Submit to Appropriate
District Office
State Lease - 4 copies
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DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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Form C-102
Revised 1-1-89

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
Meridian Oil Inc.	Sunray G	2R

Unit Letter	Section	Township	Range	County
O	21	31 North	9 West NMPM	San Juan

Actual Footage Location of Well:
995 feet from the South line and 1755 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
6200'	Mesa Verde	Blanco	314.96 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

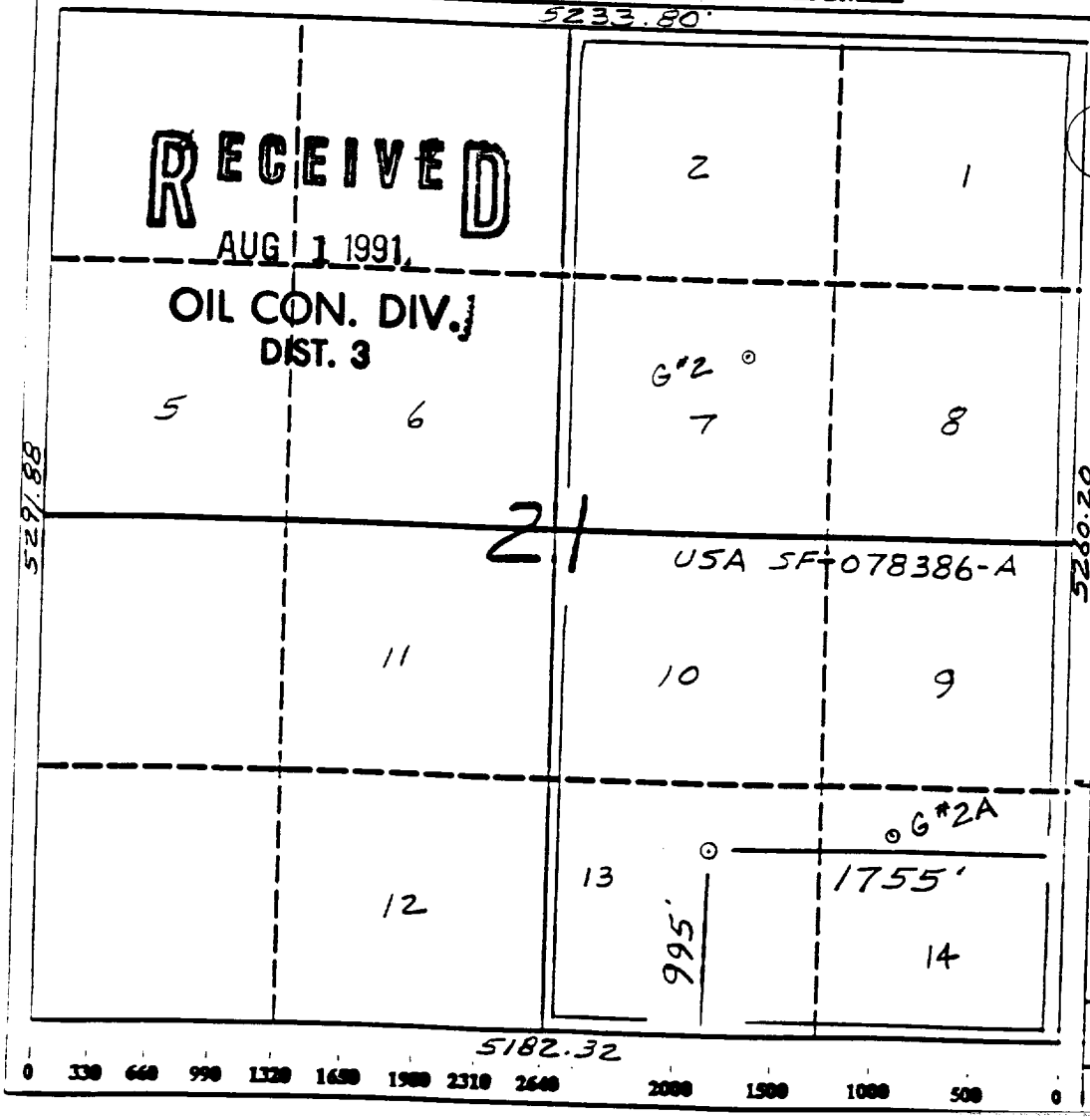
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, force-pooling, etc.?

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

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

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



OPERATOR CERTIFICATION

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

Signature: Peggy Bradfield

Printed Name: Peggy Bradfield

Position: Regulatory Affairs

Company: Meridian Oil Inc.

Date: 6-17-91

SURVEYOR CERTIFICATION

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

Date Surveyed: 5-13-91

Signature & Seal of Professional Surveyor: NEW MEXICO 6857 REGISTERED LAND SURVEYOR

Certificate No. Neale C. Edwards 6857

I. General Well Data

A. Well Data:

Well Name & Number--- Sunray G #2R
Location---------- SW/SE/4 Sec.21,T31N,R09W
Surveyed Footages---- 995'FSL - 1775'FEL
County, State-------- San Juan County, NM
Field--------------- Blanco Mesaverde
Formation---------- Mesaverde
Surveyed Elevation--- 6200 'GL

B. Formation Tops:

	TVD	MD*
San Jose ----------	Surf	Surf
Ojo Alamo----------	1474 '	1474 '
Kirtland----------	1530 '	1530 '
Fruitland----------	2693 '	2693 '
Pictured Cliffs----------	3063 '	3063 '
Lewis----------	3294 '	3294 '
Intermediate TD----------	4600 '	4600 '
Kick-Off Point----------	4766 '	4766 '
Mesaverde----------	4807 '	4807 '
Menefee----------	4936 '	4938 '
Point Lookout----------	5282 '	5408 '
End of Build Section----------	5337 '	5616 '
Total Depth----------	5607 '	8725 '

* Note: Measured depths are provided as a general guide based on the proposed directional program. Measured depths will vary with the actual well program.

C. Proposed Directional Program:

Depth TVD/MD (ft)	Drift (deg)	Build/Drop (deg/100')	Azimuth (deg)	East West	North South	Departure (ft)	Comments
4766 / 4766	0.0	0.0	N 0.0E	0'E	0'S	0	Kick-Off Point
5337 / 5616	85.0	10.0	N15.3E	138'E	505'N	523	End of Build
5607 / 8725	85.0	0.0	N15.3E	955'E	3491'N	3620	Total Depth

* Note: Reference Exhibits 1 and 2 for proposed directional program. The well will penetrate the Mesaverde interval and will be drilled to total depth within the orthodox boundaries (790' setbacks) of the E/2 of Section 21.

