

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-101

Revised February 10, 1999

Instructions on back

Submit to Appropriate District Office

State Lease - 6 Copy

Fee Lease - 5 Copy

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address

CHEVRON USA INC

15 SMITH ROAD, MIDLAND, TX 79705

² OGRID Number

4323

³ API Number

30 025 06635

⁴ Property Code

29965

⁵ Property Name

WEATHERLY, MITTIE

⁶ Well No.

1

⁷ Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
F	17	21S	37E		1980	NORTH	1980	WEST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County

⁹ Proposed Pool 1

PENROSE SKELLY GRAYBURG

¹⁰ Proposed Pool 2¹¹ Work Type Code

P

¹² WellType Code

O

¹³ Rotary or C.T.

R

¹⁴ Lease Type Code

P

¹⁵ Ground Level Elevation

3480' DF

¹⁶ Multiple

No

¹⁷ Proposed Depth

6638'

¹⁸ Formation

GRAYBURG

¹⁹ Contractor²⁰ Spud Date

7/15/2003

²¹ Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/4"	13-3/8"	48	273'	300	CIRC
11"	8-5/8"	32	2791'	1000	1740'
7-7/8"	5-1/2"	15.5	6638'	350	4058'

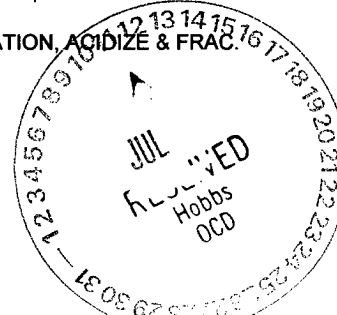
²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

CHEVRON U.S.A. INC. INTENDS TO RECOMPLETE THE SUBJECT WELL TO THE GRAYBURG FORMATION, ACIDIZE & FRAC.

THE INTENDED PROCEDURE AND WELLBORE DIAGRAMS IS ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

Plug-Back



²³ I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Denise Leake

Title Regulatory Specialist

Date 7/8/2003

Telephone 915-687-7375

OIL CONSERVATION DIVISION

Approved By:

Title:

PETROLEUM ENGINEER

Approval Date: JUL 16 2003

Expiration Date:

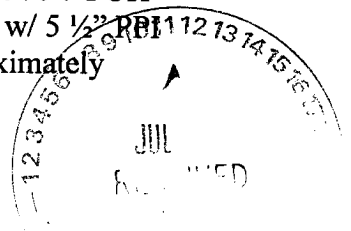
Conditions of Approval:

Attached ☐

Mittie Weatherly # 1
Penrose Skelly Field
T21S, R37E, Section 17
Job: PB To Grayburg Formation, Acidize, And Frac

Procedure:

1. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. AGU, EMSU, and EMSUB buried fiberglass lines will be tested with 300 psi. All polypipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Larry Williams for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report.
2. MI & RU pulling unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. Release pkr. POH with 2 3/8" tbg string.
3. PU and GIH with 4 3/4" MT bit and 2 7/8" work string to 6000'. POH with work string and bit. LD bit.
4. PU and GIH with 5 1/2" tbg-set CIBP to 5635'. Set CIBP at 5635'. Dump 35' cmt on top of CIBP. PUH to 5500'. Reverse circulate well clean from 5500' using 8.6 PPG cut brine water. Pressure test csg and CIBP to 500 psi. POH with 2 7/8" work string. **Note: Do not exceed 500 psi csg pressure due to cmt sqzd perfs at 4000'.**
5. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/Neutron/CCL log from 5600' up to 2600'. POH. **Note: Fax log to Robert Martin ((915) 687-7905) for correlation and picking perfs.** GIH and conduct GR/CBL/CCL log from 5600' up to 2600'. POH. Inspect logs for good cement bond from approximately 4300' up to 3500'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. Cmt squeeze as necessary to obtain good cmt across completion interval. GIH with 4 1/2" Predator slick casing guns and perforate from 3716-24', 3736-44', 3755-63', 3776-86', 3806-12', 3828-36', 3844-50', 3860-66', 3874-80', 3892-96', 3906-14', and 3930-38' with 4 JSPF at 120 degree phasing, using 38 gram premium charges. POH. RD & release electric line unit. **Note: Correlate logs and run flat with Lane Wells Radioactivity Log conducted 7/14/48. Also, exact intervals to be perforated may be adjusted after conducting logs.**
6. PU and GIH w/ 5 1/2" RBP on 2 7/8" work string to 3970'. Set RBP at 3970'. POH with work string and retrieving head. LD retrieving head. PU and GIH w/ 5 1/2" RBP pkr (with 12' element spacing) and SCV on 2 7/8" work string to approximately 3960'. Test tbg to 5500 psi while GIH. Pressure test RBP to 2000 psi.



