District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

APR – 7 2009

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

RM

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

[1] Operator Name and Address	[2] OGRID Number
Marbob Energy Corporation PO Box 227 Artesia, NM 88211-0227	14049
	[3] API Number 30 – 15-22233

[5] Property Code	[6] Property Name	[6] Well No
21597	Lakewood AQE State SWD	1

[9] Proposed Pool 1	[10] Proposed Pool 2
Upper Pennsylvanian (Cisco-Canyon)	

[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	30	19S	26E		1980	North	1980	West	Eddy

[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

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
E	O	R	S	3436' GL
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
N	9726'	Morrow		8/9/77

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 ½"	13 3/8" existing	48#	500'	600 sx	0
12 ¼"	9 5/8" existing	36#	1400'	750 sx	0
8 ¾"	7" existing	23# & 26#	8567'	1650 sx	0

[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

Marbob Energy Corporation proposes to re-enter this well and convert it to a Salt Water Disposal well

The procedure and wellbore schematics are attached

(See Administrative Order SWD-846-A)

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief

Signature: Diana J Briggs

Printed name: Diana J Briggs

Title: Production Manager

E-mail Address: production@marbob.com

Date: 4/6/09 Phone: (575) 748-3303

OIL CONSERVATION DIVISION

Approved by: Jacqui Beaver

Title: Geologist

Approval Date: 4/8/2009 Expiration Date: 4/8/2011

Conditions of Approval Attached ☐

Lakewood AQE St 1 SWD
(Formerly Lakewood AQE St 1)
1980' fnl, 1980' fwl
F-30-19s-26e
Eddy Co., NM
Conversion Procedure 1
25 Mar 09

13-3/8" @ 500' Circ. Cmt.
9-5/8" @ 1400' Circ. Cmt.
7" @ 8567' Circ. Cmt.
7"/23ppf/J55/LTC Burst=4360 psi, 3488 psi at 80% Nom. ID=6.366" Drift ID=6.241"
7"/26ppf/J55/LTC Burst=4980 psi, 3984 psi at 80% Nom. ID=6.276" Drift ID=6.151"
7"/26ppf/N80/LTC Burst=7240 psi, 5792 psi at 80% Nom. ID=6.276" Drift ID=6.151"
2.875"/6.5ppf/J55/EUE Burst=7260 psi, 5808 psi at 80% Nom ID=2.441" Drift ID=2.347"
Collapse=7680 psi, 6144 at 80%
Tensile=99700 lb with no safety factor

Objective: Complete well as SWD in Upper Penn dolomite per attached Order SWD-846-A. Notify OCD at least 24 hrs in advance of testing the casing shoe and testing the injection packer.

Note: Will be fishing ASI-X packer with 3 slip segments on top after drilling out CIBP above San Andres. If we don't make progress getting packer OOH after a few days of fishing, decision might be made to abort reentry—let's discuss.

Procedure:

1. Blade road into location and upgrade pad as needed. Dig out cellar, remove dryhole marker, dress off 7" casing and install 7" extension if needed. Install wellhead onto 7".

2. MIRU WSU and reentry equipment. Install BOP and test BOP and wellhead to 2000 psi. Pick up 6-1/8" bit and DCs and drill out the following plugs using fresh water.

Cement plug 0-160'
Cement plug 385-546'
Cement plug 1305-1467'
CIBP + cement 2339' (CIBP should be in 2480-2488' range, S Andres perfs 2536-60')
ASI-X packer to be fished should be just below CIBP (records show packer at 2480')

3. RU fishing tools and fish packer at approx. 2480' (see attached Kenco installation plan). After packer is recovered, RIH with bit and drill out CIBP + cement 2850' (Yeso perfs 2888-3060'). RIH to CIBP + cement above Upper Penn (approx. 7851') and tag up (don't drill plug).