D. Logging/Coring/DST:

Wireline Logging - Open Hole: None
Mud Logs/Coring/DST
Mud Logs - 4766'TVD to Total Depth.
Coring/DST: None

E. Wellhead

* 13 5/8" 3000 psi Type C-22 X 13 3/8" Slip-On-Weld Casinghead will be used to intermediate casing point.
* 11" 3000 psi Type C-22 X 9 5/8" Slip-On-Weld Casinghead will be used to total depth and for permanent installation.

F. **BOP Specifications and Tests**

* A 13 5/8" 2000 psi minimum double gate BOP equipped with pipe and blind rams will be used from the surface casing shoe to intermediate total depth (reference Figure #1A).
* An 11" 2000 psi minimum double gate BOP equipped with pipe and blind rams will be used from the intermediate casing shoe to total depth (reference Figure #1B).
* A 2" 2000 psi minimum choke manifold will be used from the surface casing shoe to total depth (reference Figure #2).
* A rotating head rubber will be installed for all drilling operations below the surface casing shoe.
* While the drill string is in use, pipe rams will be actuated once each day to test proper functioning.
* Blind rams will be actuated once each trip to test proper functioning.
* The upper kelly cock valve with handle and drill string safety valves to fit each drill string will be available on the rig floor at all times.
* Hand wheels for the pipe and blind rams will be installed at all times.
* A BOP pit level drill will be conducted for each drilling tour prior to drilling the top of the Fruitland formation.
* Prior to drilling out the surface casing, rams and casing will be tested to 1000 psi for 30 minutes.
* Prior to drilling out the intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.
* All BOP test and drills will be recorded in the IADC Drilling Report.

II. **Drilling:**

Mud Program

Interval(ft)	Type	Weight(ppg)	Visc (s/qt)	Fluid Loss
0 - 500	Water-Based	8.4 - 8.9	40-50	No Control
500 - 4600	Water-Based	8.4 - 10.9	35-50	< 16cc
4680 - 8423	Gas/Mist	N/A	N/A	N/A

* Pit Levels will be visually monitered to detect Gain or Loss of circulating fluid volume.

Special Drilling Considerations

Intermediate Hole - Mud-Drilled

* The Fruitland Coal interval is overpressured. While drilling, any flow will be diverted at the surface until control by a mud weight increase is required.

Production Hole - Gas/Mist Drilled

* An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
* The blooie line will be equipped with an automatic igniter or pilot light.
* Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
* Engines will have spark arresters or water cooled exhaust.
* Deduster equipment will be utilized.
* The rotating head will be properly lubricated and maintained.
* A float valve will be utilized above the bit.
* Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Deviation/Surveys

-Deviation surveys will be conducted every 500' to kick-off point.
-A multi-shot survey will be conducted from intermediate casing point to the base of the surface casing to verify bottom-hole location.
-Below kick-off point, directional surveys will be conducted every 30' - 300' utilizing MWD instruments.
-Directional surveys will be corrected for magnetic declination.

III. **Materials:**

Casing Program

Interval(ft)	Hole Size	Csg. Size	Weight	Grade	Thread	Length	Cond
0 - 500	17 1/2"	13 3/8"	48.0#	H-40	8rd ST&C	500 '	New
0 - 3200	12 1/4"	9 5/8"	36.0#	K-55	8rd ST&C	3200 '	New
3200 - 4100	12 1/4"	9 5/8"	40.0#	K-55	8rd ST&C	900 '	New
4100 - 4600	12 1/4"	9 5/8"	40.0#	N-80	8rd LT&C	500 '	New
4450 - 8725	8 1/2"	5 1/2"	17.0#	N-80	BT&C	4275 '	New

Surface Casing Float Equipment

* 13 3/8" Sawtooth guide shoe on bottom.
* Centralizers as follows:
  - 4 Bowspring Centralizers: one (1) on bottom joint and one every fourth joint to surface.

Intermediate Casing Float Equipment

* 9 5/8" Cement Nose Guide Shoe.
* 9 5/8" 80' Shoe Joint above Guide Shoe.
* 9 5/8" Float Collar.
* 9 5/8" Multiple Stage Cementing Tool set at 1600 '.
* Centralizers as follows:
  - 3 Bowspring Centralizers every other joint off bottom.
  - 2 Turbolizing Centralizers: one (1) below and one (1) above the base of the Ojo Alamo at 1530 '.
  - 10 Bowspring Centralizers every fourth joint above the Ojo Alamo to the base of the surface casing.

Production Casing Float Equipment

* 5 1/2" Down-Jet Cement Nose Float Guide Shoe at 8725'MD.
* 5 1/2" Float Collar set at 6450'MD.
* 5 1/2" External Casing Packer set at 6300'MD.
* 5 1/2" Multiple Stage Cementing Collar above External Casing Packer.
* Centralizers as follows:
  - 46 Bowspring Centralizers to the base of the intermediate casing spaced every joint for nine joints followed by a bowspring turbolizer.

* Note - ECP placement may vary depending on formation gauges.

IV. **Cementing:**

Surface Casing

Cement to Surface with 590 sacks of Class "B" Cement with 3% Calcium Cloride and 1/4# Flocele per sack.
Slurry volume: 694 ft^3. Excess slurry: 200%.

Slurry Weight (ppg)	15.6
Slurry Yield (ft^3/sack)	1.18
Water Requirement (gal/sack)	5.20

Intermediate Casing

First Stage:
Cement to Stage Tool. Lead with 490 sacks of 65/35 Class "B" Pozmix Cement with 6% Gel, 2% Calcium Chloride, 5# Gilsonite per sack and 1/4# Flocele per sack. Tail with 200 sacks of Class "B" Cement with 2% Calcium Chloride.
Slurry volume: 1080 ft^3. Excess slurry: 15%.

	Lead	Tail
Slurry Weight (ppg)	12.6	15.6
Slurry Yield (ft^3/sack)	1.77	1.18
Water Requirement (gal/sack)	8.74	5.20

Second Stage:
Cement to Surface. Lead with 560 sacks of 65/35 Class "B" Pozmix Cement with 6% Gel, 2% Calcium Chloride, 5# Gilsonite per sack and 1/4# Flocele per sack. Tail with 50 sacks of Class "B" Cement with 2% Calcium Chloride.
Slurry volume: 1002 ft^3. Excess slurry: 100%.

