NMOCD

Form 3 160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 3 1 ,1993

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICA TE

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
CONOCO INC
CONOCO INC.

3. Address and Telephone No.
10 DESTA DR. STE. 100W, MIDLAND, TX. 79705-4500 (915) 686-5424

4. Location of Well (Footage. Sec., T. R. M. or Survey Description)
Section 14, T-20-S, R-37-E, M
1310 FSL & 480 FWL

5. Lease Designation and Seriai No.

6. If Indian, Allonee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
SEMU # 165

9. API Well No.
30-025-35835

10. Field and Pool, or Exploratory Area
Skaggs Abo (Gas), Weir Drinkard

11. County or Parish, State
Lea Co., NM

In CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Repon	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracrunng
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other _____	☐ Dispose Water

INole: Reponresuitsof multiplecompitiononWdl Completion or Recompletion Report and Log form.)

13. Describe Proposed or Compieted Operations (Clearly state ail 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.)*

Conoco proposes to perforate the Abo & the Drinkard in this newly drilled well. The well is nonstandard in the Drinkard and Abo. The Weir Drinkard and the Skaggs Abo pools are approved by NSL Order # 4696 A. Conoco would like to amend the previously submitted sundry dated October 7 to the attached procedure. There will be additional perforations in the Upper Drinkard.

SUBJECT TO
LIKE APPROVAL
BY NMOCD

14. I hereby certify that the foregoing is true and correct

Signed _____ Title - Regulatory Agent (915) 686-5798 Date October 31, 2002

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval if any:

NOV 7 2002

BLM(6), NMOCD(1), SHEAR, PONCA, COST ASST, FILE ROOM

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.

*See Instruction on Reverse Side

SEMU #165 D&E
Abo Test & Drinkard Recompletion Pr dure
October 25, 2002

WELL INFORMATION:
(Refer to Wellview for Schematic)

AFE #:	51-61-1416
Spud Date:	02/24/02
API Number:	30025-35835
Location:	1310' FSL & 480' FWL of Sec. 14, T20S, R37E, Lea County, NM
Zone/Pool:	Abo : Undesignated Skaggs – Abo Gas Pool (NSL Order 4696 – A Granted Oct 11, 2002) Drinkard: Undesignated Drinkard Weir Pool
Battery Destination:	----------
TD:	8,199'
PBTD:	8,114 (Float collar-Tagged PBTD at 8,114')
DV Tool:	Drilled out both at 5,003' & 7,666'
TOC:	CBL Indicated Poor Cement Above 2600'. (Good Cement Across Completion Intervals)
KBE:	3,557'
GLE:	3,546'
KBM:	11'

Casing Specifications:

Pipe	Depth (ft)	Drift ID (inches)	Collapse (psi)	Burst (psi)	Capacity (bbl/ft)
8-5/8", 24#, J-55 STC	1481	-	-	-	-
Cement surface: Cemented with 465 sks of Lead and 200 sks of tail . Bump plug w/820 PSI @ 14:00 hrs, circulate 24 bbls of cement to the pit.					
5-½", 17#, L-80, LTC	8,197	4.767	6280	7740	0.02324
Stage 1: Cement from 7,650' to 8,199' with 175 sks of Magne Plus 13.0 ppg Cement. Bumped plug with 750 PSI. No returns to surface. Stage 2: Lead Cement from 5,000' to 5,800' with 49 BBL, 11.8 ppg Class "C" Pozzolan Salt Cement. Tail cement from 5,800' to 7,650' with 120 bbls of Class "C". Bump plug with 3,080 PSI. Circ 55 bbls of cement to surface. Stage 3: Lead cement from surface to 4,100' with 397 bbs of 11.85 ppg lead followed by 48 bbls of 14.8 ppg tail Class "C" . Displace with 115 bbl, water. Bump plug with 3,080 PSI. Circulated 46 bbls of cement to surface.					

Tubing Specifications:

Pipe	Depth (ft)	Drift ID (in)	Collapse (psi)	Burst (psi)	Capacity (bbl/ft)
2-7/8", 6.5#, L-80	7900	2.347	11,160	10,570	0.00579

COMPLETION & WELL TESTING PHILOSOPHY:

Originally, SEMU #165 was drilled as a Cass Penn well, which had an IP of 1.7 MMCFPD, but fell off to 135 MCFPD & 15 BOPD within a month. The well was Shut-in and a fluid gradient run ... the results indicated a static reservoir pressure of 700 PSIG with no gas-liquid interface. Based on these results, the Cass Penn drainage area at this location is limited and the overlying horizons appear to offer better production at this point in time.