4. RIH with retrievable packer, set below bottom Yeso perf at 3060', test casing and plug above Upper Penn to 2500 psi and TOOH with packer. Pick up retainer, set at approx. 2830', sting out, pump tubing volume, sting into retainer, keep annulus full and monitor, establish injection rate and squeeze Yeso perfs 2888-3060' (60) with 50 sx. Class "C" with low fluid loss followed by 150-200 sx. Class "C" neat. Resqueeze with 100 sx. Class "C" neat if running squeeze not obtained. Sting out of retainer, reverse excess cement out of tubing and TOOH with tubing.

5. Pick up retainer, set at approx. 2475', sting out, pump tubing volume, sting into retainer, trap 500 psi on annulus, establish injection rate and squeeze San Andres perfs 2536-60' (25) with 50 sx. Class "C" with low fluid loss followed by 100-150 sx. Class "C" neat. Have more Class "C" neat on hand in case running squeeze not obtained on first attempt. When squeeze pressure achieved, sting out of retainer, reverse tubing clean, TOOH and WOC 24-36 hrs.

6. After WOC, drill out squeezes and test squeezed perfs to 1000-1500 psi. Resqueeze as necessary to get perfs to hold pressure. After successful pressure test is obtained, drill out CIBP at 7886' and push to at least 8250'. Well will likely go on a vacuum as soon as plug is drilled.

7. RU lubricator, run gauge ring/junk basket to 8250' and perf the Upper Penn dolomite with 1 spf at any phasing at the depths shown below using a 4" casing gun (inclusive).

Upper Penn: 7974-7980', 7992-8002', 8014-8038', 8104-8122', 8132-8150', 8166-8180', 8194-8210' (113 shots) CBL

8. RIH with packer on 2-7/8"/6.5/N80/EUE work string, set packer at 8250', test casing shoe to 2500 psi, reset packer above perfs, test annulus to 1000 psi and pump 20,000 gals. 20% HCl acid (no additives other than corrosion inhibitor) down tubing at 10-15 bpm (if can't get 10 bpm, pump at highest rate achievable while limiting treating pressure to 7500 psi). Drop 10 slugs of 25 ballsealers spaced evenly through job. Flush acid with 2 transports of fresh or produced water. Limit surface treating pressure to 7500 psi while holding 1000 psi on the annulus.

Note: Notify OCD Artesia 24 hrs before testing casing shoe in case they want to witness test.