	Lead	Tail
Slurry Weight (ppg)	12.6	15.6
Slurry Yield (ft^3/sack)	1.77	1.18
Water Requirement (gal/sack)	8.74	5.20

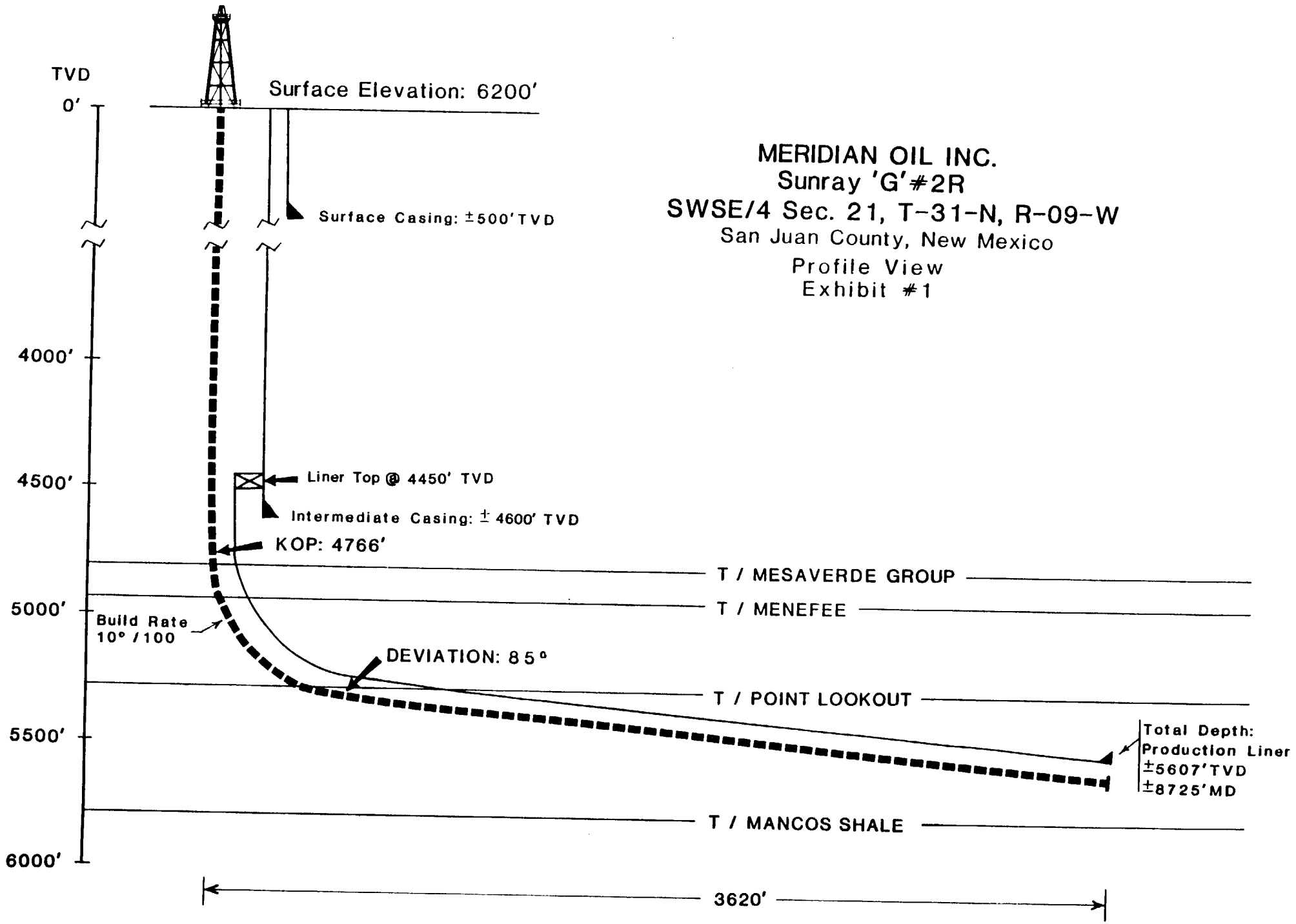
Production Casing

From 8725' to 6300' will be uncemented. From 6300' to 4450' will be cemented. Cement to circulate Liner Top. Lead with 220 sacks of 50/50 Class "B" Pozmix Cement with 2% Gel, and 0.6% FLA. Tail with 300 sacks of 50/50 Class "A" Premium Pozmix Cement with 2% Gel, 5# Calseal per sack, 6# Gilsonite per sack, 0.4% Fluid Loss Additive, 0.1% Expansion Agent, 0.2% Dispersant, and 1/4# Cellophane Flakes per sack.
Slurry volume: 672 ft^3. Excess slurry: 50%.

	Lead	Tail
Slurry Weight (ppg)	13.4	13.3
Slurry Yield (ft^3/sack)	1.24	1.38
Water Requirement (gal/sack)	5.40	5.80

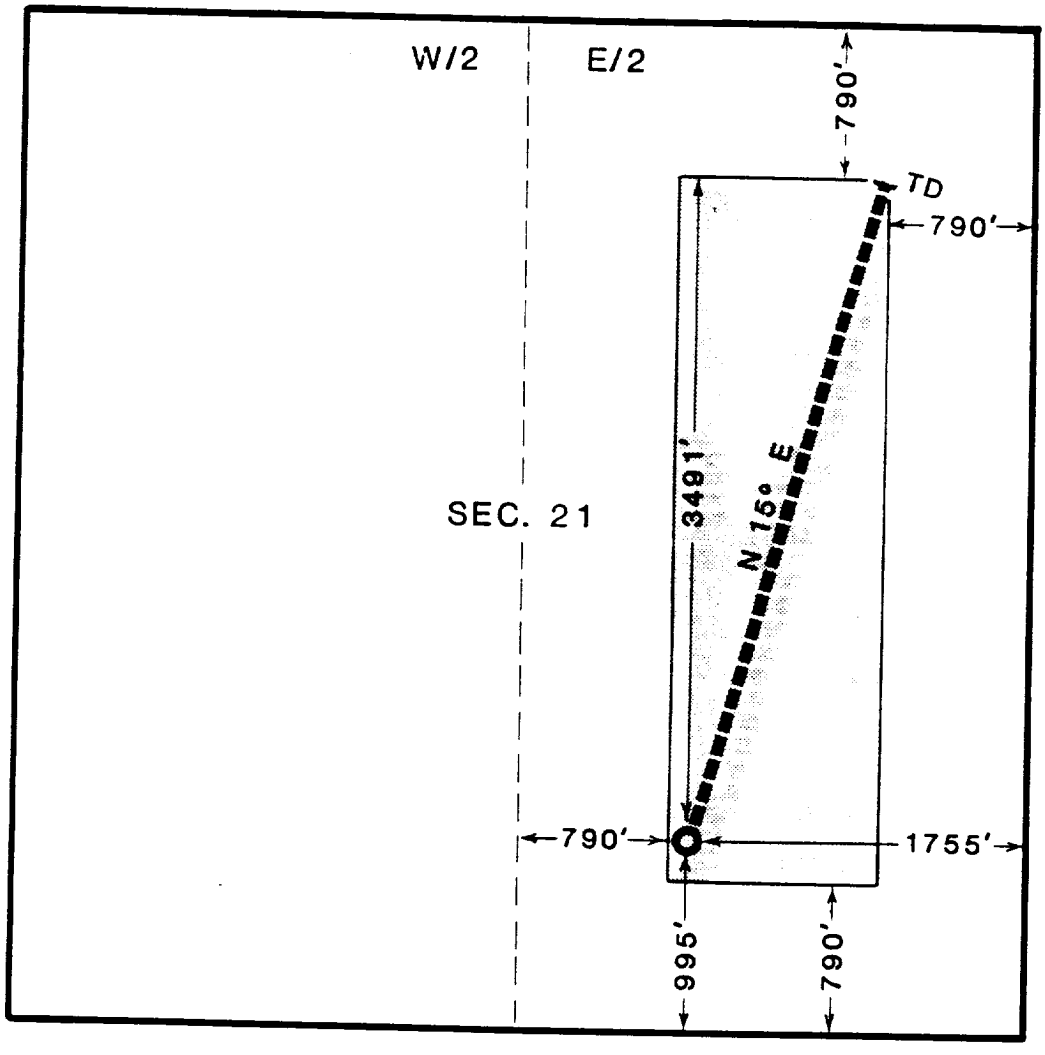
General
* If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/mud contamination or cement hydration.
* The pipe will be rotated and/or reciprocated, if hole conditions permit.
* The Cementing Contractor will provide the BLM with a chronological log of the pump rate, pump pressure, slurry density and volume for all cement jobs.