7. MI & RU DS Services. Acidize perfs 3716-3938' with 2,400 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **3500 psi**. Spot acid across perfs at beginning of each stage and let soak to lower breakdown pressure and prevent communication. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
3930-38'	200 gals	½ BPM	3928-40'
3906-14'	200 gals	½ BPM	3904-16'
3892-96'	200 gals	½ BPM	3888-3900'
3874-80'	200 gals	½ BPM	3871-83'
3860-66'	200 gals	½ BPM	3858-70'
3844-50'	200 gals	½ BPM	3840-52'
3828-36'	200 gals	½ BPM	3826-38'
3806-12'	200 gals	½ BPM	3804-16'
3776-86'	200 gals	½ BPM	3775-87'
3755-63'	200 gals	½ BPM	3753-65'
3736-44'	200 gals	½ BPM	3734-46'
3716-24'	200 gals	½ BPM	3714-26'

Displace acid with 8.6 PPG cut brine water -- do not overdisplace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS services. **Note: Pickle tubing in 1 run of 500 gals acid, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal A264 and 1 gal W53. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 1000 psi csg pressure. If cannot, then move PPI to next setting depth and combine treatment volumes of the intervals.**

* Acid system is to contain:

1 GPT A264	Corrosion Inhibitor
8 GPT L63	Iron Control Agent
2 PPT A179	Iron Control Aid
20 GPT U66	Mutual Solvent
2 GPT W53	Non-Emulsifier

8. Release PPI pkr and PUH to approximately 3650'. Swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. **Note: Selectively swab perfs as directed by Engineering if excessive water is produced.**

9. Open well. Release PPI pkr. POH with tbg and PPI packer. LD PPI tool.

10. PU and GIH w/ 5 ½" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile and 118 jts. of 3 ½" EUE 8R L-80 work string, testing to 7500 psi. Set pkr at approximately 3600'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

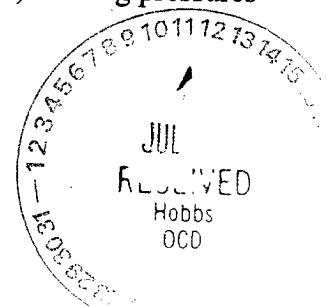
11. MI & RU DS Services and Cardinal Surveys. Frac well down 3 ½" tubing at **40 BPM** with 66,000 gals of YF135, 138,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR4000 proppant. Observe a maximum surface treating pressure of **7400 psi**. Tag frac with 2 radioactive isotopes (1 in main proppant body and 1 in resin-coated stage). Pump job as follows:

Pump 2,000 gals 2% KCL water containing 110 gals Baker SCW-358 Scale Inhibitor
Pump 1,000 gals 2% KCL water spacer
Pump 25,000 gals YF135 pad containing 5 GPT J451 Fluid Loss Additive
Pump 5,000 gals YF135 containing 1.5 PPG 16/30 mesh Jordan Sand
Pump 6,000 gals YF135 containing 2.5 PPG 16/30 mesh Jordan Sand
Pump 7,000 gals YF135 containing 3.5 PPG 16/30 mesh Jordan Sand
Pump 8,000 gals YF135 containing 4.5 PPG 16/30 mesh Jordan Sand
Pump 10,000 gals YF135 containing 5.5 PPG 16/30 mesh Jordan Sand
Pump 5,000 gals YF135 containing 6 PPG **resin-coated** 16/30 mesh CR4000 proppant

