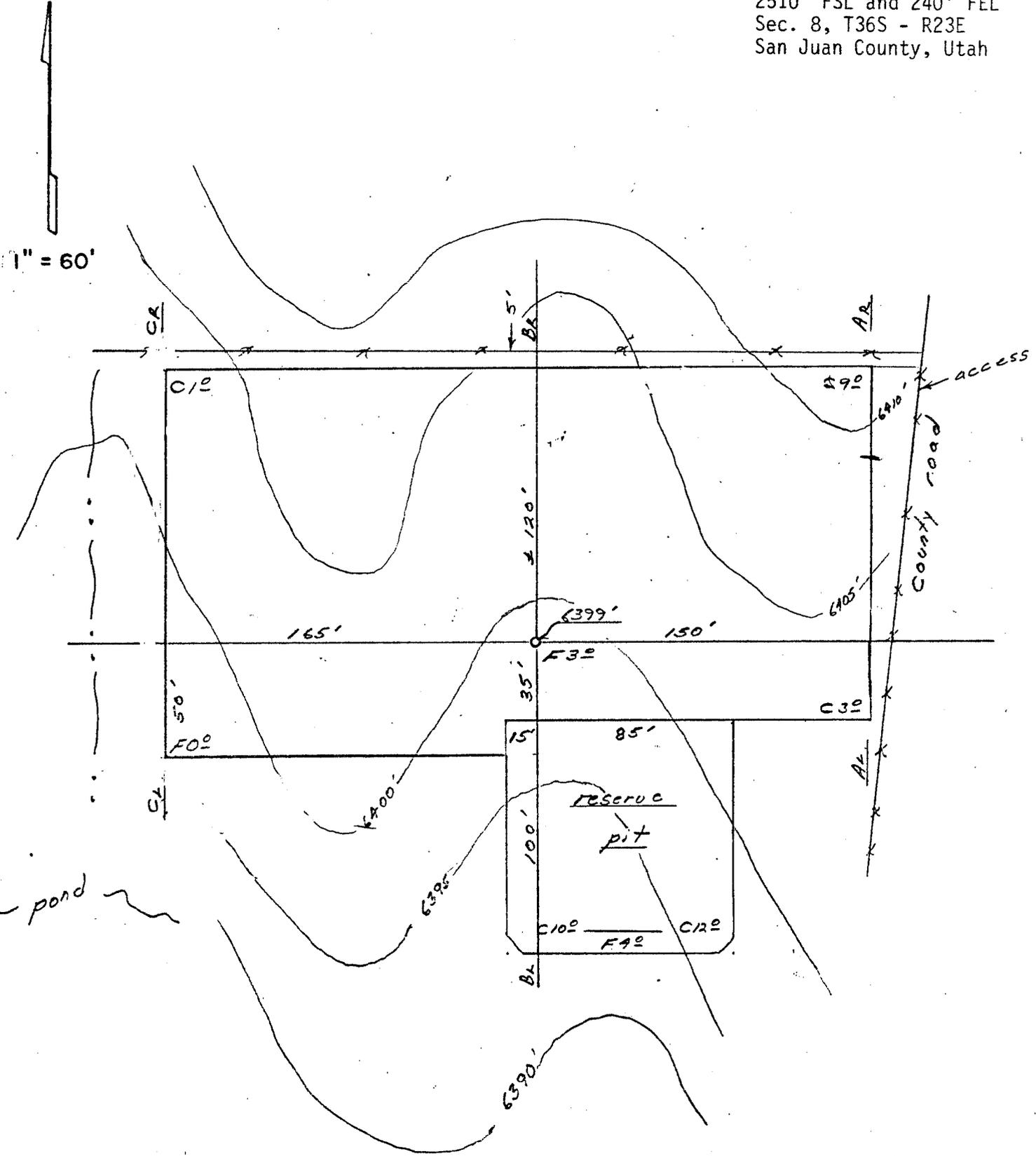
Scales: 1" = 60' H.
1" = 30' V.



WELL PAD PLAN VIEW

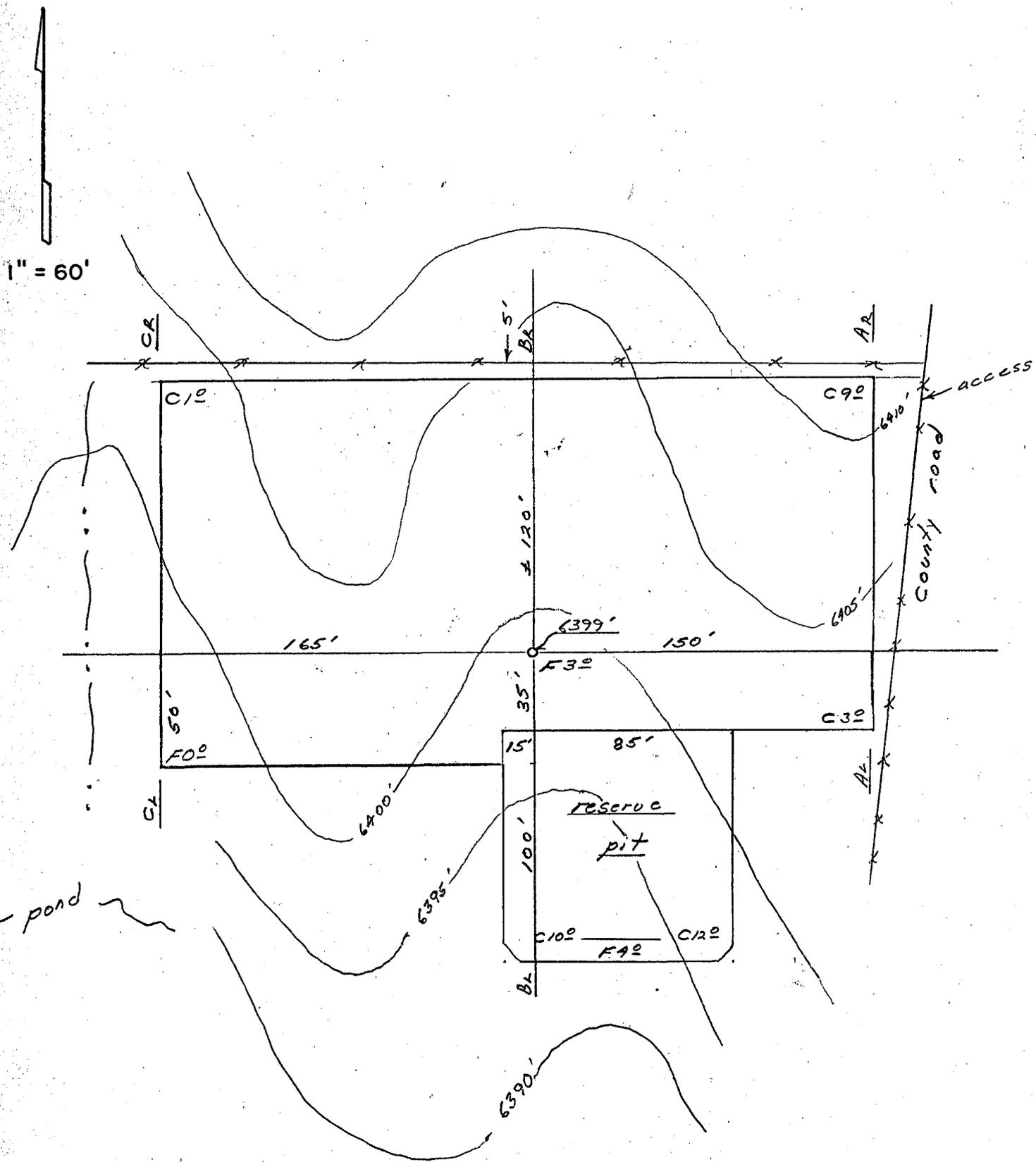
Quintana Petroleum Corp.
Well Caballo Federal 1-8

2510' FSL and 240' FEL
Sec. 8, T36S - R23E
San Juan County, Utah



WELL PAD PLAN VIEW

Well Caballo Federal 1-8

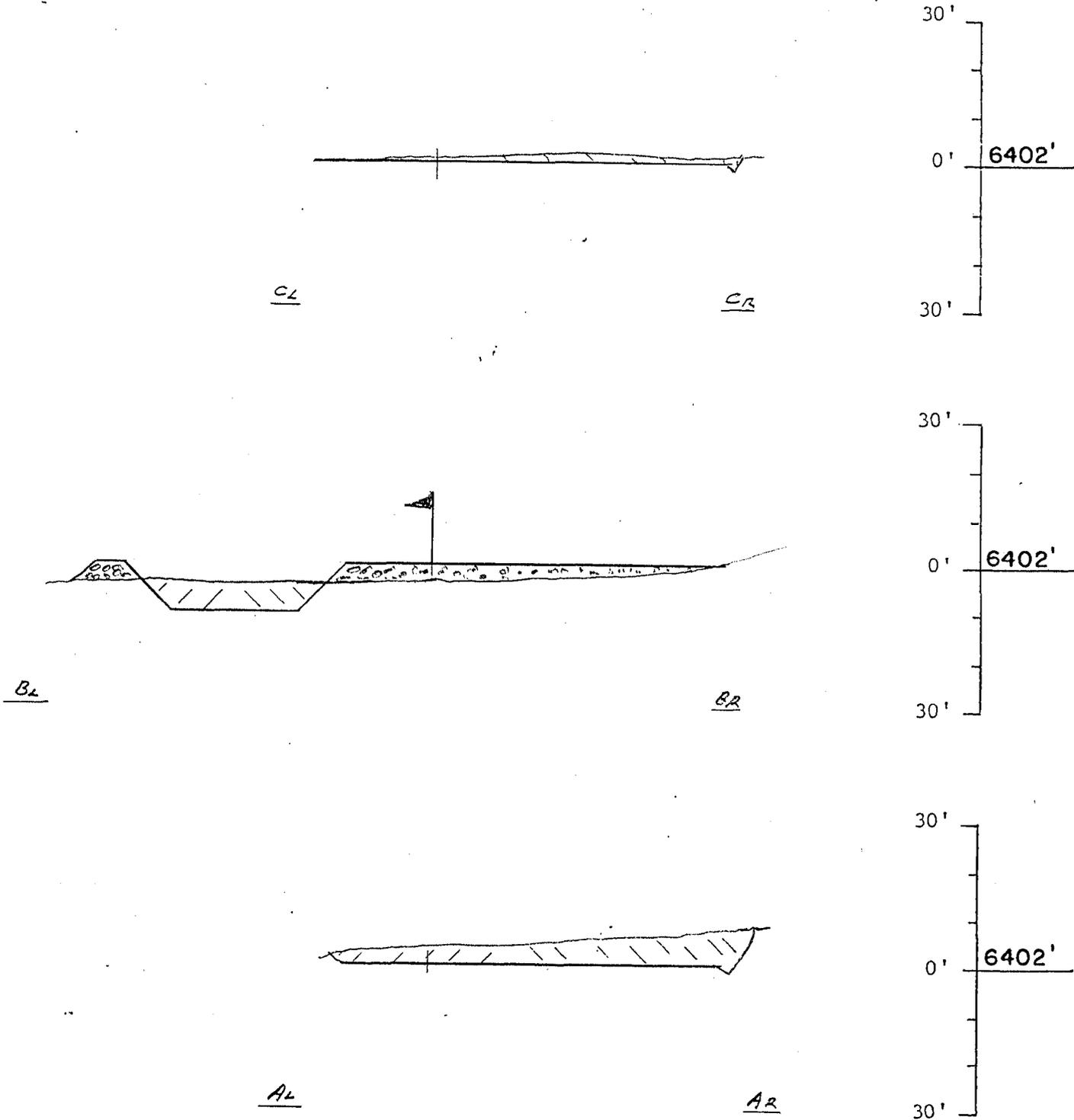


WELL PAD CROSS-SECTION

Caballo Federal 1-8

Cut /////
Fill 

Scales: 1" = 60' H.
1" = 30' V.