The first interval that will be perforated and tested will be the Abo from 7060'- 66' and 7102'-06', which has been a very proflict gas producing zone in the Britt B #27 well, estimated to have and EUR of ~8.0 BCF. Because of the larger withdrawals from the Britt B #27, the Abo is most likely depleted. Therefore, the intent of this procedure will be to perforate and breakdown the Abo then swab test to evaluate if further stimulation is necessary. Depending upon the flow tests after the breakdown, a decision will be made to perform additional stimulation and leave on production as an Abo producer or to isolate the zone with a RBP or a CIBP.

If the decision is made on the Abo to isolate it with a RBP or a CIBP then the Drinkard will be perforated and acid frac'd. Since the Drinkard and Abo are located in different fields, the Drinkard will be tested for a period of 30 days or longer to establish prior to commingling with the Abo. If the Abo was determined to be non-commerical then the SEMU No. 165 will remain as a single zone completion in the Drinkard.

The Monument Tubb will not be completed at the SEMU #165 since the SEMU #87 located 73 feet to the southeast, has already been a Tubb Producer. All costs associated with the Abo test and the Drinkard recompletion will be charged against an approved Drinkard recompletion AFE No. 1416.

ESTIMATED RESERVOIR INFORMATION:

Strawn Wellbore Fluids: Gas

Existing Strawn Perforations:	**Interval**	**NEP (ft)**	**Shots (@ 4SPF)**
Lower Strawn	7878' – 7884'	6'	25
Upper Strawn	7704' - 7710'	6'	25

Existing Strawn Pressure: 700 PSI (Static Reservoir Pressure Taken May 2, 2002 with Downhole Pressure Gauges)

Abo Wellbore Fluids: Gas

Proposed Abo Perforations:	**Interval**	**NEP (ft)**	**Shots (@ 4SPF)**
Abo	7060' – 7066'	6'	25
	7102' – 7106'	4'	17
	Total	**10'**	**42 Holes**

Abo Reservoir Pressure: Original reservoir pressure is expected to be normal pore pressure of 2,850 PSIG. However the offset Britt B No. 27 is depleted in this same zone so reservoir pressure could be substantially less than the original reservoir pressure.

Abo Pool Allowable: --- BOPD and --- MCFD

Expected H_2O prod: No water is expected from the Abo

Drinkard Wellbore Fluids: ±38° API oil with sour (1200-1400 ppm H_2S)

Proposed Drinkard Perfs:	**Interval**	**NEP (ft)**	**Shots (@ 2SPF)**
Upper Drinkard	6642' – 6662'	20'	41
	6738' – 6750'	12'	25
	Total	**32'**	**66 Holes**
	Interval	**NEP (ft)**	**Shots (@ 2SPF)**
Lower Drinkard	6830' – 6834'	4'	9
	6850' – 6869'	19'	39
	6880' – 6885'	5'	15
	Total	**28**	**59 Holes**
	Total Drinkard	**60'**	**125 Holes**

Drinkard Reservoir Pressure: Original reservoir pressure is expected to be normal pore pressure of 2,800 PSIG. .

Drinkard Weir Pool Allowable: --- BOPD and --- MCFD
Expected H_2O prod: Possibly 100 to 200 BWPD from the Drinkard

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FLOWING ABO GAS WELL -- PRODUCTION TREE SPECS

- 2-9/16" swab valve
- 2-9/16" master valve
- a flow tee
- 2-1/16" wing valve
- 2–1/16" Axelson Safe-o-matic valve: High Press Set 1000 PSIG
  Low Press Set 30 PSIG

DRINKARD ARTIFICAL LIFT EQUIPMENT SPECS
(See attached design for more information)

Specs: **C320 – 256 – 62 Kreiter (Need to verify equipment specs with the operator)**

Source: **Transferred from State A2 – A No. 5 (This well will be downsized with the C160 pumping unit from the State A2 – A No. 6 shut-in well.)**

Electrical: **The unit currently has a 20 hp motor which will probably have to be replaced with a 25 or 30 hp motor. The peak polish rod hp is calculated at 12 hp.**

Pump Off: **Yes**

RECOMMENDED PROCEDURE AND NOTES

Notes:

1. All depths in this procedure are referenced from KB unless noted otherwise.
2. Please give service companies 48 hours advance notice prior to performing work on the well.
3. Hold prejob safety meetings prior to beginning any new work. For all safety considerations follow guidelines as provided in the attached Pre-Job Safety Assessment sheet.