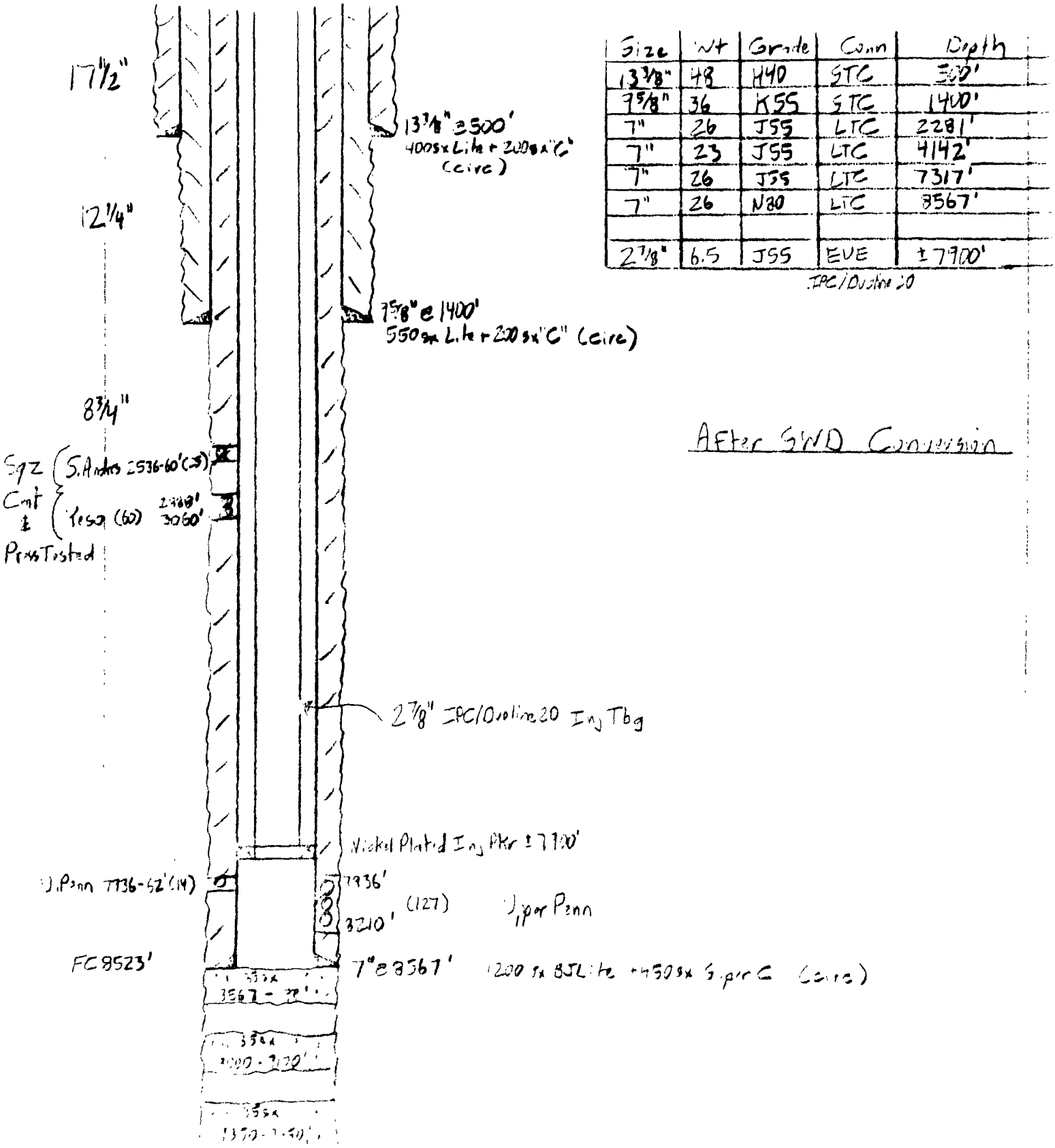
9. TOOH and lay down tubing work string. Pick up nickel plated injection packer on 2.875"/6.5/J55/EUE Duoline 20 internally lined tubing and RIH to 7900'. Pump 150 bbls clean inhibited packer fluid down annulus, set packer, fill annulus with inhibited packer fluid (approx. 240 bbls total annular volume) test annulus to 500 psi for 30 minutes and record the data on a chart for submission to OCD. Plumb tubing x casing annulus so that pressure can be monitored at surface. Limit injection pressure to 1587 psi using a pressure limiting device.

Note: Notify OCD Artesia 24 hrs before testing annulus in case they want to witness test.

Kbc/Lakewood aqe st 1 swd

Lakewood AQE St. 1 SWD
(Lakewood AQE St. 1)
1780' FNL, 1750' FWL
F- 30-17s-26e
Eddy, N.M.
30-015-22233

Zero: 14' ASL
KB: 3436'
GL: 3422'