V. **Additional Information:**
* The Mesaverde formation will be completed.
* The E/2 of Sec.21,T31N,R09W is dedicated to this well.
* This gas is dedicated.



MERIDIAN OIL INC.
Sunray 'G'#2R
SWSE/4 Sec. 21, T-31-N, R-09-W
San Juan County, New Mexico
Profile View
Exhibit #1

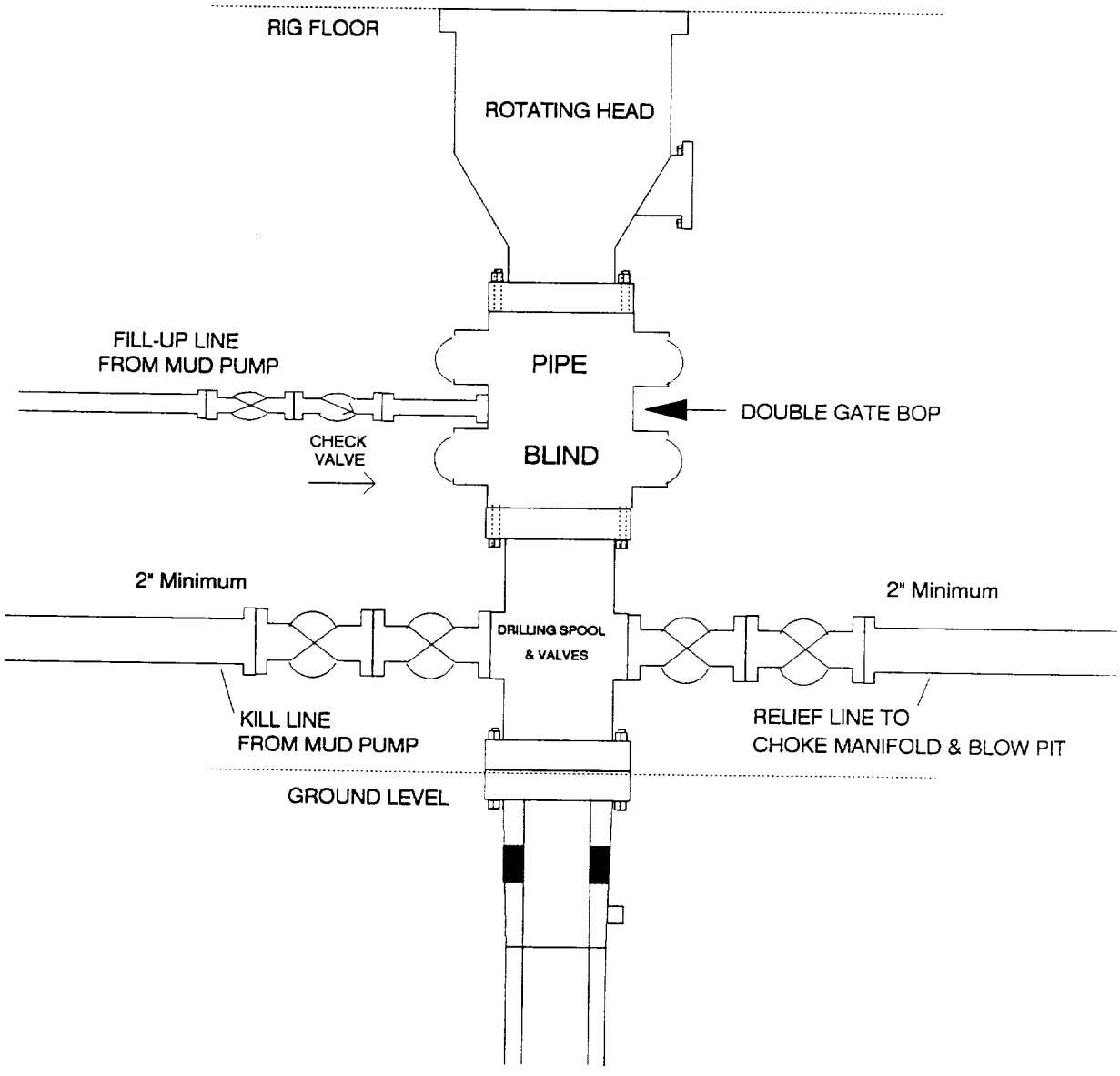
MERIDIAN OIL INC.
Sunray 'G' #2R
SWSE/4 Sec. 21, T-31-N, R-09-W
San Juan County, New Mexico
Plan View
Exhibit #2