Flush to 3600' with 1,315 gals WF135. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and Cardinal Surveys. **Leave well SI overnight.**

12. Open well. GIH and swab well until there is no sand inflow. Release pkr and POH with 3 ½" work string. Lay down work string and pkr.
13. PU retrieving head and GIH on 2 7/8" work string to top of RBP at 3970'. If sand fill is encountered, MI & RU foam unit(s) and cleanout to 3970' using foam. Engage and release RBP at 3970'. POH with 2 7/8" work string and RBP. LD work string and RBP.
14. MI & RU Cardinal Surveys electric line unit. Install lubricator and test to 1000 psi. GIH and conduct after-frac GR/Temp/CCL log from 4600' up to 3200'. POH. RD & release electric line unit. **Note: Correlate logs and run flat with Baker Atlas GR/CBL/CCL Log conducted in Step # 5.**
15. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 8 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 118 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3650', with EOT at 3935' and SN at 3900'.
16. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.
17. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH
7/3/2003



WELL DATA SHEET

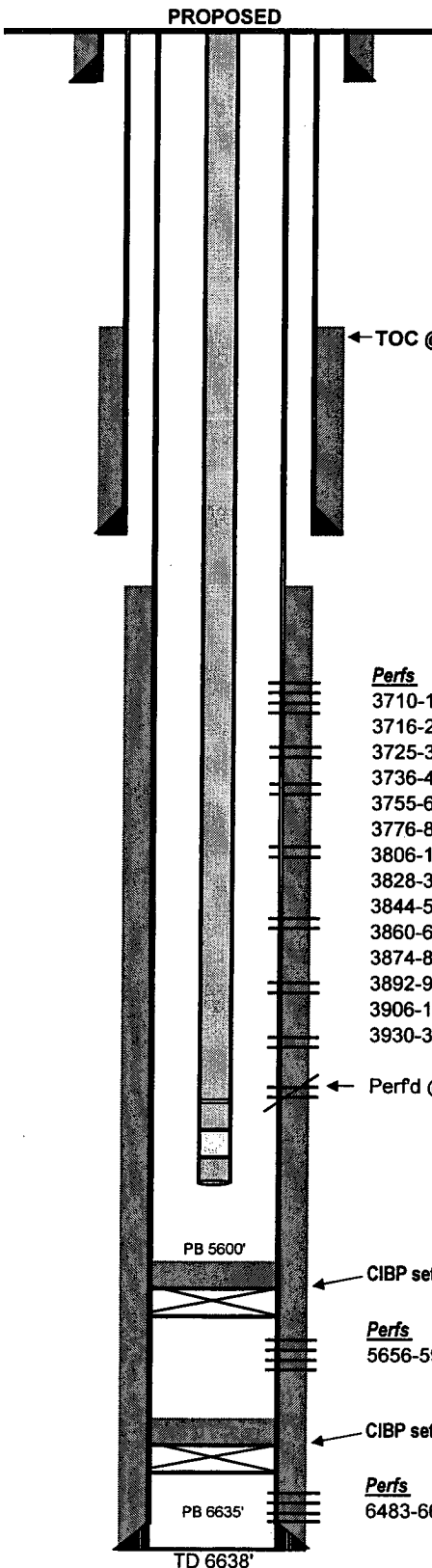
Field: Penrose Skelly Well Name: Mittie Weatherly #1 Lease Type: Fee
 Location: 1980' FNL & 1980' FWL Sec: 17-F Township: 21S Range: 37E
 County: Lea State: New Mexico Refno: FA7739 API: 30-025-06635 Cost Center: UCU46
 Current Status:
 Current Producing Formation(s): Blinebry
 Initial Prod Field/Formation(s): Drinkard/Drinkard