DRILLING LOCATION ASSESSMENT

State of Utah
Division of Oil, Gas & Mining

OPERATOR: Quintana WELL NAME: Caballo Fed 1-B

QTR/QTR: NESE SECTION: 8 TWP: 36S RANGE: 23E

COUNTY: SJ FIELD: Undesignated F L F L

SFC OWNER: Briggs Stevens (Arizona) LEASE #: ~~23570~~ FEE

SPACING: 240 F SECTION LINE F QTR/QTR LINE F ANOTHER WELL

INSPECTOR: Chip, Brad DATE & TIME: 3/22/88, 9:15

PARTICIPANTS: Chip, Brad, Rich McClure (BLM), Lisa Green (Landman), Permitted

Johnny Shumway (Landowner Rep) Howard Hughes (Contractor) Lowell/Larson (Contractor) Gerald Huddleston (Surveyor)

REGIONAL SETTING/TOPOGRAPHY: Blanding Basin, uncultivated field NE of Blanding on Mustang Flat

LAND USE

CURRENT SURFACE USE: cattle (none at this time) OR (during activity)

PROPOSED SURFACE DISTURBANCE: pit & pad. Pad - 170 ft x 315 ft w/ 85 ft x 85 ft pit extension

AFFECTED FLOODPLAINS AND/OR WETLANDS: _____

FLORA/FAUNA: Sage, Mormon tea, native grass, deer, rabbits.

ENVIRONMENTAL PARAMETERS

GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Red sandy soil some chert

SURFACE FORMATION & CHARACTERISTICS: QE.

EROSION/SEDIMENTATION/STABILITY: stable field area

SUBSURFACE GEOLOGY

OBJECTIVE(S)/DEPTH(S): UNKNOWN footage (desert creek Ismay)

ABNORMAL PRESSURES - HIGH AND LOW: NONE expected

CULTURAL RESOURCES/ARCHAEOLOGY: NONE REQUIRED

WATER RESOURCES: ~~WATER~~ FIELD IS fairly flat w/ NO major drainages.

RESERVE PIT

CHARACTERISTICS: 85' x 85' x 15' deep dirt pit.

LINING: NATURAL unless blasting occurs then inspector shall inspect pit for further lining

MUD PROGRAM: FW gel.

DRILLING WATER SUPPLY: PRIVATE & RECAPTURE

OTHER OBSERVATIONS:

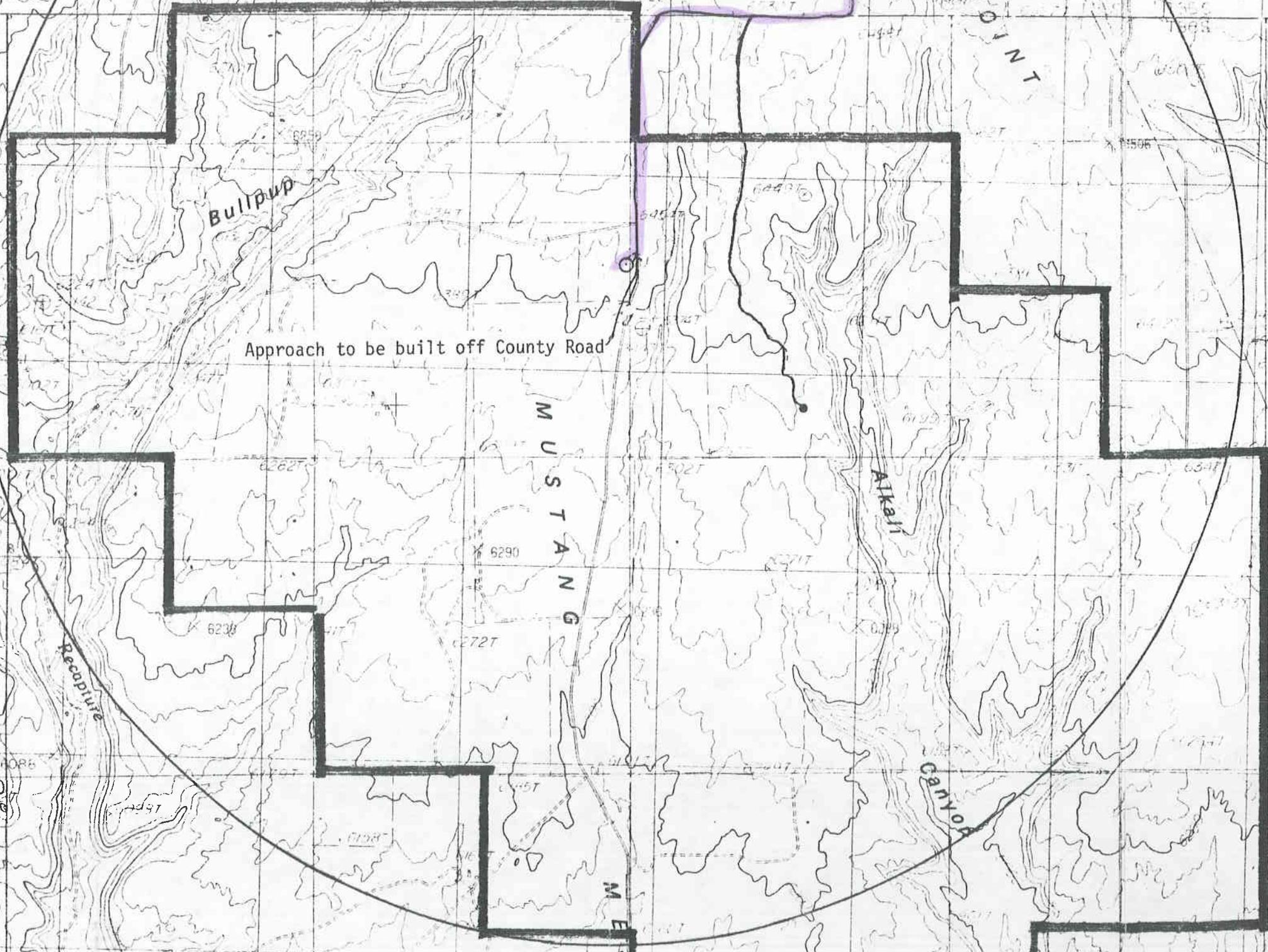
STIPULATIONS FOR APD APPROVAL: SEE attachments

ATTACHMENTS

R23E

To Highway 191

N
T
36
S



Approach to be built off County Road

MAP #1
Quintana Petroleum Corp.
Caballo Federal #1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

- Proposed Location
- Proposed Access Route
- - - New Access to Be Built
- ▬ Unit Boundaries

Stipulations for Quintana Fee 1-8
& Fed 1-16.

Inspector: Chip Hutchinson 259-8151 OR 259-5184

1. If pit is excavated on ~~Fed~~ 1-8 by use of blasting then inspector must be notified before any fluids are placed in it. This is to allow further bentonite placement if necessary.
2. Fed 1-16 is to be done in metal mud tanks with the cuttings hauled to the Fed 1-9 per agreement w/BLM.
3. State is to be notified of spud within 24 hrs of actual commencement
Arlene-538-5340
4. Inspector is to be notified of surface pipe set. Allow 4 hrs of notice.
5. BOP stack to be tested by independent tester or rig pump to stack working psi or 80% of casing strength. Inspector must be notified. allow 4hr of notice.
6. DST's are to be run according to Utah OSHA guidelines and inspector notified.
7. Plugging for abandonment - Instructions will be given by John Baza, DOGM in Salt Lake City. 538-5340.

OVER

If inspector cannot be reached for notification the operator does not have to wait.



April 11, 1988

Quintana Petroleum Corporation
c/o Permitco, Incorporated
P. O. Box 44065
Denver, Colorado 80201-4065

Gentlemen:

Re: Caballo Unit 1-8 - NE SE Sec. 8, T. 36S, R. 23E
2510' FSL, 240' FEL - San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule R615-2-3, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.
2. Quintana Petroleum Corporation, as designated operator, is the bonded principal in reference to this Application for Permit to Drill. Should this designation change or a transfer of ownership occur, liability will remain with the designated operator until the Division is notified by letter of a new bonded principal.
3. Following excavation for the reserve pit and prior to placing fluid in the pit, the operator shall notify Mr. Chip Hutchinson, Division inspector in Moab, Utah, office 259-8151 or home 259-5184, to allow for the inspection of the reserve pit and a determination of pit lining requirements.
4. The operator shall notify the Division inspector at least four hours prior to commencement of the following operations:
 - (1) Running and cementing of the 9-5/8" surface casing,
 - (2) BOP equipment testing,
 - (3) Drill stem testing.

In addition, the following actions are necessary to fully comply with this approval:

Page 2
Quintana Petroleum Corporation
Caballo Unit 1-8
April 11, 1988

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form OGC-8-X.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-22, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31401.

Sincerely,



R. L. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

2. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR 303/628-9211 1050-17th St., Suite 400
 Quintana Petroleum Corp. Denver, CO 80265

3. ADDRESS OF OPERATOR 303/322-7878 P.O. Box 44065
 Permitco Inc. - Agent Denver, CO 80201-4065

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 2510' FSL and 240' FEL
 At proposed prod. zone NE SE Sec. 8 43-037-31401

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 25 miles southeast of Monticello, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 240

16. NO. OF ACRES IN LEASE 200

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. none

19. PROPOSED DEPTH 6860'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6399' GR

22. APPROX. DATE WORK WILL START* Immediately upon approval of this application.

5. LEASE DESIGNATION AND SERIAL NO.
Private Minerals

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Caballo Unit

8. FARM OR LEASE NAME
Caballo Federal Unit

9. WELL NO.
#1-8

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 8, T36S - R23E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

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" | 36# | 2258' | 821 sx or suffic. to circ to surf |
| 8-3/4" | 5-1/2" | 15.5 & 17# | 6860' | Will be designed upon completion |
| | | | | Sufficient to cover zones of interest. |

RECORDED
APR 27 1988

DIVISION OF
OIL, GAS & MINING

23. ADVISORY STATE DEPARTMENT REVIEWED...
 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 [Signature] TITLE Consultant for Quintana Petroleum Corp. DATE 3/28/88