Surface Location: 995' FSL, 1755' FEL

Drilling Window

MERIDIAN OIL INC.
SUNRAY G #2R
BOP Configuration



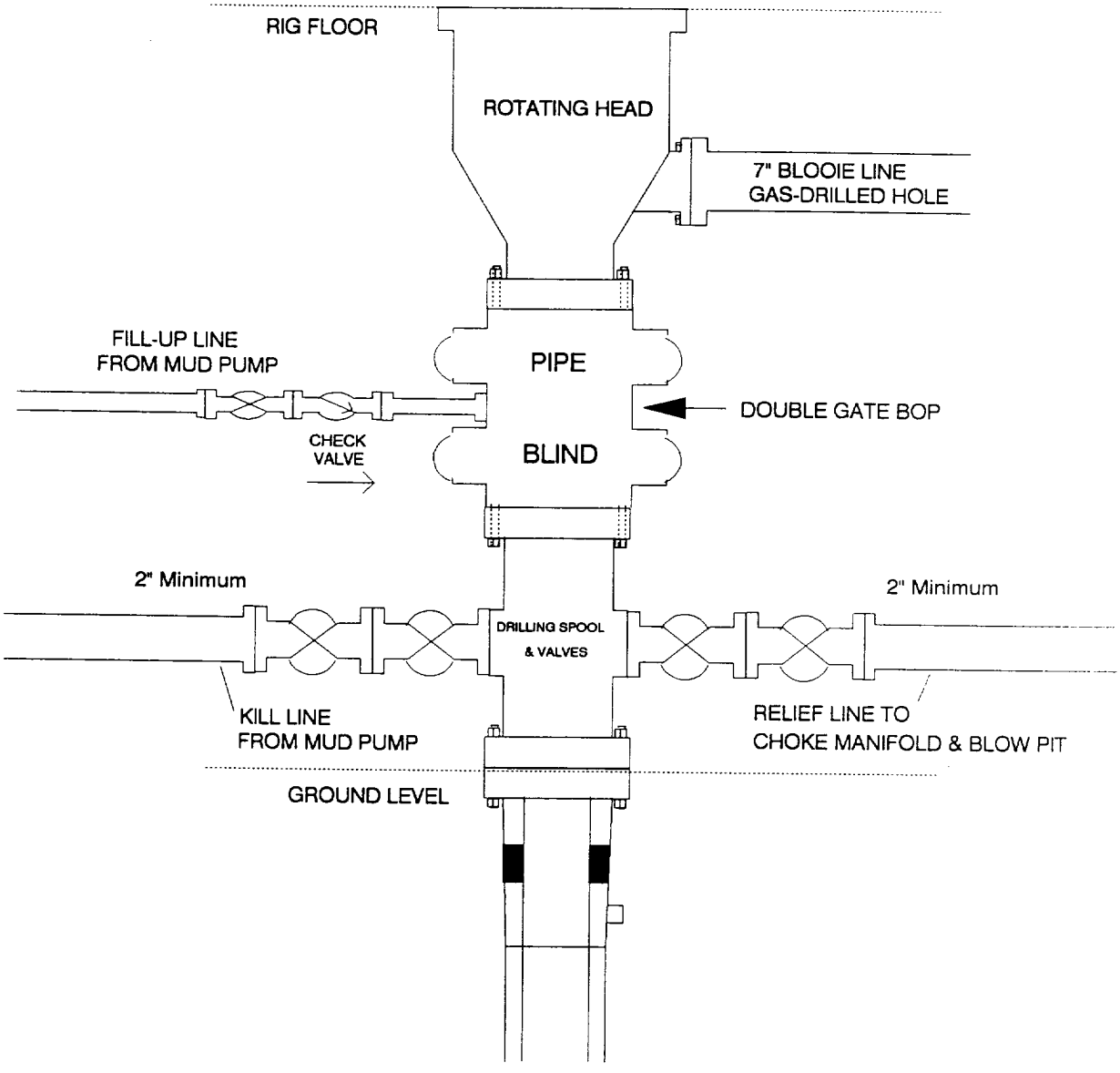
Minimum BOP installation for the SUNRAY G #2R Mesaverde well from surface to Intermediate Total Depth. 13 5/8" 2000psi working pressure double gate BOP to be equipped with blind and pipe rams. A rotating head to be installed on the top of BOP. All equipment is 2000psi working pressure/or greater.

Figure #1A

MERIDIAN OIL INC.

SUNRAY G #2R

BOP Configuration



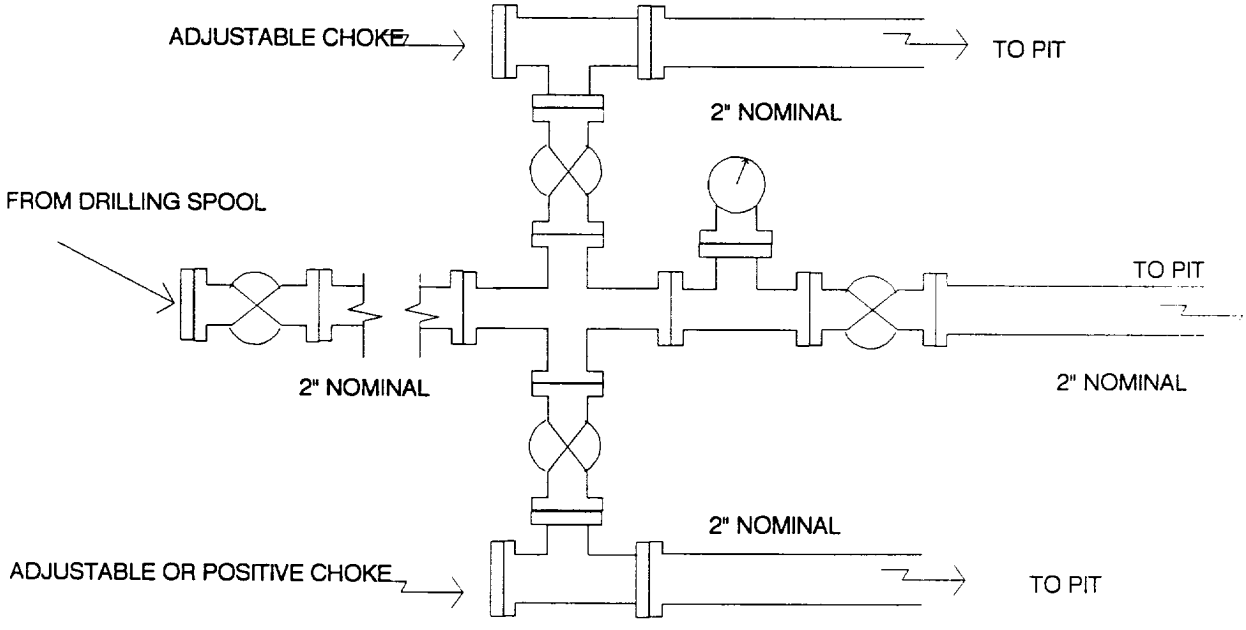
Minimum BOP installation for the SUNRAY G #2R Mesaverde well from Intermediate Total Depth to Total Depth. 11" 2000psi working pressure double gate BOP to be equipped with blind and pipe rams. A rotating head to be installed on the top of BOP. All equipment is 2000psi working pressure/or greater.