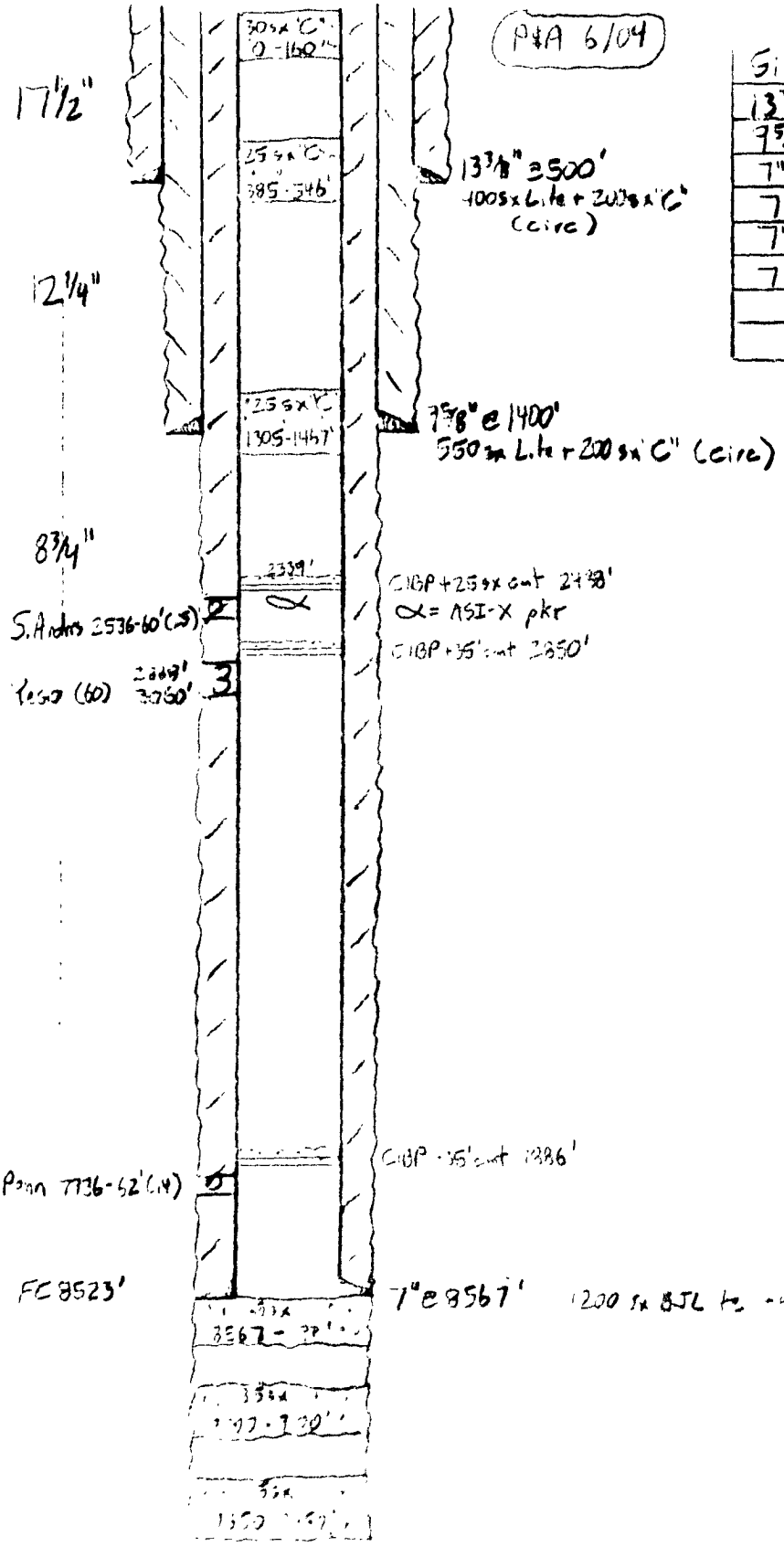
Size	Wt	Grade	Conn	Depth
13⅜"	48	H40	STC	500'
7⅝"	36	K55	STC	1400'
7"	26	J55	LTC	2281'
7"	23	J55	LTC	4142'
7"	26	J55	LTC	7317'
7"	26	N80	LTC	8567'
2⅞"	6.5	J55	EVE	±7700'

IPC/Duoline 20

After SWD Conversion

Lakewood AQE St. 1
1780' FNL, 1780' FWL
F-30-17s-26e
Eddy, N.M.
30-015-22233

Elev: 14' ASL
KB: 3436'
GL: 3422'