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

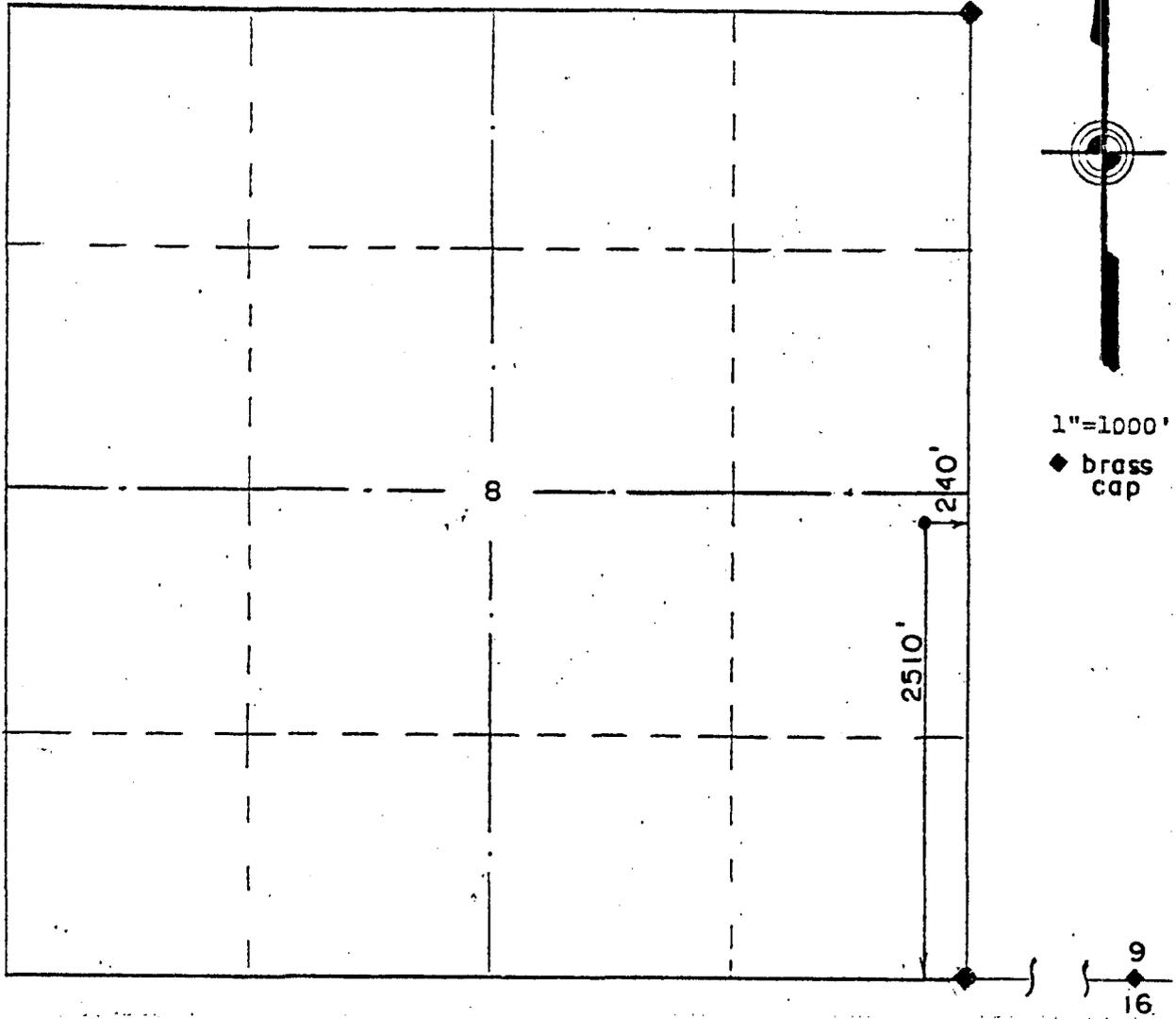
APPROVED BY [Signature] TITLE Acting District Mgr DATE 4/25/88
 CONDITIONS OF APPROVAL, IF ANY:

APPROVED FOR UNIT PURPOSES ONLY

*See Instructions On Reverse Side

STATE OF UTAH
DOSH

WELL LOCATION AND ACREAGE DEDICATION PLAT



WELL LOCATION DESCRIPTION:

Quintana Petroleum, Caballo Federal 1-8
 2510' FSL & 240' FEL
 Section 8, T.36 S., R.23 E., SLM
 San Juan County, Utah
 6399' grd. elevation
 References: North 125', 6405' grd.
 East 160', 6406' grd.

The above plat is true and correct to my knowledge and belief.

16 March 1988

REGISTERED LAND SURVEYOR
 No. 5785
 GERALD G. HIDDLESTON
 STATE OF UTAH
 Gerald G. Hiddleston LS

Quintana Petroleum Corporation
Well No. Caballo Federal Unit 1-8
Sec. 8, T. 36 S., R. 23 E.
San Juan County, Utah
Fee

CONDITIONS OF APPROVAL

Quintana Petroleum Corporation is the bonded entity on this application. Liability will remain with the bonded party named until we are formally notified by letter of the new bonded entity in reference to this Application for Permit to Drill.

TEMPORARY

FILING FOR WATER IN THE STATE OF UTAH

APR 2 1988

MAR 29 1988

Rec. by [initials] Fee Rec. 30.00 Receipt # 24001 Microfilmed Roll #

APPLICATION TO APPROPRIATE WATER SALT LAKE

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

* WATER RIGHT NO. 09 - 1566 * APPLICATION NO. A T63151

1. *PRIORITY OF RIGHT: March 29, 1988 * FILING DATE: March 29, 1988

2. OWNER INFORMATION

Name(s): Quintana Petroleum Corp. c/o PERMITCO INC Interest: % Address: P.O. Box 44065 City: Denver State: CO Zip Code: 80201-4065 Is the land owned by the applicant? Yes No XX (If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: cfs and/or 0.5 ac-ft

4. SOURCE: Spring/Pond * DRAINAGE:

which is tributary to which is tributary to

POINT(S) OF DIVERSION: NW SW NW Sec. 34, T35S - R23E no wells this loc. COUNTY: San Juan N. 990 ft. & W. 330 ft. from W 1/4 Cor. Sec. 34, T35S, R23E, SLB&M.

Description of Diverting Works: 80 bbl. pump truck w/enclosed tank * COMMON DESCRIPTION: 5 miles NE of Blanding Blanding Quad

5. POINT(S) OF REDIVERSION

The water will be rediverted from N/A at a point:

Description of Rediverting Works:

6. POINT(S) OF RETURN

The amount of water consumed will be cfs or 0.5 ac-ft The amount of water returned will be cfs or 0 ac-ft The water will be returned to the natural stream/source at a point(s): N/A

7. STORAGE

Reservoir Name: N/A Storage Period: from to Capacity: ac-ft. Inundated Area: acres Height of dam: feet Legal description of inundated area by 40 acre tract(s):

* These items are to be completed by the Division of Water Rights

TEMPORARY

Appropriate

8. List any other water rights which will supplement this application not known

CONFIDENTIAL

9. NATURE AND PERIOD OF USE

| | | |
|---------------------------|---------------------|-------------------|
| Irrigation: | From _____ | to _____ |
| Stockwatering: | From _____ | to _____ |
| Domestic: | From _____ | to _____ |
| Municipal: | From _____ | to _____ |
| Mining: | From _____ | to _____ |
| Power: | From _____ | to _____ |
| Other: Oil & Gas Drilling | From <u>4/15/88</u> | to <u>4/15/89</u> |

10. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
 Stockwatering (number and kind): _____
 Domestic: _____ Families and/or _____ Persons
 Municipal (name): _____
 Mining: _____ Mining District in the _____ Mine
 Ores mined: _____
 Power: Plant name: _____ Type: _____ Capacity: _____
 Other (describe): Water will be used over the next year for an approximate period of 30 days use per well.

11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Water will be used at the following drillsites
Caballo Fed. Unit #1-16, 200' FNL and 800' FEL, Sec. 16, T36S - R23E
Caballo Fed. Unit #2-9, 1800' FSL and 1680' FWL, Sec. 9, T36S - R23E 43-037-31402 Dr 1
Caballo Fed. Unit #1-8, 2510' FSL and 240' FEL, Sec. 8, T36S - R23E 43-037-31401 Dr
Caballo Fed. Unit #1-15, 1120' FNL and 700' FWL, Sec. 15, T36S - R23E 43-037-31403 Dr
2030' FNL 30 FEL ok as per Water Rights 6/16/88

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of same size if necessary):

Permission for the use of this water has been obtained from Boyd Laws.
A letter indicating his consent will be forwarded directly to your office by Mr. Laws.
Mr. Laws has requested that we not use this water source during periods in which he needs it for his stock watering purposes. Quintana Petroleum Corp. has agreed to these terms.

 The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Lisa L. Green
 Signature of Applicant(s)
 Lisa L. Green - PERMITCO INC.
 Authorized Agent For:
 QUINTANA PETROLEUM CORP.

Enc. - \$30.00 filing fee

STATE ENGINEER'S ENDORSEMENT

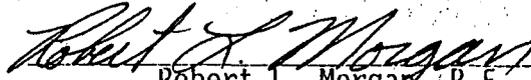
WATER RIGHT NUMBER: 09 - 1566

APPLICATION NO. T63151

1. March 29, 1988 Application received by MP.
 2. March 31, 1988 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-

Conditions:

This application is hereby APPROVED, dated April 12, 1988, subject to prior rights and this application will expire on April 12, 1989.


Robert L. Morgan, P.E.
State Engineer

RECEIVED JUN 2 1988

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

DIVISION OF OIL, GAS & MINING

5. Lease Designation and Serial No. U-23520
6. If Indian, Allottee or Tribe Name N/A
7. Unit Agreement Name Caballo Unit
8. Farm or Lease Name Caballo Federal
9. Well No. #1-8
10. Field and Pool, or Wildcat Caballo/Wildcat
11. Sec., T., R., M., or Blk. and Survey or Area Sec. 8, T36S - R23E

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL [X] DEEPEN [] PLUG BACK []

b. Type of Well Oil Well [X] Gas Well [] Other [] Single Zone [X] Multiple Zone []

2. Name of Operator 303/628-9211 1050-17th St., Suite 400 Quintana Petroleum Corp. Denver, CO 80265

3. Address of Operator 303/322-7878 P.O. Box 44065 Permitco Inc. - Agent Denver, CO 80201-4065

4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 2030' FNL and 30' FEL At proposed prod. zone SE NE

Amended Copy

14. Distance in miles and direction from nearest town or post office* 25 miles southeast of Monticello, Utah

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 30' 16. No. of acres in lease 2387.42 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. 2970' 19. Proposed depth 6860' 20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.) 6435' GR 22. Approx. date work will start* Immediately upon approval of this application.

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: Size of Hole, Size of Casing, Weight per Foot, Setting Depth, Quantity of Cement. Rows include 12-1/4" hole with 9-5/8" casing and 8-3/4" hole with 5-1/2" casing.