Surface Csg.
 Size: 13 3/8"
 Wt.: 48#
 Set @: 273'
 Sxs cmt: 300
 Circ: yes
 TOC: surface
 Hole Size: 17 1/4"

Production Csg.
 Size: 8 5/8"
 Wt.: 32#
 Set @: 2791'
 Sxs Cmt: 1000
 Circ: No
 TOC: 1740' by TS
 Hole Size: 11"

Tbg Detail:
 BP @ 3935'
 1 jt. 2 7/8" tbg
 2 7/8" x 4' perf sub
 SN @ 3900'
 8 jts. 2 7/8" EUE 8R J-55 tbg
 TAC @ 3650'
 118 jts. 2 7/8" EUE 8R J-55 tbg

Production Csg.
 Size: 5 1/2"
 Wt.: 14#
 Set @: 6638'
 Sxs Cmt: 350
 Circ: No
 TOC: 3731' by TS
 Hole Size: 7 3/8"



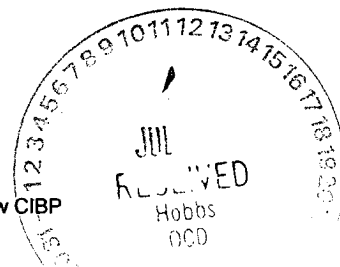
KB: _____
 DF: 3480'
 GL: _____
 Spud Date: 7/1/1948
 Compl. Date: 7/16/1948
 Downhole Commingled: 6/9/1976
 (Penrose Skelly-Grayburg/Drinkard)

Perfs	Status
3710-15'	Grayburg - Cmt Sqzd
3716-24'	Grayburg - Open
3725-30'	Grayburg - Cmt Sqzd
3736-44'	Grayburg - Open
3755-63'	Grayburg - Open
3776-86'	Grayburg - Open
3806-12'	Grayburg - Open
3828-36'	Grayburg - Open
3844-50'	Grayburg - Open
3860-66'	Grayburg - Open
3874-80'	Grayburg - Open
3892-96'	Grayburg - Open
3906-14'	Grayburg - Open
3930-38'	Grayburg - Open

← Perfd @ 4000' and sqzd w/200 sx cmt

Perfs	Status
5656-5918'	Blinebry - open

Perfs	Status
6483-6635'	Drinkard - below CIBP



Prepared by: K M Jackson
 Date: 6/11/2003

WELL DATA SHEET

Field: <u>Blinebry Oil & Gas</u>	Well Name: <u>Mittie Weatherly #1</u>	Lease Type: <u>Fee</u>
Location: <u>1980' FNL & 1980' FWL</u>	Sec: <u>17-F</u> Township: <u>21S</u>	Range: <u>37E</u>
County: <u>Lea</u> State: <u>New Mexico</u>	Refno: <u>FA7739</u> API: <u>30-025-06635</u>	Cost Center: <u>UCU46</u>
Current Status: <u>Blinebry</u>		
Current Producing Formation(s): <u>Drinkard/Drinkard</u>		
Initial Prod Field/Formation(s): <u>Drinkard/Drinkard</u>		

Surface Csg.

Size: 13 3/8"
 Wt.: 48#
 Set @: 273'
 Sxs cmt: 300
 Circ: yes
 TOC: surface
 Hole Size: 17 1/4"

Production Csg.