Figure #1B

MERIDIAN OIL INC.

SUNRAY G #2R

Choke Manifold Configuration



Minimum choke manifold installation from surface to Total Depth.
2000psi working pressure equipment with two chokes.

Figure #2

Multi-Point Surface Use Plan
Meridian Oil Inc.
Sunray G #2R

1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.

2. Planned Access Road - Refer to Map No. 1. The required new access road is shown on Map No. 1. The gradient, shoulder, crowning and other design elements will meet or exceed those specified by the responsible government agency. The new access road surface will not exceed twenty feet (20') in width. No additional turnarounds or turnouts will be required. Upon completion of the project, the access road will be adequately drained to control soil erosion. Approximately 200' of access road will be constructed. Pipelines are indicated on Map No. 1A.

3. Location of Existing Wells - Refer to Map No. 1A.

4. Location of Existing and/or Proposed Facilities if Well is Productive -

   a. On the Well Pad - Refer to Plat No. 1, anticipated production facilities plat.

   b. Off the Well Pad - Anticipated facilities off the well pad will be applied for as required.

5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from Pump Wash Water Hole #1 located in SW/4 Section 12, T-30-N, R-09-W, New Mexico.

6. Source of Construction Materials - If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.

7. Methods of Handling Waste Materials - All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Hazardous waste will be disposed of in accordance with Federal Regulations.

8. Ancillary Facilities - None anticipated.

9. Wellsite Layout - Refer to the location diagram (Plat No. 2) and to the wellsite cut and fill diagram (Plat No. 2A). The Blow Pit will be constructed with a 2'/160' grade to allow positive drainage to the Reserve Pit and prevent standing liquids in the Blow Pit.

10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.

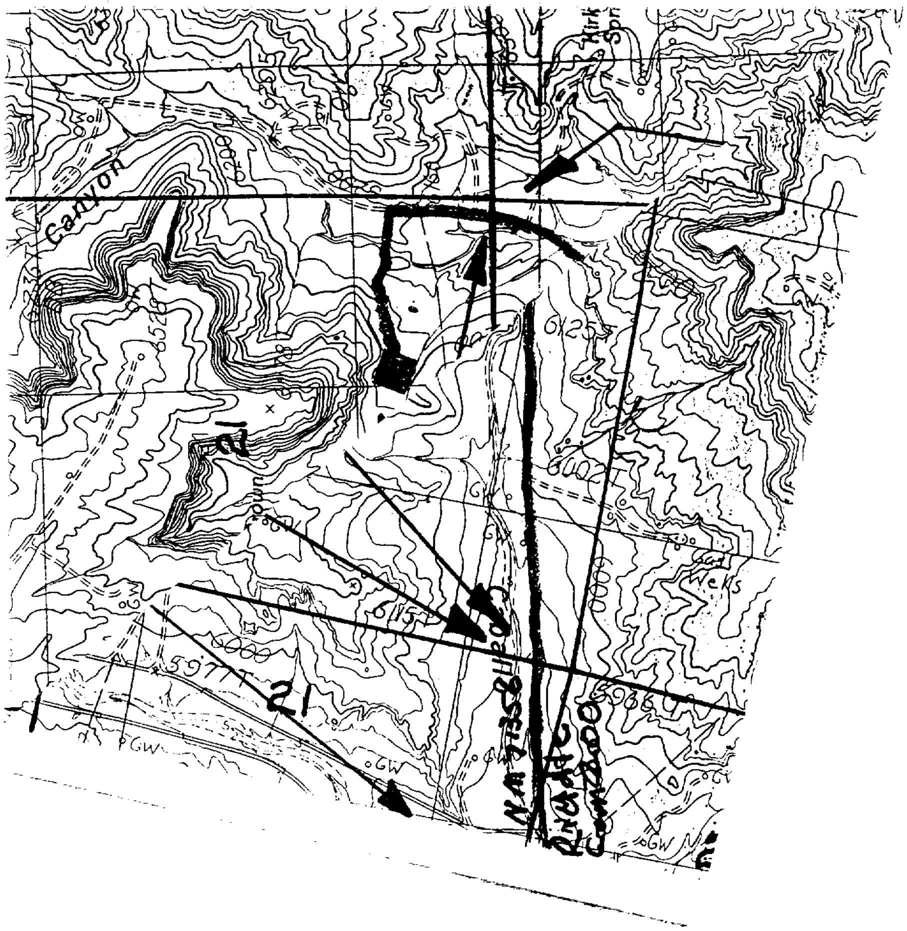
11. Surface Ownership - Bureau of Land Management.

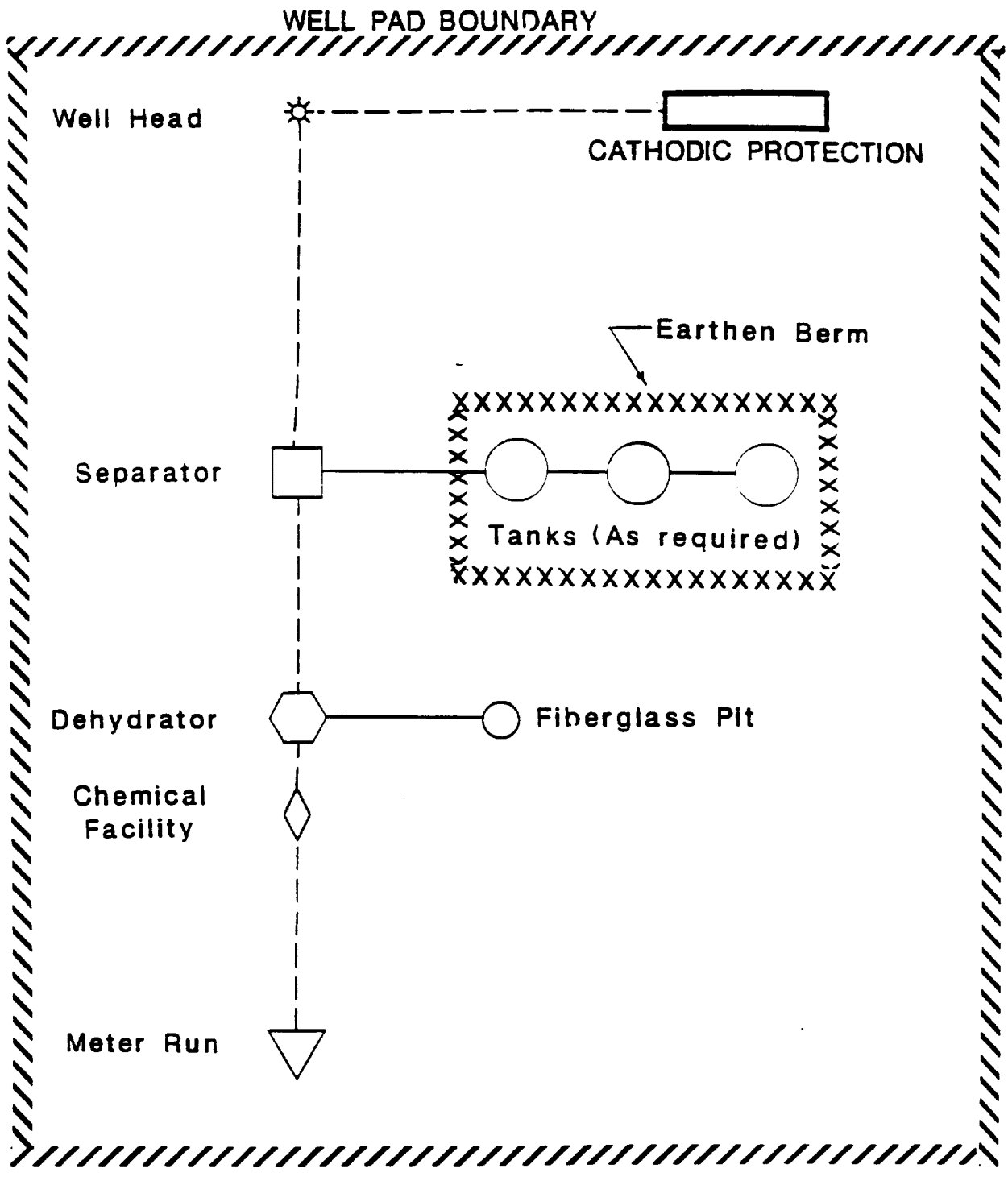
12. Other Information - Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