P&A 6/04

Size	Wt	Grade	Conn	Depth
13⅜"	48	H40	STC	500'
7⅝"	36	K55	STC	1400'
7"	26	J55	LTC	2281'
7"	23	J55	LTC	4142'
7"	26	J55	LTC	7317'
7"	26	N80	LTC	8567'

Before Sid Commission

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-22233	96184	~~Upper Pennsylvanian (Circo Canyon)~~ SWD Canyon

[4] Property Code	[5] Property Name	[6] Well Number
21597	Lakewood AQE State SWD	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
14049	Marbob Energy Corporation	3436' GR

[10] Surface Location

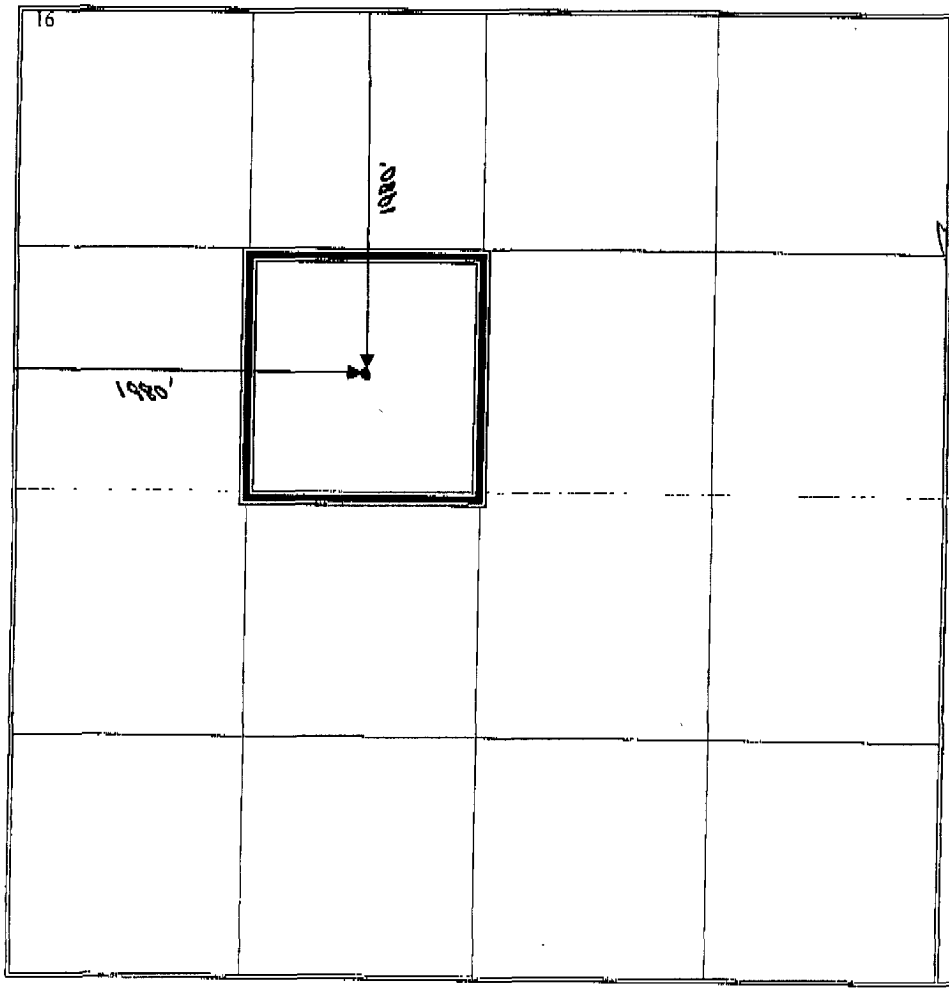
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	30	19S	26E		1980	North	1980	West	Eddy

[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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
40			

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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — April 6, 2009 — Date

Diana J. Briggs — Production Manager
Printed Name

[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 belief.

July 15, 1977
Date of Survey

Signature and Seal of Professional Surveyor

REFER TO ORIGINAL PLAT

Richard B. Dawson
4882
Certificate Number