Kill Fluids:

- 9.0 ppg brine w/magnacide biocide (completion fluid)

Frac Fluids/Breakdown Fluids:

- As per BJ Services specs/procedure

ABO TEST PROCEDURE

1. Prepare location for work. Find/set and test deadmen anchors.
2. Install modified test tank and flow manifold.
3. RU workover rig. RU pump truck to the tubing then bleed off wellhead pressure to the modified test tank. Load the tubing with 50 bbls of treated fresh water to kill the Strawn. Install BPV in the tubing hanger. Presure test the BPV to 3,000 PSIG. ND the production tree and install the 5,000 PSIG WP BOP stack and test to 5,000 PSIG according to SOP's. Remove the BPV.
4. Install landing joint and PU tubing to release the M-1X treating packer set at 7639'. Allow tubing and casing to equalize. TOOH with 2 7/8" L-80 tubing and packer. Backfill casing with kill fluid as necessary to maintain hydrostatic head against the Strawn. Re-dress the M-1X packer to be re-used in the Abo test.
5. RU electric line company. Install lubricator with packoff and RIH with 5 ½" CIBP to set at 7680' or 24' above the top Strawn perforation at 7704'. PU wireline bailer and dump bail 35' of cement on top of the CIBP to permanently abandon the Strawn. RD electric line truck.
6. RU pump truck and pressure test plug and casing to 4500 PSIG for 15 minutes.
7. Install a modified test tank to swab into following the Abo breakdown.
8. TIH with open-ended 2 7/8" tubing to PBTD at 7630' and displace the casing with 8.4 ppg treated water with corrosion inhibitor. Spot a 9.5 ppg brine water pill with Cl from PBTD at 7630' back to 7,000' (approximately 15 bbls.) PU the bottom of the tubing to 7,106' and spot a 15% NEFE acid pill from 7,106 back to 7,000 (approximately 3 bbls.). PU to 7,005' and reverse out excess acid. TOOH with tubing.
9. PU the following bottom hole assembly and TIH
   a) wireline re-entry guide with a 2.25" ID "R" profile nipple
   b) 5 1/2" , MX 1 packer with 80/70/80 du elements with carbide slips, ID 2.38"
   c) 2 7/8", L-80 tubing to surface

10. Space the packer out to set at 7000'. Reverse circulate packer fluid. Install Cameron Model --- extended neck tubing hanger, set the packer and land the tubing.

11. Install the BPV. Remove the BOP stack and install 5,000 PSIG production tree for Abo gas completion. (2-9/16" swab valve, 2-9/16" master valve, a flow tee, 2-1/16" wing valve, 2–1/16" Axelson Safe-o-matic valve, and a full opening adjustable choke) See attached wellhead specs.

12. Pressure test the tree flange to 5,000 PSIG. Pressure test the tree to 5,000 PSIG. Pressure test the casing annulus to 4,500 PSIG. Remove the BPV.

13. RU electric line company and install lubricator with packoff. RIH with 2 1/8" Predator expendable perforating guns loaded 4 JSPF, 0 degree phasing (hole diameter: 0.32", penetration: 25.2") to perforate **(from the top down)** the following Abo intervals: **Correlation will be made using the CBL.**

Safety Note: All 2-way radios and phones are to be turned off while perforating for a distance of 500'. Warning signs are to be posted on all incoming roads.

		NEP	Shots
Abo	7060' – 7066'	6'	25
	7102' – 7106'	4'	17
	Total	**10'**	**42 Holes**

RD Baker Atlas.

14. RU BJ Services. Test treating lines to 6,000 PSIG against treating valve. Release pressure, set treating line nitrogen actuated relief valve to 4,500 PSIG and test. Open the casing valve and leave open to the pit during breakdown. Pump acid breakdown across the lower Abo as follows:

- Load the tubing and breakdown the perforations with 20 bbls of 2% KCL water.
- After breakdown, pump 3,000 gals of 15% NEFE at 5 BPM dropping 60, 1.3 sg, 7/8 RCN ball sealers throughout the treatment.
- At ballout, surge the balls off the perforations and over displace acid through the perforations by 2 bbls.
- Monitor pressure bleed off at 5, 10 and 15 minutes.
- Bleed off surface pressure and disconnect BJ from the tubing and then RD and release BJ services.