13. Operator's Representative and Certification - Meridian Oil Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Meridian Oil Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Regional Drilling Engineer

JWC/adw


Canyon
6125
6002
Gas Wells
6115
6000
5977
5986
21
GW

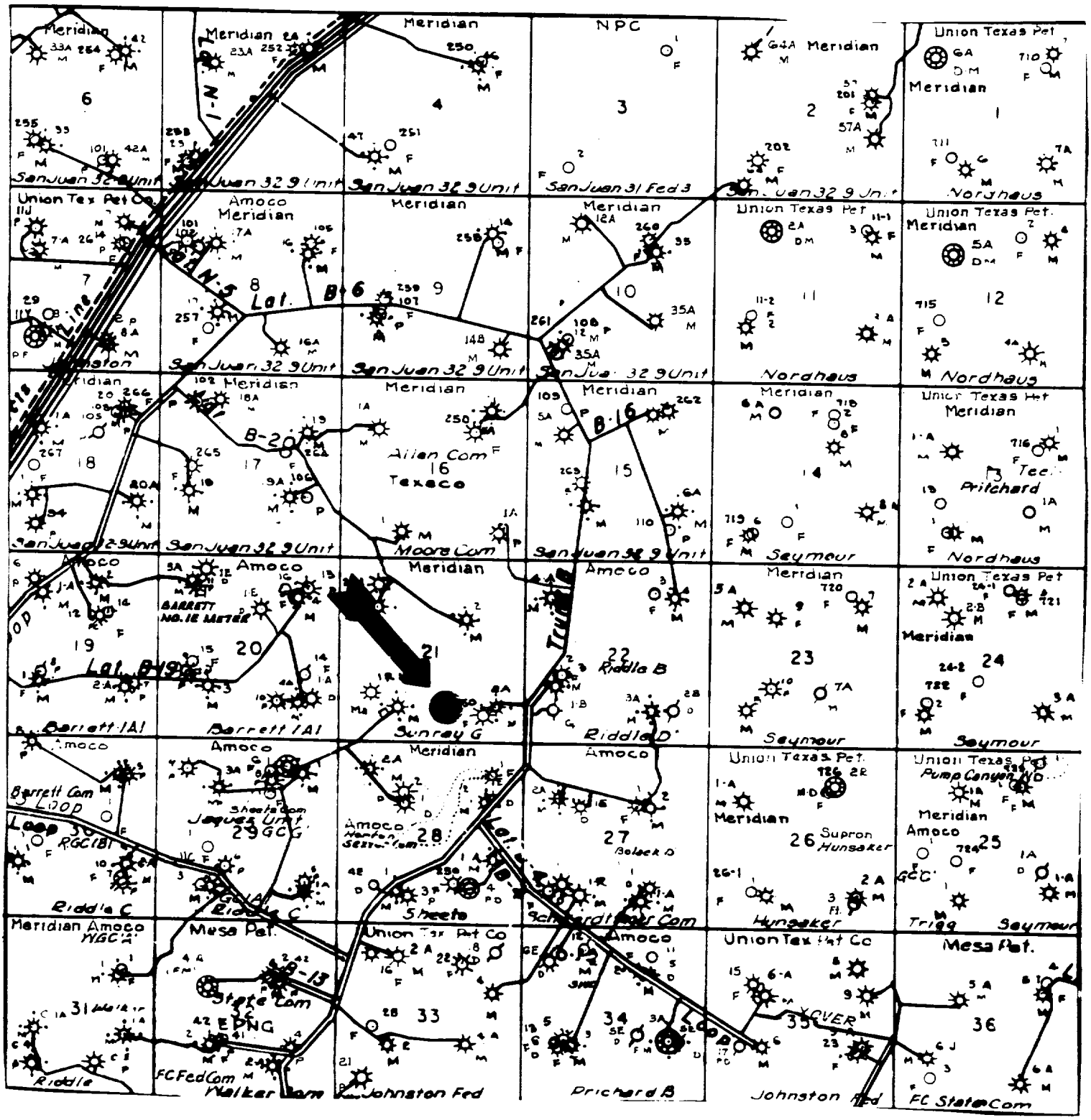


MERIDIAN OIL

PLAT #1

ANTICIPATED
PRODUCTION FACILITIES
FOR A