Quintana Petroleum Corp. proposes to drill a well to 6860' to test the Ismay and Desert Creek formations. This location was chosen based on seismic data and archeological concerns. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

We realize this location is non-standard in accordance with the spacing rules for the State of Utah. Quintana Petroleum Corp. is the Unit Operator of the Caballo Unit and we are requesting that you grant approval to drill this well at non-standard spacing.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive 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. Signature: [Signature] Title: Consultant for Quintana Petroleum Corp. Date: 5/31/88

(This space for Federal or State office use)

Permit No. 43-037-31401 Approval Date

Approved by Title APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

Conditions of approval, if any: DATE: 10-9-88 BY: [Signature] WELL SPACING: 15-2-3

*See Instructions On Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

| | | | | |
|--|---|--|---|---|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> | | CONFIDENTIAL RECEIVED JUN 2 1988 DIVISION OF OIL, GAS & MINING | | 5. LEASE DESIGNATION AND SERIAL NO. U-23520 |
| 2. NAME OF OPERATOR 303/628-9211 Quintana Petroleum Corp. | | | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A |
| 3. ADDRESS OF OPERATOR 303/322-7878 Permitco Inc. - Agent | | | | 7. UNIT AGREEMENT NAME Caballo Unit |
| 4. LOCATION OF WELL (Report location clearly and in accordance with BLM Form 3160-1) See also space 17 below.) At surface 2510' FSL and 240' FEL NE SE | | | | 8. FARM OR LEASE NAME Caballo Federal |
| 14. PERMIT NO. 43-037-31401 | 15. ELEVATIONS (Show whether DF, GR, or CR) 6399' GR | 9. WELL NO. #1-8 | 10. FIELD AND POOL, OR WILDCAT Caballo | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 8, T36S - R23E |
| | | 12. COUNTY OR PARISH San Juan | 13. STATE Utah | |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO: | | SUBSEQUENT REPORT OF: | |
|--|---|---|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/> | MULTIPLE COMPLETE <input type="checkbox"/> | FRACTURE TREATMENT <input type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/> | ABANDON* <input type="checkbox"/> | SHOOTING OR ACIDIZING <input type="checkbox"/> | ABANDONMENT* <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/> | CHANGE PLANS <input type="checkbox"/> | (Other) <input type="checkbox"/> | |
| (Other) <input type="checkbox"/> | Move Location <input checked="" type="checkbox"/> | (NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) | |

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

After reviewing their seismic data more closely, Quintana Petroleum Corp. has chosen to move the above mentioned location to the following footages: 2030' FNL and 30' FEL, Sec. 8, T36S - R23E. These footages are non-standard spacing in accordance with the requirements for the State of Utah. A request for exception to spacing will be filed with their office.

Enclosed you will find a new Application for Permit to Drill (Form 3160-3), 13-Point Surface Use Plan, Topographic Map, Diagrams #1 and #2. A new archeological report will be submitted directly by LaPlata Archeological Consultants.

All other information originally submitted in the original application will remain the same. Please note that Quintana Petroleum Corp. no longer intends to drill a location at 2510' FSL and 240' FEL.

If you should have any questions, please feel free to contact me at your convenience.

18. I hereby certify that the foregoing is true and correct
SIGNED [Signature] TITLE Consultant for Quintana Petroleum Corp. DATE 5/31/88

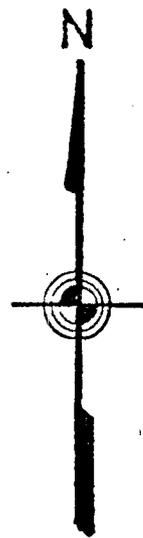
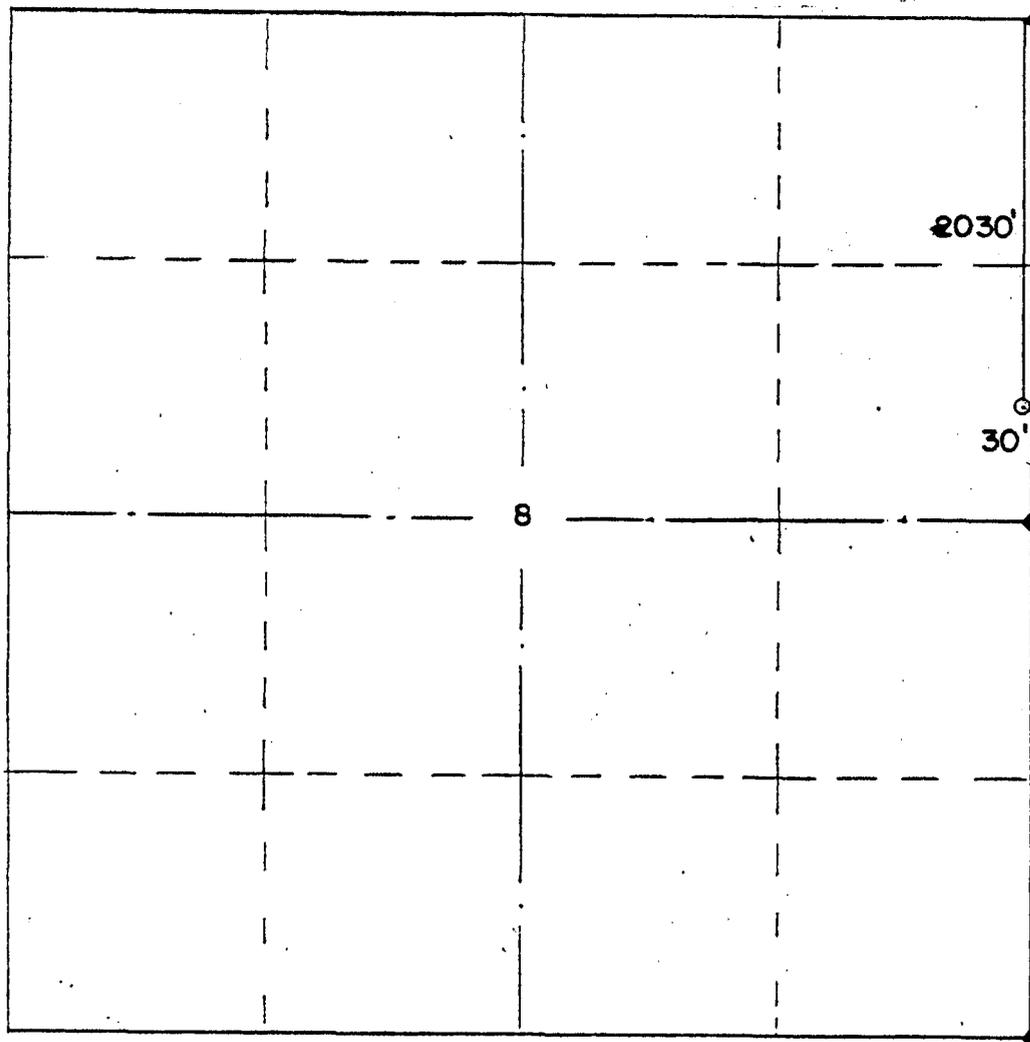
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

cc: State of Utah - Div. of Oil, Gas & Mining

*See Instructions on Reverse Side

WELL LOCATION AND ACREAGE DEDICATION PLAT



1"=1000'

◆ brass cap

WELL LOCATION DESCRIPTION:
 QUINTANA PETROLEUM, Caballo Federal #1-8
 2030'FNL & 30'FEL
 Section 8, T.36 S., R.23 E., SLM
 San Juan County, Utah
 6435' ground elevation
 Reference: SP 141+38, 2155' FN, 133' FW
 Section 9, 6440 grd.

The above plat is true and correct to my knowledge and belief.

10 May 1988

REGISTERED LAND SURVEYOR
 No. 5705
 GERALD G. HUDDLESTON
 Huddleston, LS
 STATE OF UTAH

ONSHORE ORDER NO. 1
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

1. Existing Roads

- a. The proposed well site is located 25 miles southeast of Monticello, Utah.
- b. Directions to the location from Blanding, Utah are as follows:

Go north on Highway 191 for 8.9 miles. Turn east onto the Devils Canyon Road (Alkali #204) and proceed 2.7 miles in a southeasterly direction to a fork in the road. Turn right onto the location.
- c. The roads in the area are primarily county roads. See Map #1.
- d. Improvement to the existing access will not be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. An encroachment permit will be obtained from the San Juan County Road Department, 801/587-2231, ext. 43.

2. Planned Access Roads

- a. There will be no new access, other than an approach built off the county road. The wellpad sits directly west of the right-of-way fenceline.
- b. The maximum total disturbed width will be 30 feet.
- c. The grade will be 5% or less.
- d. No turnouts will be necessary. The ditch along the county road will be filled temporarily during drilling operations and later replaced with a culvert if production is established unless otherwise requested by the San Juan County Road Dept.

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #1).
 - a. Water Wells - none
 - b. Injection or disposal wells - none
 - c. Producing Wells - one
 - d. Drilling Wells - none

4. Location of Tank Batteries and Production Facilities.
 - a. All permanent structures will be painted at the discretion of the operator.
 - b. If the well is productive, a production facility layout will be submitted showing the proposed facilities.
 - c. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.
 - d. All site security guidelines identified in 43 CFR 3162.7-4 regulations will be adhered to.
 - e. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the BLM - District Office, Moab, Utah.
 - f. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
 - g. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

- h. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply
 - a. All water needed for drilling purposes will be obtained from a private source.
 - b. Water will be trucked to location over the county roads in the area.
 - c. No water well is to be drilled on this lease.
 - d. Use of water for this operation will approved by obtaining a temporary use permit from the Utah State Engineer, in Price, Utah, 801/637-1303.
 - e. Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

6. Source of Construction Material
 - a. Road surfacing material will be obtained from a commercial source. Pad construction material will be native.
 - b. The use of materials under BIM jurisdiction will conform to 43 CFR 3610.2-3.

SURFACE USE PLAN

7. Methods for Handling Waste Disposal

- a. The reserve pit will not be lined unless porous material is encountered. At least half the capacity will be in cut.
- b. Three sides of the reserve pit will be fenced with three strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.
- c. All trash will be contained in a trash cage and hauled to an approved landfill upon completion of drilling operations.
- d. At the request of Quintana Petroleum, no burning will be permitted at this location.

8. Ancillary Facilities

- a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. See Diagram #1 for rig layout. See Diagram #2 for cross section of drill pad and cuts and fills.
- b. The location of mud tanks; reserve, trash cage; pipe racks; living facilities and soil stockpiles will be shown on Diagram #1 and #2. The location will be laid out and constructed as discussed during the predrill conference.
- c. Approximately 6 inches (or the maximum amount) of topsoil material will be removed from the location and stockpiled near the wellpad.
- d. Access to the well pad will be from the north side of the pad. Topsoil along the access will be reserved in place.

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

10. Reclamation

- a. Immediately upon completion of drilling, the location and surrounding area will be cleared of all remaining debris, materials, trash and junk not required for production.
- b. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- c. The disturbed wellpad area will be recontoured if requested by the landowners.
- d. The stockpiled topsoil will be spread evenly over the disturbed area. Brush will be scattered over the location if requested by the landowners.
- e. Seed will be drilled at a time specified by the surface owners.
- f. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed.

11. a. Surface Ownership

Al Clark
584 South 200 West
#61-5
Blanding, UT 84511

Merlin Grover
464 West 400 North
#43-2
Blanding, UT 84511
801/678-2589

b. Mineral Ownership

Federal



Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

12. Other Information

- a. There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used.
- b. "Sundry Notice and Report on Wells" will be filed for approval for all changes of plans and other operations.
- c. The dirt contractor will be provided with an approved copy of the surface use plan.
- d. All persons in the area who are associated with the project will be informed by the operator that they will be subject to prosecution for disturbing archaeological sites or collecting artifacts. If subsurface cultural material is exposed during construction, work at that spot will stop immediately and the BLM, San Juan Resource Area Office will be contacted (801/587-2141.) The operator will be responsible for the cost of evaluation of the discovery and proper mitigation measures. Any decision as to proper mitigation shall be made by the authorized officer after consulting with the operator.
- e. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- f. An archeological study was conducted by LaPlata Archeological Consultants. No significant cultural resources were found and clearance is recommended. A copy of this report will be submitted directly by LaPlata Archeological Consultants.