TREATING LINE TEST PRESSURE: A minimum 1000 psig over MATP	**6000**	**PSIG**
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system	**5000**	**PSIG**
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : **300 psig less than 90% MAWP or, (Exception: 4500 PSIG equals 90% of MAWP)** **300 psig over MATP**	**4500**	**PSIG**
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	**4300**	**PSIG**
MAXIMUM ANTICIPATED TREATING PRESSURE: Based on frac design	**3900**	**PSIG**

15. Install swabbing lubricator, swab test both sets of Abo perforations to the modified test tank. If rates require testing equipment, RU rental temporary testing facilities consisting of a separator and gas flare. Continue to test until rates are stable. Report swab test to Midland and determine productivity.

    - If the Abo is considered to be commercial connect the flowline and install separator and gas meter at the location.
    - If the Abo is considered to be non-commercial a CIBP will be set at 7,040' (20' above the top perforation) and 35' of cement will be placed on the CIBP for permanent abandonment. Continue with Step 14 for abandonment of the Abo and recompletion to the Drinkard.

Lower Drinkard Recompletion Prodcedure
(Assuming the Abo Test to be Non-Commerical)

16. Load the tubing with 50 bbls of brine water. Install BPV and test to 3,000 PSIG. Remove the production tree. Install the 5,000 WP BOP stack. Remove the BPV and test to BOP stack to 5,000 PSIG as per SOP. Unseat the packer and TOOH with 2 7/8" L-80 tubing and M-1X packer.

17. RU electric line company. Install lubricator with packoff and RIH with 5 ½" CIBP to set at 7040' or 20' above the top Abo perforation at 7760'. PU wireline bailer and dump bail 35' of cement on top of the CIBP to permanently abandon the Abo.

18. RU pump truck and pressure test plug and casing to 4500 PSIG for 15 minutes.

19. TIH with open-ended 2 7/8" tubing to spot a 9.5 ppg brine pill containing corrosion inhibitor from PBTD at 7000' back to 6,800 (approximately 5 bbls.) PU the bottom of the tubing to 6,885', reverse out tubing volume plus 10 bbls then spot a 15% NEFE (double inhibited) acid pill from 6,885 back to 6,685 (approximately 5 bbls.) using 8.4 ppg water. TOOH with tubing.

20. Install lubricator with packoff and RIH with 3 1/4" Slick expendable perforating guns loaded 2 JSPF, 120 degree phasing (hole diameter: 0.4", penetration: 20") to perforate **(from top down)** the Lower Drinkard intervals: **Correlation will be made using the CBL.**

Safety Note: All 2-way radios and phones are to be turned off while perforating for a distance of 500'. Warning signs are to be posted on all incoming roads.

		Interval	NEP	Shots
Drinkard	3 1/4" Slick	6830' – 6834'	4'	9
		6850' – 6869'	19'	39
		6880' – 6885'	5'	11
		Total	**28'**	**59 Holes**

RD Baker Atlas.

21. PU PPI tool with 30' spacing between elements and a mechanical collar locator (no spot control valve). TIH with 2 7/8" L-80 tubing and space out to straddle the bottom set of perforations from 6880' to 6885'. Top packer setting depth is 6874' with the bottom packer set at 6904'.

22. RU BJ and perform acid breakdown using 5 bbls of 15% NEFE across the initial set of perforations then continue to breakdown the remaining perforations as indicated below:

Setting	Perf. Interval Bottom to Top	Top Pkr Setting	Bottom Pkr Setting	Acid Vol Bbls.
2	6850' to 6869'	6842'	6872'	10
3	6830' to 6834'	6810'	6840'	5

After all zones have been broken down, pick up to 6750', fish the standing valve and install frac valve and treating line with nitrogen actuated relief valve. Load and test the casing to 3000 PSIG. Test treating lines to 6,000 PSIG against treating valve. Release pressure, set treating line nitrogen actuated relief valve to 5,300 PSIG and test. Open the casing valve and leave open to the pit during breakdown. Pump acid breakdown across all Drinkard zones at 5 BPM using 3,000 gals of 15% NEFE and 75, 1.3 sg, 7/8 RCN ball sealers:

TREATING LINE TEST PRESSURE: A minimum 1000 psig over MATP	**6000**	**PSIG**
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system	**6280**	**PSIG**
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : **300 psig less than 90% MAWP or,** **300 psig over MATP**	**5300**	**PSIG**
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	**5000**	**PSIG**
MAXIMUM ANTICIPATED TREATING PRESSURE: Based on frac design	**3900**	**PSIG**

23. Release the PPI packer at 6600' and drop down through the Drinkard perforations to 6900' to knock the ball sealers off the perforations. TOOH.