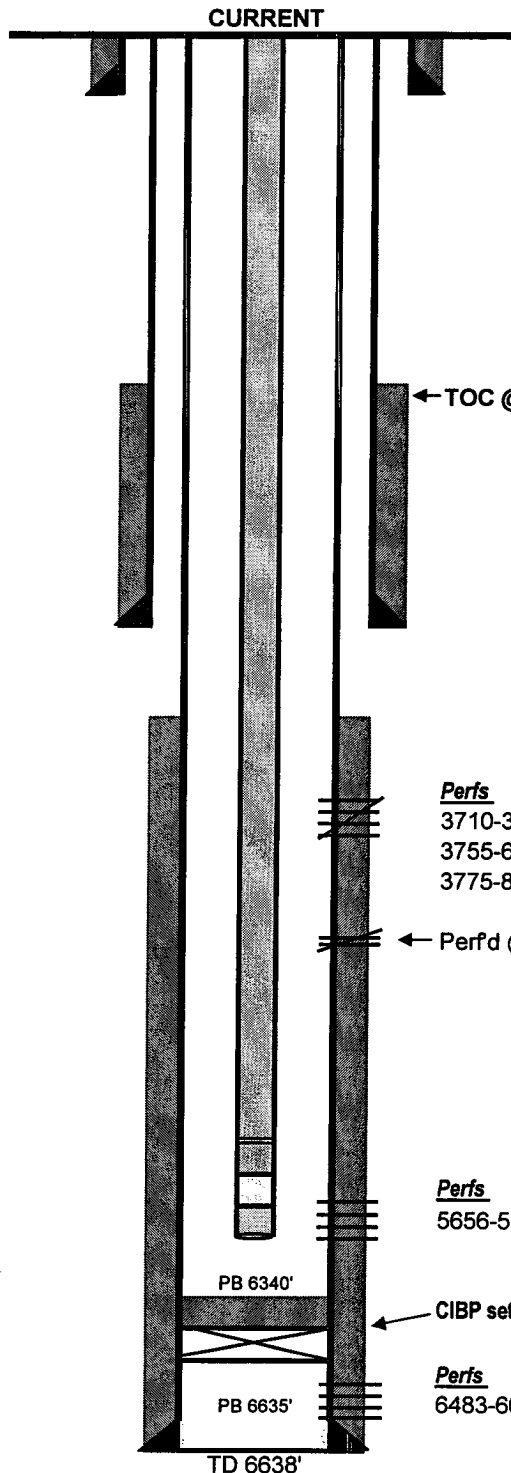
Size: 8 5/8"
 Wt.: 32#
 Set @: 2791'
 Sxs Cmt: 1000
 Circ: No
 TOC: 1740' by TS
 Hole Size: 11"

Tubing Detail - 2/22/97

183 jts 2-3/8" to 6125'
 SN @ 6092'

Production Csg.

Size: 5 1/2"
 Wt.: 14#
 Set @: 6638'
 Sxs Cmt: 350
 Circ: No
 TOC: 3731' by TS
 Hole Size: 7 3/8"

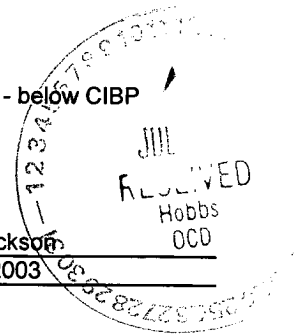


KB: _____
 DF: 3480'
 GL: _____
 Spud Date: 7/1/1948
 Compl. Date: 7/16/1948
 Downhole Commingled: 6/9/1976
 (Penrose Skelly-Grayburg/Drinkard)

Perfs **Status**
 5656-5918' Blinebry - open

Perfs **Status**
 6483-6635' Drinkard - below CIBP

Prepared by: K M Jackson
 Date: 6/11/2003



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Form C-102

Revised February 10, 199

Instructions on bac

Submit to Appropriate District Office

State Lease - 4 Copie

Fee Lease - 3 Copie

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30 025 06635	² Pool Code 50350	³ Pool Name PENROSE SKELLY GRAYBURG
⁴ Property Code 29965	⁵ Property Name WEATHERLY, MITTIE	⁶ Well No. 1
⁷ OGRID Number 4323	⁸ Operator Name CHEVRON USA INC	⁹ Elevation 3480' DF