13. Lessee's or Operator's Representative and Certification

Permit Matters

PERMITCO INC.
Lisa L. Green
P.O. Box 44065
Denver, CO 80201-4065
303/322-7878

Drilling & Completion Matters

QUINTANA PETROLEUM CORP.
1050-17th St.
Suite 400
Denver, CO 80265
303/628-9211 (W) -
303/969-9468 (H) - Scott Kimbrough



Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

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 Quintana Petroleum Corp. and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

March 31, 1988

Date:



Lisa L. Green - PERMITCO INC.
Authorized Agent for:
QUINTANA PETROLEUM CORP.



Permitco Incorporated
A Petroleum Permitting Company

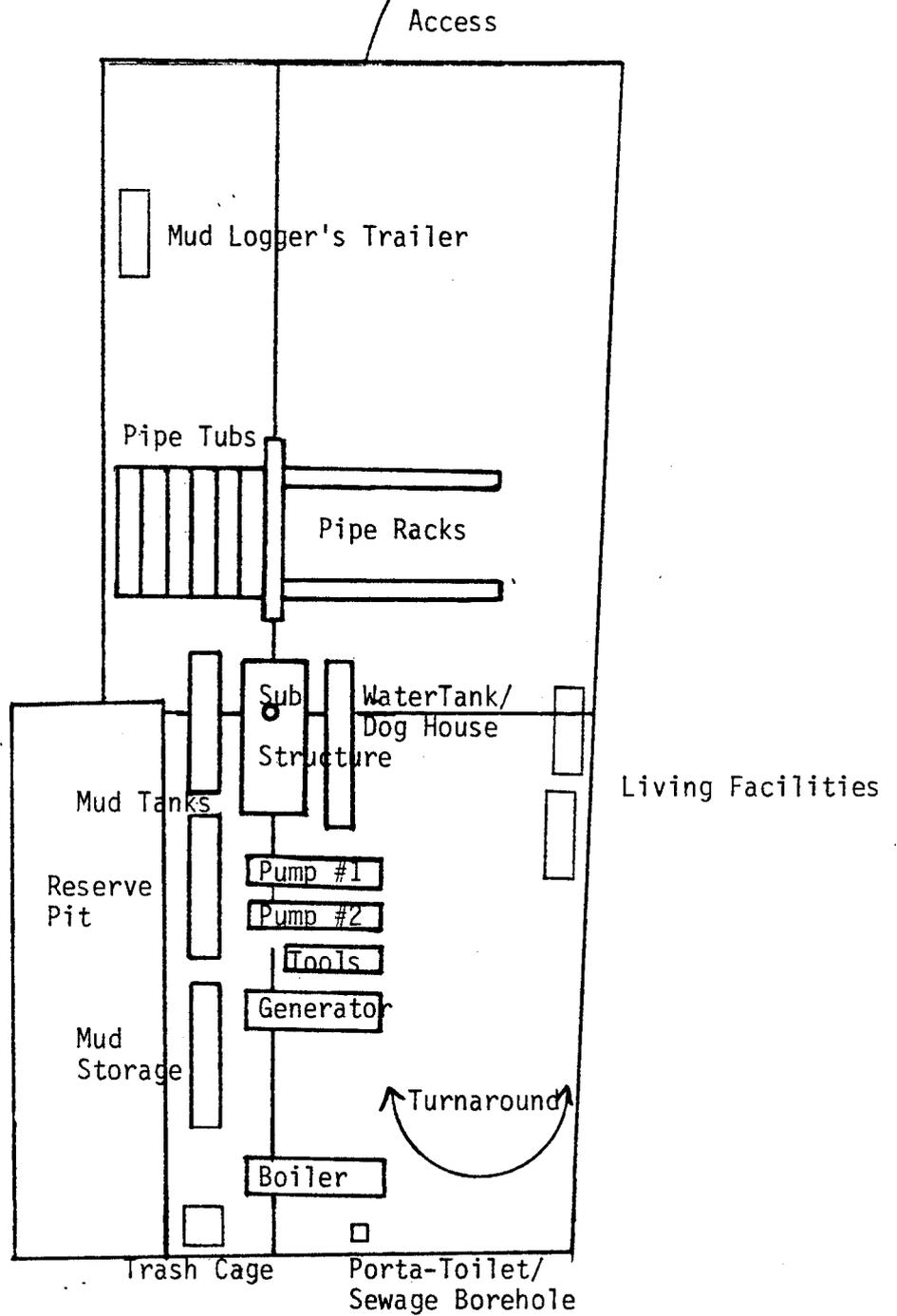
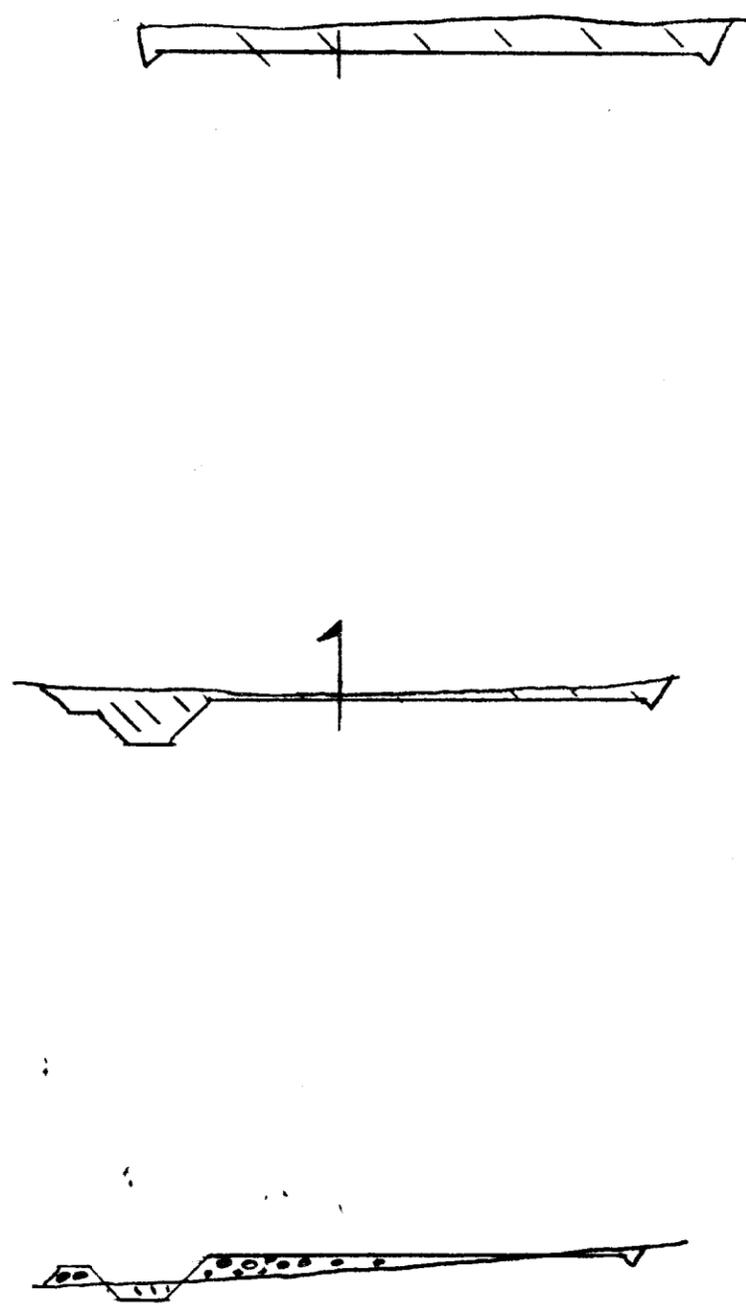
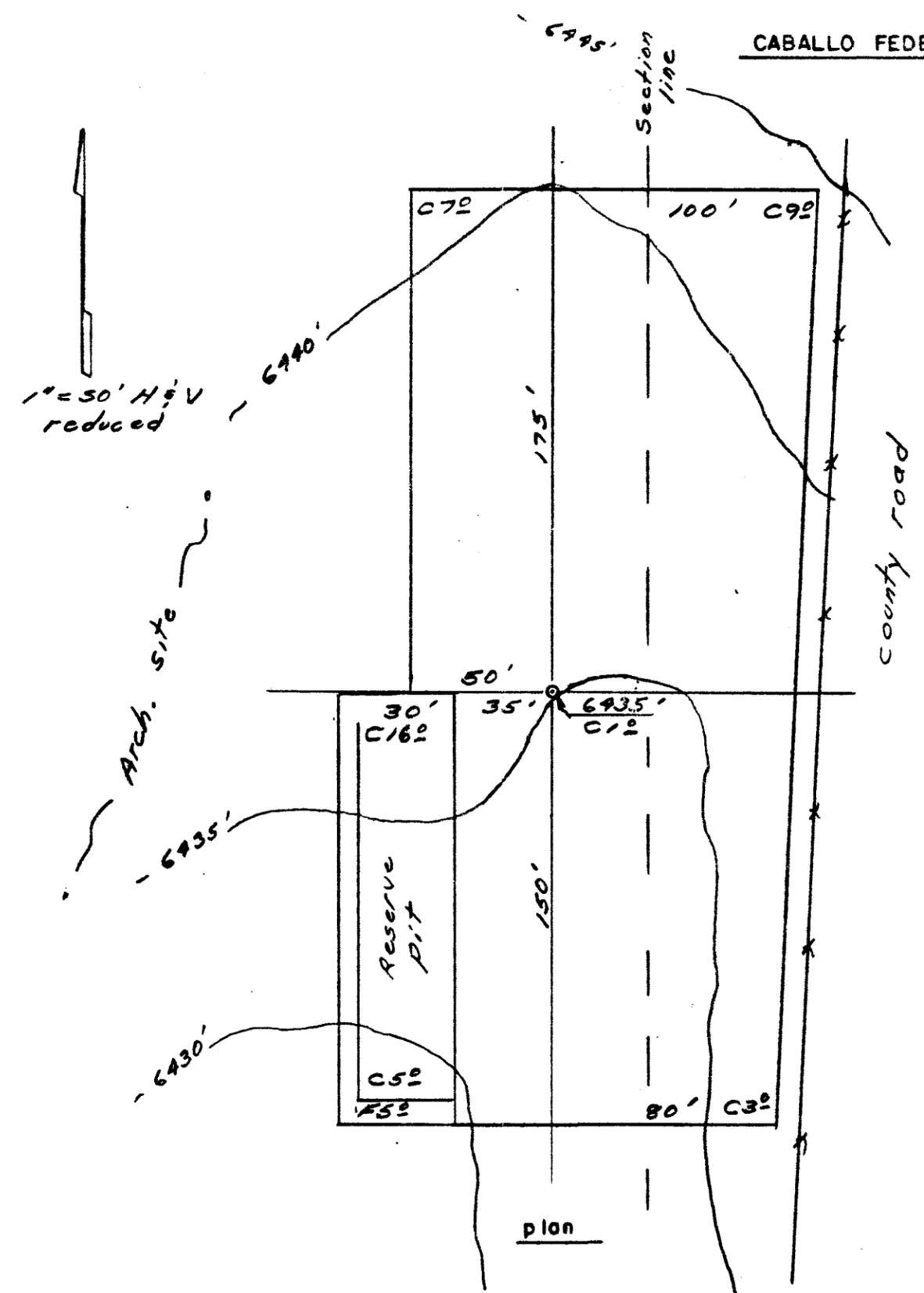


DIAGRAM #1
Rig Layout
Quintana Petroleum Corp.
Caballo Federal #1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah



section



plan

DIAGRAM #2
 Cross Section & Cuts & Fills
 Quintana Petroleum Corp.
 Caballo Federal #1-8
 2030' FNL and 30' FEL
 Sec. 8, T36S - R23E
 San Juan County, Utah

Lease No. U-23520

Well: Caballo #1-8

2030' FNL and 30' FEL
Sec. 8, T36S - R23E

I Certify that Quintana Petroleum Corp. has reached an agreement with Al Clark as to the requirements for the protection of surface resources and reclamation of disturbed areas and/or damages in lieu thereof. If an agreement has not been reached Quintana Petroleum Corp. will comply with the provisions of the law or regulations governing the Federal or Indian right of reentry to the surface (43 CFR 3814).