MESA VERDE WELL

KFR 2/90



MERIDIAN OIL INC.
Pipeline Map
T-31-N, R-09-W
San Juan County, New Mexico

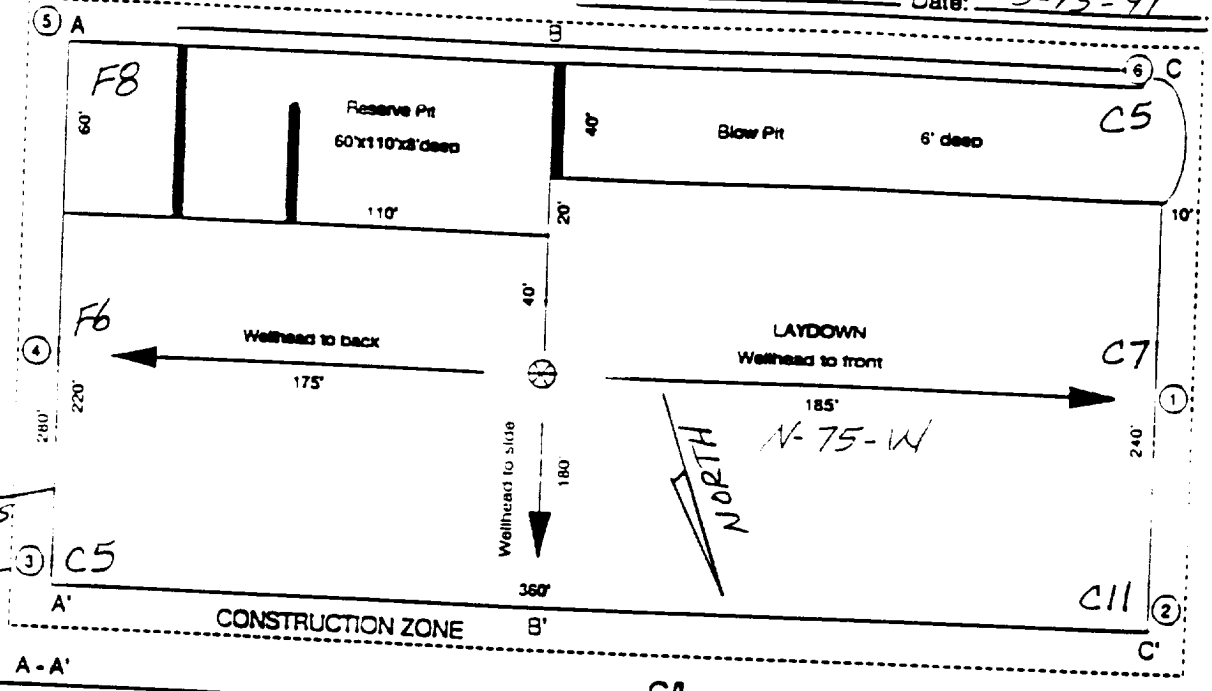
Sunray G #2R

3/91 adw/mjb

MERIDIAN OIL

Plat 4

Name:- SUNRAY E #2R
Footage: 995 FSL 1755 FEL
Sec 21 T. 31 N,R- 9 W NMPM
Co. SAN JUAN St. N.M.
Elevation: 6200' Date: 5-13-91



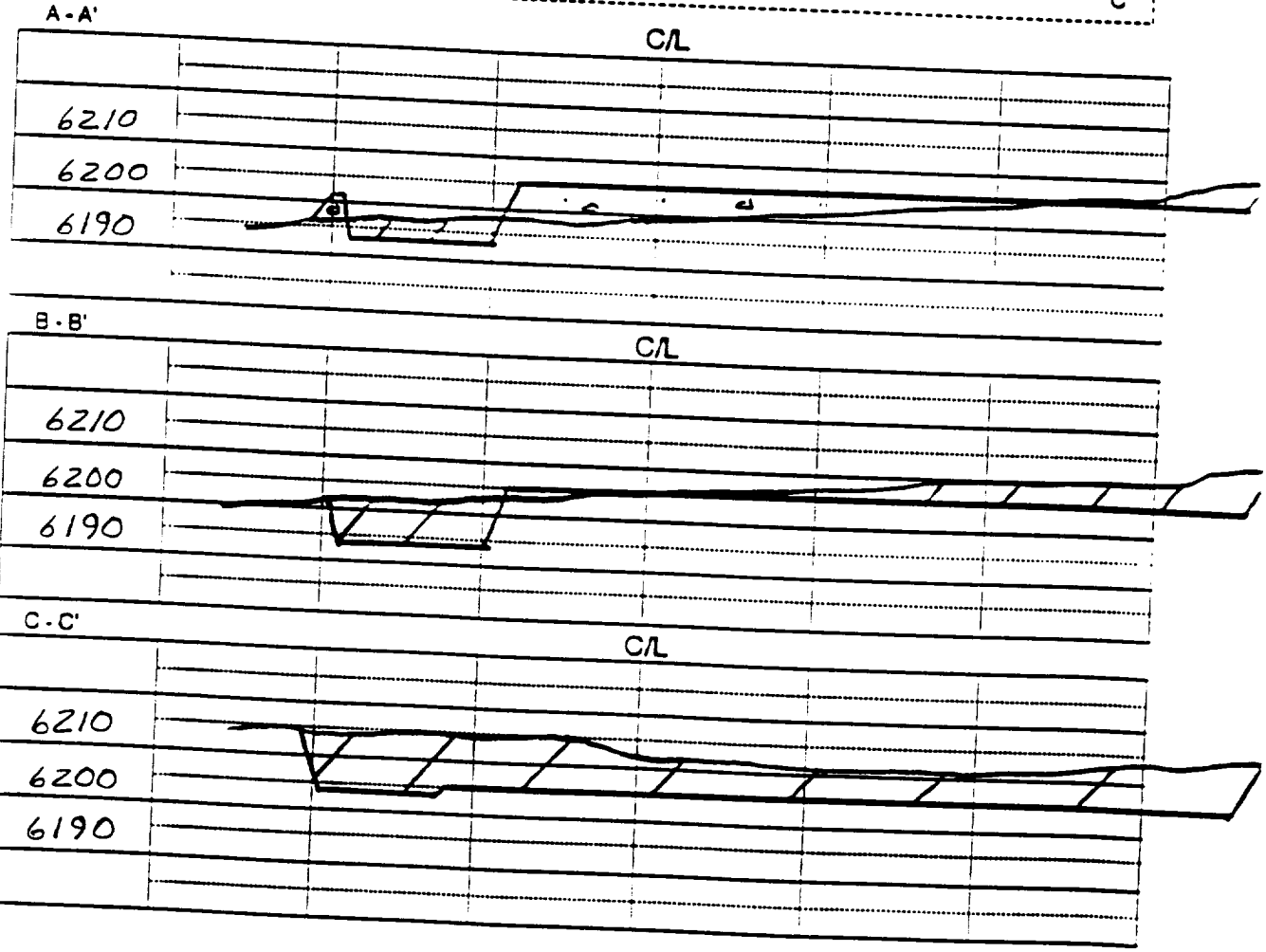


Figure #4