¹⁰ Surface Location

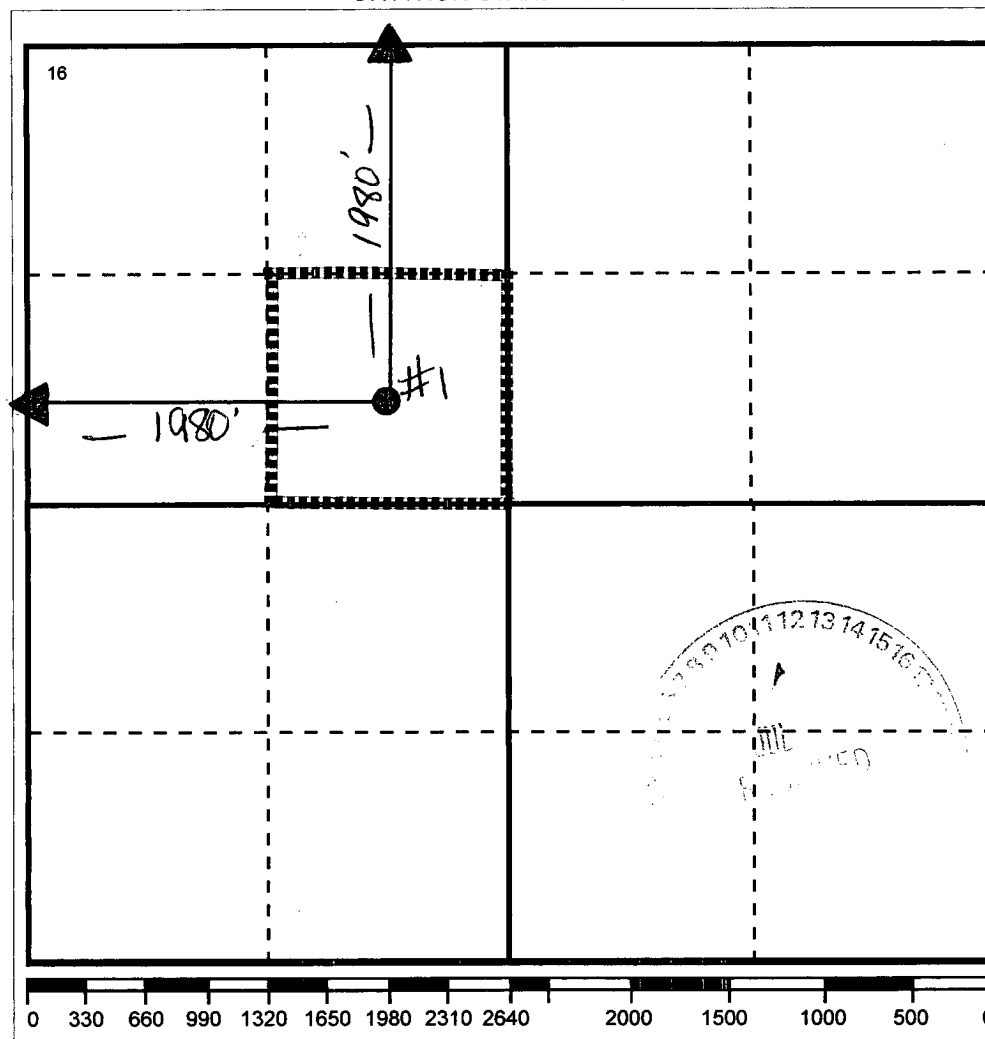
Ul or lot no F	Section 17	Township 21S	Range 37E	Lot.Idn	Feet From The 1980	North/South Line NORTH	Feet From The 1980	East/West Line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
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¹² Dedicated Acre 40	¹³ Joint or Infill No	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
Signature <i>Denise Leake</i>
Printed Name Denise Leake
Positio Regulatory Specialist
Date 7/8/2003
¹⁸ 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 supervision, and that the same is true and correct to the best of my knowledge and belief.
Date Surveyed
Signature & Seal of Professional Surveyor
Certificate No.