If access crosses private property, the operator will insure the Bureau of Land Management (BLM) has access across the private property including keys to any locked gates.

5/31/88
Date


Operator Representative
Lisa L. Green - Authorized Agent for:
QUINTANA PETROLEUM CORP.

NOTE: Please include a map showing the access route that has received a cultural resources clearance.

Access directly west of county road and was covered in the 10 acre survey.

CONFIDENTIAL

Change of plans!

OPERATOR Quintana Petroleum Corp DATE 6-7-88

WELL NAME Cabello Federal 1-8

SEC SENE 8 T 36S R 23E COUNTY San Juan

43-037-31401
API NUMBER

Fed.
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

Unit well - no well within 920'
need water permit
exception location requested

APPROVAL LETTER:

SPACING: R615-2-3 Cabello R615-3-2
UNIT
 CAUSE NO. & DATE R615-3-3

STIPULATIONS:

~~1-water permit~~ 09-1566 / T63151 (6-10-88)



June 9, 1988

Quintana Petroleum Corporation
c/o Permitco Inc.
P. O. Box 44065
Denver, Colorado 80201-4065

Amended

Gentlemen:

Re: Caballo Unit 1-8 - SE NE Sec. 8, T. 36S, R. 23E - San Juan County, Utah
2030' FNL 30' FEL

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule R615-2-3, Oil and Gas Conservation General Rules.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form OGC-8-X.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-22, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.

Page 2
Quintana Petroleum Corporation
Caballo Unit 1-8
June 9, 1988

7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31401.

Sincerely,



R.D. Pirth
Associate Director, Oil & Gas

lr
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson
8159T



Division of State History
 (Utah State Historical Society)
 Department of Community and Economic Development

Norman H. Bangertter
 Governor
 Max J. Evans
 Director

300 Rio Grande
 Salt Lake City, Utah 84101-1182

June 7, 1988

RECEIVED
 JUN 10 1988

DIVISION OF
 OIL, GAS & MINING

Mr. Dale Davidson
 Area Archeologist
 Bureau of Land Management
 P. O. Box 7
 Monticello, Utah 84535

RE: An Archeological Survey of TEB, Inc.'s Proposed Cedar Mesa #2 Well Site and Access Road, San Juan County, Utah (LAC No. 8858, U-88-LA-162b, SAI# UT880525-00)

In Reply Please Refer To Case No. L252

Dear Dale:

The staff of the Utah State Historic Preservation Office has received for review the above referenced project. We concur that the newly recorded site, 42Sa 20032, will be avoided by construction of the well site and associated access road, and that there will be no effect as a result of the project.

However, in order to determine eligibility status to the National Register of Historic Places for 42Sa 20032, our office would need more information, such as results of limited test excavation to determine depth and extent of subsurface remains. The Bureau of Land Management can use this information in making any further recommendations on this project.

The above is provided on request as outlined by 36 CFR 800 or Utah Code, Title 63-18-37. If you have questions or need additional assistance, please contact Diana Christensen at (801) 533-7039, or 533-6017.

Sincerely,

Diana Christensen

for A. Kent Powell
 Deputy State Historic
 Preservation Officer

DC:L252/5597V BLM/NP

- cc: Chairperson, Resource Development Coordinating Committee, State Planning Office, 118 State Capitol, Salt Lake City, Utah 84114
- cc: John Baza, Division of Oil, Gas & Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180-1203
- cc: OPB
- cc:-La Plata Archeological Consultants, Inc., PO Box 783, Dolores, CO 81323



CONFIDENTIAL

| OIL AND GAS | |
|------------------------|----------|
| DRN | RJF |
| JRB | GLH |
| DTS | SLS |
| 1-LCB | Per 6/20 |
| 2-TAS | |
| 3 MICROFILM | |
| 4- FILE | |

*Caballo 1-8
Caballo 4-9*

June 14, 1988

Bureau of Land Management
P.O. Box 970
Moab, Utah 84532

Attn: Carol Fruediger

Re: Quintana Petroleum Corp.
Caballo #1-8
2510' FSL and 240' FEL
Section 8, T36S - R23E 43-037-31401
San Juan County Utah

Caballo #4-9
2300' FNL and 200' FWL
Section 9, T36S - R23E
San Juan County, Utah
U-23520

Dear Carol:

Please be advised that Quintana Petroleum Corporation no longer intends to drill the above mentioned wells at the above footages. Please note, however, that a new Application for Permit to Drill will be filed on the Caballo #1-8 at the following footages: 2030' FNL and 30' FEL Section 8, T36S - R23E.

I apologize for any inconvenience this may have caused your office. If you have any questions, please feel free to contact me.

Sincerely,

PERMITCO INC.

Lisa L. Green
Consultant for
Quintana Petroleum Corp.

Permitco Incorporated
A Petroleum Permitting Company

P.O. Box 44065
Denver, Colorado 80201-4065
(303) 322-7878

cc: BLM - Monticello, Utah
Quintana Petroleum Corp. - Denver, CO
Div. of Oil, Gas and Mining - SLC, UT



RECEIVED
JUN 17 1988

DIVISION OF
OIL, GAS & MINING

CONFIDENTIAL

June 15, 1988

| OIL AND GAS | |
|-------------|------------|
| DRN | RJF |
| JRB | GLH |
| DTS | SLS |
| I- LCR | ✓ LCR 6/20 |
| | |
| | |
| MICROFILM | |
| FILE | |

Bureau of Land Management
P.O. Box 970
Moab, UT 84532

Attn: Carol Fruediger

Re: Quintana Petroleum Corp.
Caballo Federal #1-8
2030' FNL and 30' FEL
Sec. 8, T36S - R23E
San Juan County, Utah

Dear Carol:

As per my telephone with Rich McClure of the Monticello Office, I am enclosing four copies of the 10 Point Drilling Plan on the above mentioned well which was not previously submitted with the 13 Point Plan.

Please attach these 10 Point Plans to the previous information. If you should have any questions, please do not hesitate to contact me.

Sincerely,

PERMITCO INC.

Lisa L. Green
Consultant for
Quintana Petroleum Corp.

cc: Quintana Petroleum - Denver, CO
BLM - Monticello, UT
Div. of Oil, Gas & Mining - SLC, UT
Natural Resources - Moab, UT

Permitco Incorporated
A Petroleum Permitting Company

P.O. Box 44065
Denver, Colorado 80201-4065
(303) 322-7878

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

CABALLO UNIT FEDERAL #1-8

2030' FNL and 30' FEL
Section 8, T36S - R23E
San Juan County, Utah

Prepared For:

QUINTANA PETROLEUM CORP.

By:

PERMITCO INC.
P.O. Box 44065
Denver, Colorado 80201-4065
303/322-7878

Copies Sent To:

- 4 - BLM - Moab, Utah
- 1 - BLM - Monticello, Utah
- 1 - Div. of State Lands - Natural Resources - Moab, Utah
- 1 - Div. of Oil, Gas & Mining - SIC, Utah
- 3 - Quintana Petroleum Corp. - Denver, CO



ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S-R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

1. The surface formation and estimated formation tops to be encountered are as follows:

| <u>Formation</u> | <u>Depth</u> | <u>Subsea</u> |
|--------------------|--------------|---------------|
| Quaternary Eolians | Surface | |
| Chinle | 2258' | +4158' |
| Shinarump | 2921' | +3495' |
| Hermosa | 5133' | +1283' |
| Ismay | 6491' | - 75' |
| Hovenweep Shale | 6601' | - 185' |
| Lower Ismay | 6654' | - 238' |
| Gothic Shale | 6708' | - 292' |
| Desert Creek | 6725' | - 309' |
| Chimney Rock Shale | 6839' | - 423' |
| T.D. - Akah | 6860' | - 444' |

2. The estimated depths at which oil, gas, water or other mineral bearing zones are expected to be encountered are as follows:

| <u>Substance</u> | <u>Formation</u> | <u>Anticipated Depth</u> |
|------------------|------------------|--------------------------|
| Oil | Ismay | 6491' |
| Oil | Desert Creek | 6725' |

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth cased and cemented. All oil and gas shows will be tested to determine commercial potential.

ONSHORE ORDER NO.
 Quintana Petroleum Corp.
 Caballo Unit Federal 1-8
 2030' FNL and 30' FEL
 Sec. 8, T36S-R23E
 San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

3. Pressure control equipment will consist of a 10", 3000# BOP. (See BOP Diagram attached.)

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

4. a. Casing

The proposed casing program is as follows:

| <u>Purpose</u> | <u>Depth</u> | <u>Hole Size</u> | <u>O.D.</u> | <u>Wt.</u> | <u>Grade</u> | <u>Type</u> | <u>New or Used</u> |
|----------------|--------------|------------------|-------------|------------|--------------|-------------|--------------------|
| Conductor | 0-40' | 17-1/2" | 16# | -- | | | |
| Surface | 0-2258' | 12-1/4" | 9-5/8" | 36# | K-55 | ST&C | New |
| Produc. | 0-6000' | 8-3/4" | 5-1/2" | 15.5# | K-55 | LT&C | New |
| Produc. | 6000-TD | 8-3/4" | 5-1/2" | 17.0# | K-55 | LT&C | New |

- b. Cement

The cementing program will be as follows:

| | |
|----------------|---|
| <u>Surface</u> | <u>Type and Amount</u> |
| 0-2258' | 621 sx Lite with 2% CaCl ₂ and 1/4#/sk Flocele, followed by 200 sx Class B w/2% CaCl ₂ or sufficient to circulate to surface. |

| | |
|-------------------|------------------------|
| <u>Production</u> | <u>Type and Amount</u> |
|-------------------|------------------------|

Will be designed upon completion - sufficient to cover zones of interest.

Anticipated cement tops will be reported as to depth, not the expected number of sacks.

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S-R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

c. Auxiliary Equipment will be as follows:

1. Kelly cock.
2. Float above the bit.
3. A sub with a full opening valve will be on the floor when the kelly is not in use.
4. Monitoring of the system will be done visually.

