MESA GRANDE RESOURCES, INC.
1200 PHILTOWER BUILDING
TULSA, OKLAHOMA 74103
(918) 587-8494

May 25, 1984

Mr. Joe D. Ramey
Director
New Mexico Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Gavilan-Howard #1
SE NW Section 23-25N-2W
N.M.P.M.
Rio Arriba County, New Mexico

Dear Mr. Ramey:

Mesa Grande Resources, Inc. requests administrative approval to surface commingle production from both zones of our dual completed Gavilan-Howard #1 well. The lower zone is completed in the Dakota/ Greenhorn formations and the upper completion is in the Mancos zone. The value of the commingled fluids would be the same as the value of fluids considered separately and uncommingled. The mineral ownership is the same for both production horizons.

The pertinent facts and figures are included on the following pages as well as a more thorough explanation of the installation configuration.

Thank you for your attention to this matter.

Very truly yours,

Gregory R. Phillips

GRP:dw
Enclosures

DIVISION ORDER R-7534 ALLOWS FOR THE DOWNHOLE COMMINGLING OF THE DAKOTA AND GREENHORN POOLS.

SPQ

WELL DATA

	(A)	(B)	(C)
Formation:	Dakota/Greenhorn	Mancos	Commingled
Gravity:	62	41.8	48.1 (calculated)
Value:	29.60/bbl	29.60/bbl	29.60/bbl
Volume:	83 BO	181 BOPD	264 BO

The calculated gravity of the commingled fluids was determined by the following formula:

$$V_A \cdot (Gr_A) + V_B \cdot (Gr_B) = V_C \cdot (Gr_C) \text{ or } Gr_C = \frac{V_A \cdot (Gr_A) + V_B \cdot (Gr_B)}{V_C}$$

Where V = volume, Gr = gravity, and $V_C = V_A + V_B$

Then

$$Gr_C = \frac{(62)\ (83BO) + (181)\ (41.8)}{(181 + 83)}$$

PROPOSED INSTALLATION

The accompanying plat shows the proposed installation. We propose the depicted installation using only one meter and the method of differences to determine the second volume figure. The meter numbered ① would be installed and would measure the production volumes from the Dakota/Greenhorn zone. The Mancos zone production would be determined by subtraction of Dakota/Greenhorn production from the total.

The meter numbered ② is present in order to show placement in case two meters are required or the Mancos zone is the one chosen to be directly measured.