5. Drilling fluid will be as follows:

| <u>Interval</u> | <u>Mud Type</u> | <u>Mud Wt.</u> | <u>Visc.</u> | <u>F/L</u> | <u>PH</u> |
|-----------------|------------------|----------------|--------------|------------|-----------|
| 0-2258' | Gel/Lime | 8.3-8.6 | 27-35 | N/C | 8.5-9.0 |
| 2258-5100' | Water w/Gel/Lime | | | | |
| | Sweeps | 8.4-8.6 | 27-35 | N/C | 8.5-9.0 |
| 5100-T.D. | Dispersed | 9.0-10.5 | 35-45 | 8-10cc | 10+ |

Bloocie line will be misted to reduce fugative dust when air drilling.

6. Coring, logging and testing programs are as follows:

- a. No cores are anticipated.
- b. The logging program will consist of the following: A Dual Induction SFL or Dual Laterolog MSFL and BHC Sonic/GR will be run from T.D. to base of Surface casing. A CNL Lithodensity will be run over selected zones.
- c. Drill Stem Tests may be run in the Ismay and Desert Creek formations if shows warrant.

ONSHORE ORDER NO.
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S-R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

Whether the well is completed as a dry hole or as a producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager.

7. Abnormal conditions, bottom hole pressures and potential hazards.
 - a. The maximum bottom hole pressure to be expected is 3800 psi.
8. Anticipated Starting Dates and Notifications of Operations
 - a. Quintana Petroleum Corp. plans to spud the Caballo Unit Federal #1-8 immediately upon approval of this application and intends to complete the well within approximately one month after the well has reached T.D.
 - b. Written notification in the form of a Sundry Notice will be submitted to the BLM District Manager in Moab, Utah and the Div. of Oil, Gas & Mining within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.
 - d. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the BLM District Manager in Moab, Utah and the Div. of Oil, Gas & Mining.
 - e. Should the well be successfully completed for production, the BLM District Manager in Moab, Utah and the Div. of Oil, Gas & Mining will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.

ONSHORE ORDER NO
Quintana Petroleum Corp.
Caballo Unit Federal 1-8
2030' FNL and 30' FEL
Sec. 8, T36S-R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

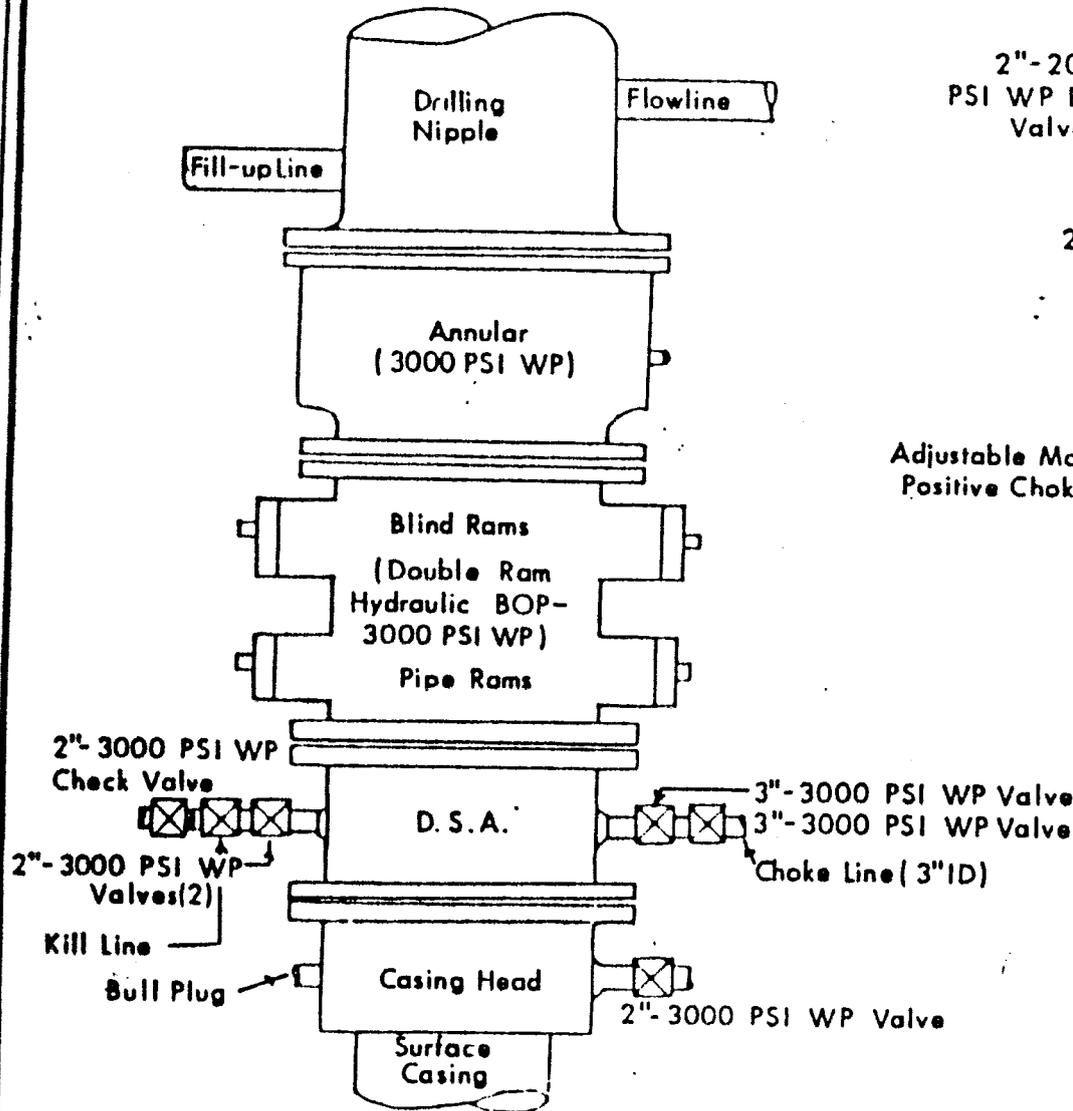
- f. A "Subsequent Report of Abandonment" will be filed with the Div. of Oil, Gas & Mining within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the surface owner.
- g. Approval to vent/flare gas during initial well evaluation will be obtained from the BLM District Manager in Moab, Utah. This preliminary approval will not exceed 30 days. Approval to vent/flare beyond this initial test period will require approval from the BLM District Manager in Moab, Utah.
- h. Upon completion of approved plugging, a regulation marker will be erected. The marker will be constructed as follows: Above ground pipe. The top of the marker will be closed or capped.
- i. The following minimum information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

"Well number, location by 1/4 1/4, section, township and range". "Lease number".

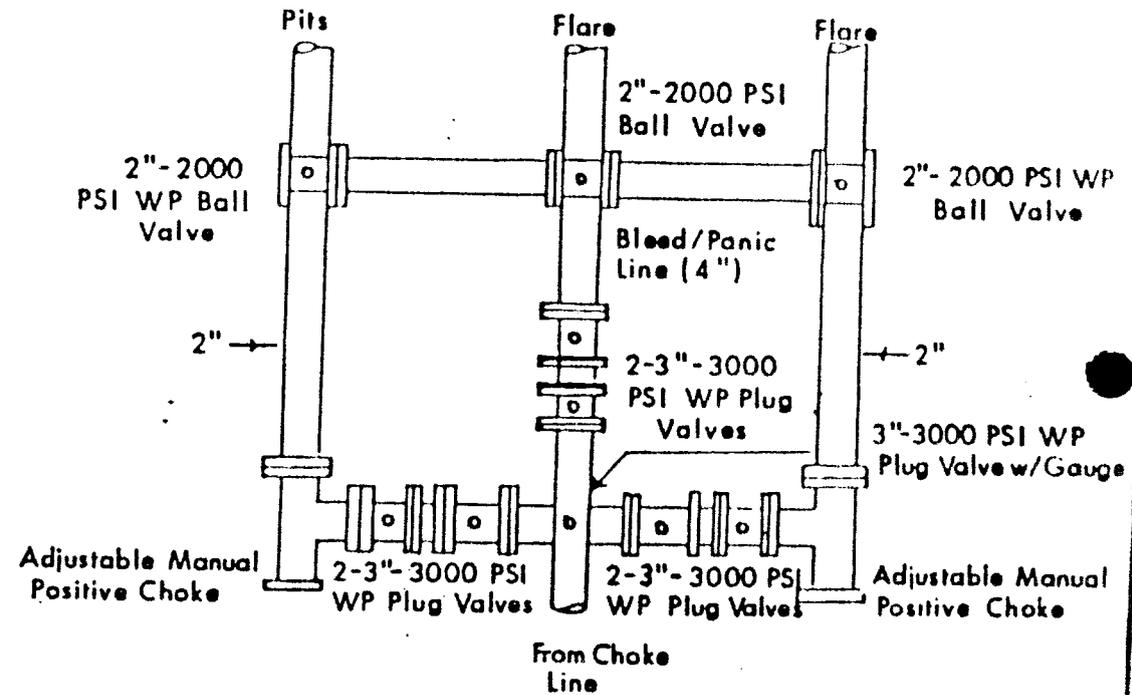


Permitco Incorporated
A Petroleum Permitting Company

BOP SCHEMATIC
3000 PSI WORKING PRESSURE



PLAN VIEW CHOKES MANIFOLD



The hydraulic closing unit will be located more than 30' from the wellhead. Choke & bleed/panic lines will go to the pit and flare. All connections in choke line and manifold will be flanged or welded. All flanges should be ring joint gasket type. All turns in lines shall be constructed using targeted 90° tees or block ells. All lines shall be anchored.

Quintana

Denver, Colorado

BOPE SCHEMATIC

RECEIVED

JUN 27 1988

DIVISION OF
OIL, GAS & MINING

| | |
|------|-----|
| FILE | NRD |
| HJG | FRB |
| STG | |
| | |
| | |
| | |
| | |
| FILE | |

3162 (U-065)
(U-23520)

Moab District
P. O. Box 970
Moab, Utah 84532

JUN 23 1988

Quintana Petroleum Corp.
1050-17th Street, Suite 400
Denver, CO 80201-4065

CONFIDENTIAL

Re: Applications
Caballo Federal Unit 1-8
2510' FSL and 240' FWL
Sec. 8, T. 36 S., R. 23 E.
San Juan County, Utah
Fee 43-037-31401

Caballo Unit Federal 4-9
2300' FNL and 200' FWL
Sec. 9, T. 36 S., R. 23 E.
San Juan County, Utah
Lease U-23520

Gentlemen:

We have been advised by letter dated June 14, 1988, that you no longer intend to drill the permitted Caballo Federal Unit 1-8 at the above footages. Also, the Notice of Staking (NOS) received for the Caballo Unit Federal 4-9 is no longer applicable.

In view of the foregoing, we are rescinding approval on the Caballo Federal Unit 1-8 with footages of 2510' FSL and 240' FWL and returning your NOS. Should you intend to drill these locations at a future date, new applications must be submitted.

If you have any questions, please contact the Branch of Fluid Minerals (801) 259-6111.

Sincerely yours,

/s/ Kenneth V. Rhea
District Manager

Enclosure:
Notice of Staking

cc: San Juan Resource Area (w/o encl.) ACTING

Permitco Inc. - Agent
Denver, CO 80201-4065 (w/o encl.)

State of Utah ✓
Division of Oil, Gas and Mining
Salt Lake City, Utah 84180-1203 (w/o encl.)

CFreudiger/cf 6/22/88

CONFIDENTIAL RECEIVED
 SUBMIT IN THIS LOCATION
 (Other Instructions on Reverse Side)
 JUN 27 1988

LCR

Form 3160-3
 (November 1983)
 (formerly 9-321C)

Form approved.
 Budget Bureau No. 1004-0136
 Expires August 31, 1985

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

DIVISION OF

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 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR 303/628-9211 1050-17th St., Suite 400
 Quintana Petroleum Corp. Denver, CO 80265

3. ADDRESS OF OPERATOR 303/322-7878 P.O. Box 44065
 Permitco Inc. - Agent Denver, CO 80201-4065

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface 2030' FNL and 30' FEL
 At proposed prod. zone SE NE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 25 miles southeast of Monticello, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 30'

16. NO. OF ACRES IN LEASE 2387.42

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. 2970'

19. PROPOSED DEPTH 6860'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GE, etc.) 6435' GR

22. APPROX. DATE WORK WILL START* Immediately upon approval of this application.

5. LEASE DESIGNATION AND SERIAL NO.
 U-23520

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 Caballo Unit

8. FARM OR LEASE NAME
 Caballo Federal

9. WELL NO.
 #1-8

10. FIELD AND POOL, OR WILDCAT
 Caballo

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 8, T36S - R23E

12. COUNTY OR PARISH
 San Juan

13. STATE
 Utah

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" | 36# | 2258' | 821 sx or suffic to circ to surf. |
| 8-3/4" | 5-1/2" | 15.5# & 17# | 6860' | Will be designed upon completion. Sufficient to cover zones of interest. |

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive 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 [Signature] TITLE Consultant for Quintana Petroleum Corp. DATE 5/31/88

(This space for Federal or State office use)

PERMIT NO. 43-037-31401 APPROVAL DATE _____

APPROVED BY /s/Kenneth V. Rhea TITLE Acting District Manager DATE 6/23/88

CONDITIONS OF APPROVAL, IF ANY:

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

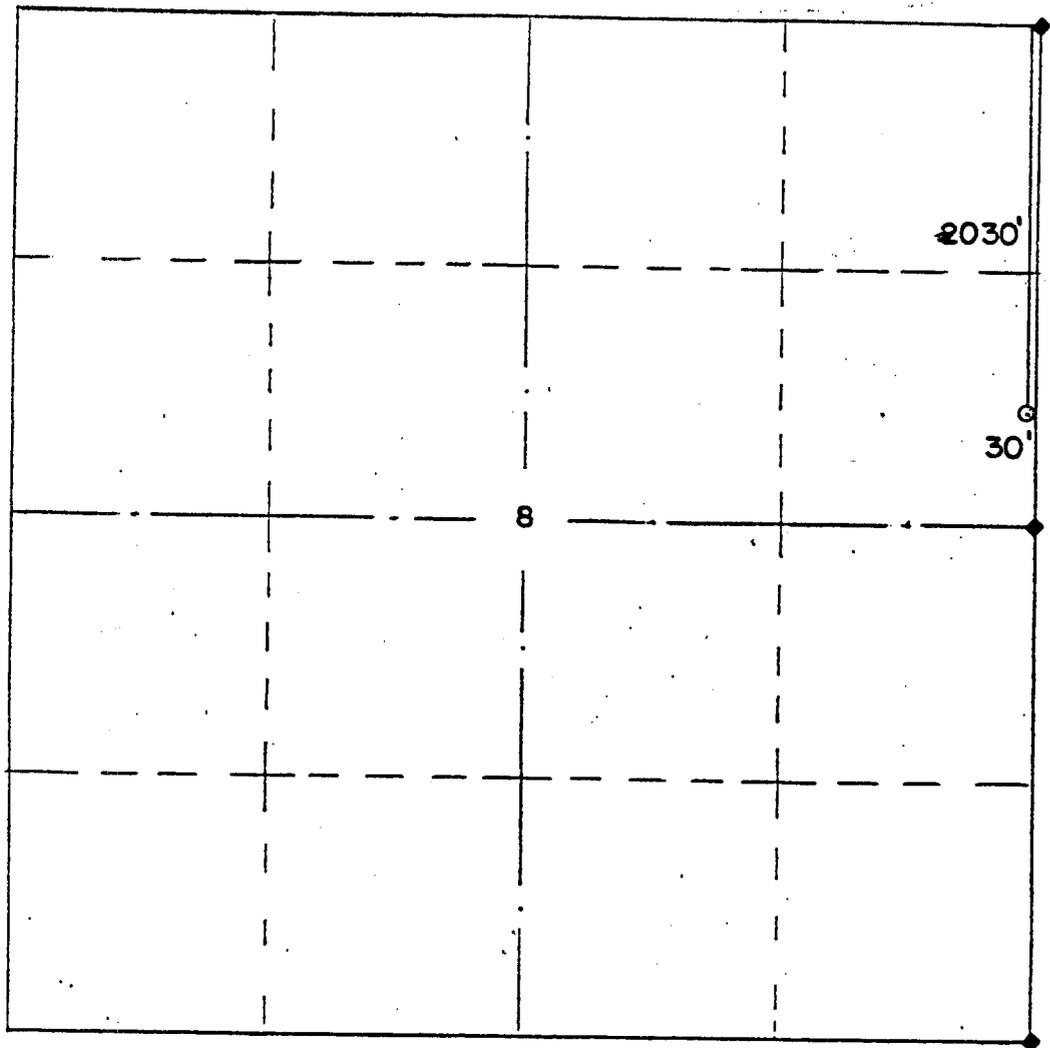
CONDITIONS OF APPROVAL ATTACHED

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

STATE OF UTAH

WELL LOCATION AND ACREAGE DEDICATION PLAT



1"=1000'
 ◆ brass cap

WELL LOCATION DESCRIPTION:
 QUINTANA PETROLEUM, Caballo Federal #1-8
 2030'FNL & 30'FEL
 Section 8, T.36 S., R.23 E., SLM
 San Juan County, Utah
 6435' ground elevation
 Reference: SP 141+38, 2155' FN, 133' FW
 Section 9, 6440 grd.

The above plat is true and correct to my knowledge and belief.

10 May 1988

REGISTERED LAND SURVEYOR
 No. 5703
 GERALD G. HUDDLESTON
 Gerald G. Huddleston, LS
 STATE OF UTAH

Quintana Petroleum Corp.
Well No. Caballo Federal Unit 1-8
Sec. 8, T. 36 S., R. 23 E.
San Juan County, Utah
Lease U-23520

CONDITIONS OF APPROVAL

Approval of this application 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.

Quintana Petroleum Corp., is the bonded entity on this application. Liability will remain with the bonded party named until we are formally notified by letter of the new bonded entity in reference to this Application for Permit to Drill.

A. DRILLING PROGRAM

BOP Specification and Testing:

All ram-type preventers shall be tested to the rated working pressure of the stack or to 70% of the internal yield of the casing, whichever is less.

The annular-type preventer shall be tested to 50% of its rated working pressure.

CASING PROGRAM

Surface casing shall be set at least 50 feet into the Chinle formation, regardless of the depth the Chinle is encountered.

PLUGGING PROCEDURES AND FINAL ABANDONMENT

In addition to receiving plugging instructions from the Moab District Office, Operator will notify for witnessing the San Juan Resource Area Office 24 hours prior to plugging at (801) 587-2141 (on duty hours) or at (801) 587-2144 (off duty hours).

Section V. of Onshore Oil and Gas Order No. 1 requires that operators submit three, separate Sundry Notices (Form 3160-5) in relation to the plugging and abandonment of any jurisdictional well, i.e., a Notice of Intent to Abandon (NIA) as a precursor to the commencement of actual abandonment operations or as a written confirmation of an orally prescribed abandonment program; a Subsequent Report of Abandonment (SRA) reflecting the actual downhole abandonment operations performed, which is to be submitted within 30 days of completing those operations; and, a notice from the operator that the required surface reclamation requirements have been completed and, thus, the site is now ready for inspection. Section V. also states that "Final abandonment shall not be approved until the surface reclamation work required by the approved drilling permit or approved abandonment notice NIA has been completed to the satisfaction of the San Juan Resource Area Office.

B. THIRTEEN-POINT SURFACE USE PLAN

1. Initial blading of location and access will be monitored by a BLM approved archaeologist. Archaeological sites adjacent to the location will be fenced for avoidance (one strand of wire and blue flagging).

NOTIFICATIONS

Notify the San Juan Resource Area, at (801) 587-2144 for the following:

2 days prior to commencement of dirt work, construction or reclamation;

1 day prior to spudding;

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed:

Dale Manchester, Petroleum Engineer Office Phone: (801) 259-6111

Home Phone: (801) 259-6239

Lynn Jackson, Chief, Branch of Fluid Minerals

Office Phone: (801) 259-6111

Home Phone: (801) 259-7990

Paul Brown, I&E Coordinator

Office Phone: (801) 259-6111

Home Phone: (801) 259-7018

24 hours advance notice is required for all abandonments.

Caballo Federal Unit Well No. 1-8
Quintana Petroleum Corp.
Application for Permit to Drill Conditions of Approval

1. Upon excavation of reserve pit and prior to placing fluid in the pit, the operator shall notify the DOGM inspector in Moab, Utah, Chip Hutchinson, work phone 259-8151 or home phone 259-5184, to allow inspection of reserve pit and determination of pit lining requirement.
2. The operator shall notify DOGM's Moab inspector at least four hours prior to running and cementing the 9-5/8" surface casing string.
3. The operator shall notify DOGM's Moab inspector at least four hours prior to initial testing of BOP equipment and testing which occurs before drilling out of casing.
4. Drill stem tests shall be conducted in accordance with Utah OSHA rules, and the operator shall notify DOGM's Moab inspector at least four hours before commencing such tests.

0458T-25

3162 (U-065)
(U-23520)

Moab District
P. O. Box 970
Moab, Utah 84532

RECEIVED
NOV 06 1989

DIVISION OF
OIL, GAS & MINING

Quintana Petroleum Corporation
1050 17th Street, Suite 400
Denver, Colorado 80265

Re: Rescinding Application for Permit to Drill
Well No. Caballo Federal Unit 1-8
Sec. 8, T. 36 S., R. 23 E.
San Juan County, Utah
Lease U-23520

Gentlemen:

The Application for Permit to Drill the referenced well was approved on June 23, 1988. Since that date, no known activity has transpired at the approved location.

Applications for permit to drill are effective for a period of one year. In view of the foregoing, this office is rescinding and returning the referenced application. Should you intend to drill at this location at a future date, a new application for permit to drill must be submitted.

If you have any questions, please contact the Branch of Fluid Minerals at (801) 259-6111.

Sincerely yours,
/s/ GENE NODINE

District Manager

Enclosure: Application for Permit to Drill

cc: San Juan Resource Area (w/o encl.)
State of Utah, Division of Oil, Gas & Mining (w/o encl.)
Permitco Inc. (w/o encl.)

bcc: USO, U-942 (w/o encl.)

KJones:kj:11/01/89



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

November 13, 1989

Quintana Petroleum Corporation
1050 17th Street, Suite 400
Denver, Colorado 80265

Gentlemen:

Re: Caballo Federal Unit 1-8, Sec. 8, T. 36S, R. 23E, San Juan County, Utah
API No. 43-037-31401

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

A handwritten signature in cursive script that reads "Don T. Staley".

Don T. Staley
Administrative Supervisor

TAS/lcd

cc: D.R. Nielson
R.J. Firth
BLM - Moab
Well file

HOI2/5