DATE: _____

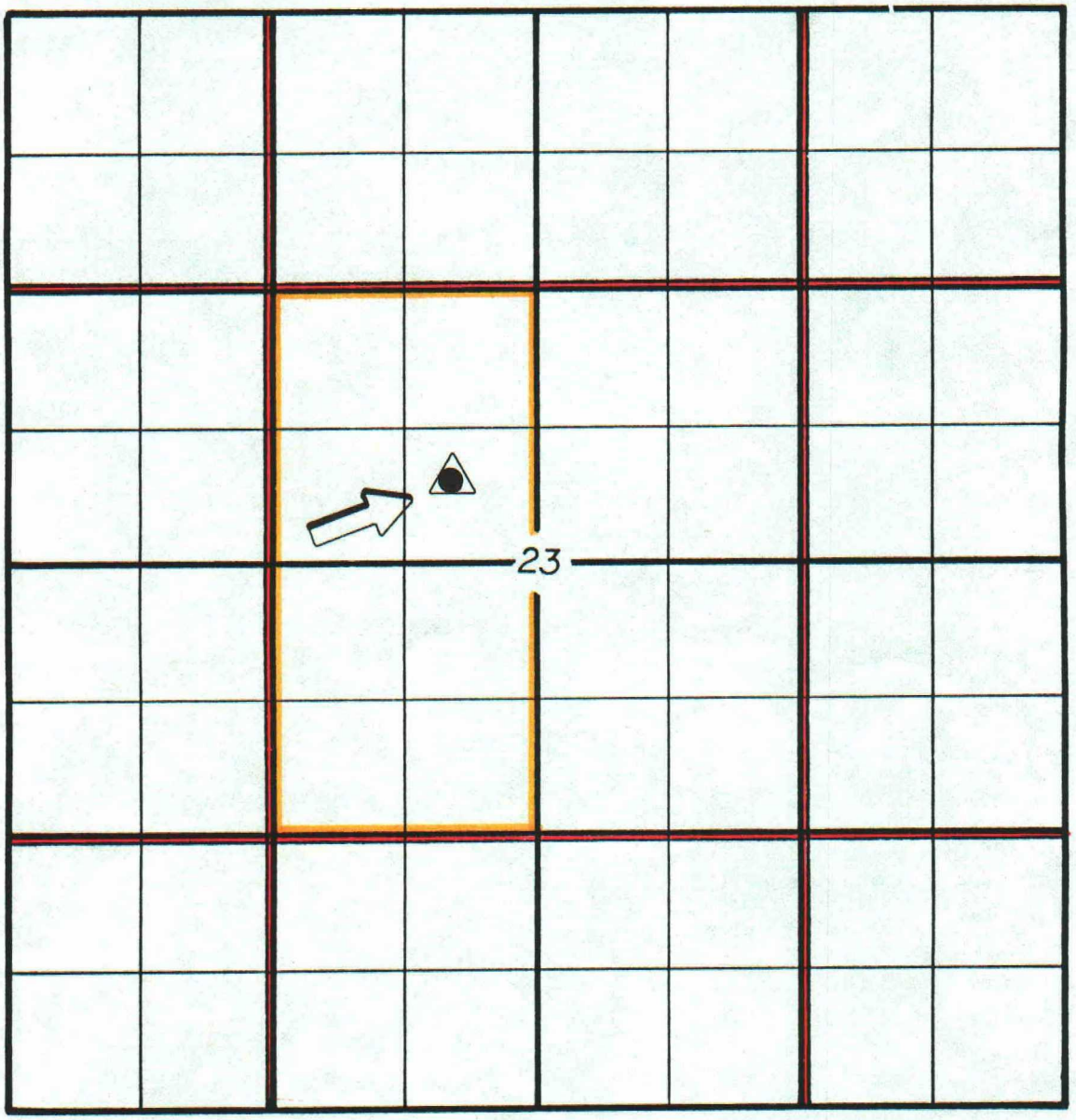
WELL: Gavilan-Howard #1

OPR: Mesa Grande Resources, Inc.

LOCATION: SE NW Sec.23-T25N-R2W

COUNTY Rio Arriba STATE New Mexico

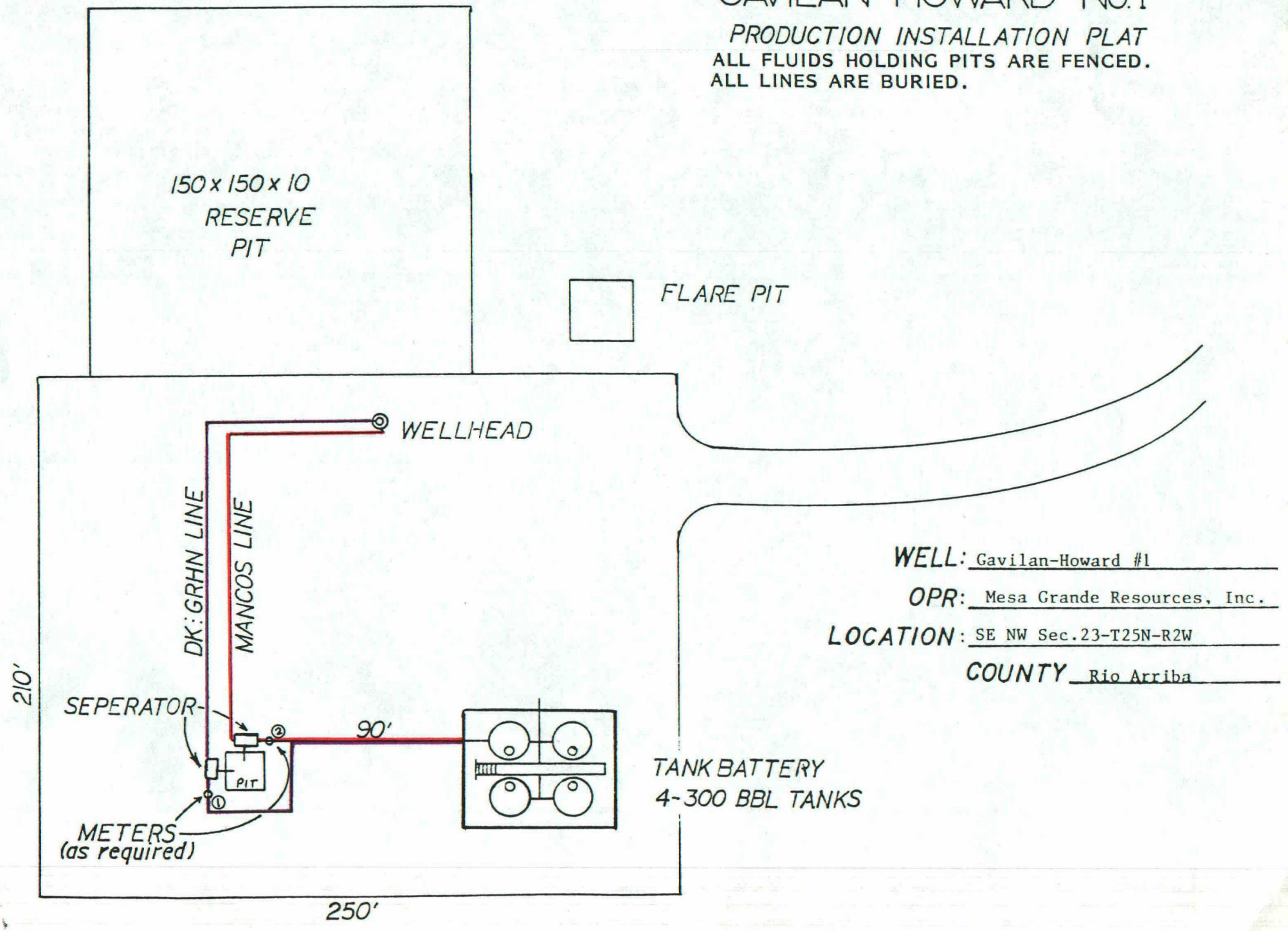
Section 23 Township 25N Range 2W County Rio Arriba



GAVILAN-HOWARD No. 1

PRODUCTION INSTALLATION PLAT

ALL FLUIDS HOLDING PITS ARE FENCED.
ALL LINES ARE BURIED.



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