24. ND the BOP stack and install 10M WP rental treating tree as shown in the attachment. Pressure test the tree to 6,000 PSIG. Hydraulically pressure test the hanger seal to 5,000 PSIG.

25. RU BJ Services. Install treating line with nitrogen actuated relief valve. Test the treating line to 6000 PSIG and set the relief valve at 4200 PSIG. Pump the acid frac as per the attached BJ Services recommendation. **Tag the Drinkard acid frac using a radioactive isotope.** Pump the treatment as follows at design rate of 10 BPM not to exceed 4000 PSIG.

TREATING LINE TEST PRESSURE: A minimum 1000 psig over MATP	**6000**	**PSIG**
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system. 90% of burst pressure for 5 ½" tubing head.	**4500**	**PSIG**
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : **300 psig less than 90% MAWP or,** **300 psig over MATP**	**4200**	**PSIG**
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	**4000**	**PSIG**
MAXIMUM ANTICIPATED TREATING PRESSURE: Based on frac design	**3300**	**PSIG**

Drinkard Acid Frac: This acid will be tagged using a single radioactive isotope.

a. Pump 6,000 gals of crosslinked 20% HCL XL Acid III at 10 BPM
b. Pump 3,000 gals of 20% NEFE HCL acid at 10 BPM
c. Displace to bottom perforation with 7200 gals of slick KCL water
d. Shut down and record 5, 10 and 15 minute pressures.
e. Disconnect BJ Services and RD
f. After the gel has broken flow back the well until it dies.

26. TIH with 2 7/8", L-80 production tubing (bottom joint being 3 ½" polylinned) with the natural gas anchor design (see attached) and 5 ½" tubing anchor. Space out the tubing to set the seating nipple at approximately 6,930' or 45' below the bottom Drinkard perforation with the tubing anchor at approximately 6,780'.

27. ND the BOP stack and install the B-1 adapter flange. See attached pumping wellhead "Type 3" drawing (beam pumping configuration with a choke on the casing). Pump or pour 5 gals of corrosion inhibitor down the tubing to coat the rods and pump as they are run in the hole. PU 1.75" RHBC pump on 7/6 Class "KD" rod design and RIH to hang on beam pump. (**See attached Drinkard Beam Pump Design. The Kreiter 320-256-62 pumping unit will be transferred from the State A2 No. 6 well to the SEMU No. 165 well.** RD and move off.

28. **Report daily well tests and fluid levels to the Midland office for 30 days or until it pumps off and the production rate has stabilized. After 30 days proceed with the Upper Drinkard Completion procedure.**

29. **Notify Champion of production so that the Cl concentration can be adjusted for production volumes.**

Upper Drinkard Recompletion Prodcedure

30. RU the pulling unit. Bleed off the casing pressure and kill the well with 100 bbls of 9.0 ppg treated brine water. Unseat the pump and TOOH with 7/6 Class "KD" rod string. Visually inspect rods for wear, pitting, paraffin and/or scale. Lay down any pitted or worn rods. Send the pump for teardown and rebuild to be rerun.

31. Release the TAC and TOOH with 2 7/8" tubing, TAC and mud anchor. Visually inspect for signs of paraffin and scale.

32. PU 5 ½" RBP and TIH to set at 6,800'. Reverse circulate the casing with 8.5 ppg brine and load to test the RBP to 4,500 PSIG. PU a joint and spot 2 sks of sand on top of the RBP using a 10 bbl. 9.5 ppg brine pill. PU to 6,750' and spot 15% double inhibited HCL NEFE back to 6,500' (approximately 6 bbls.). TOOH with 2 7/8" tubing.

33. RU electric line company and install lubricator with packoff. RIH with 3 1/4" Slick expendable perforating guns loaded 2 JSPF, 120 degree phasing (hole diameter: 0.4", penetration: 20") to perforate **(from the top down)** the Upper Drinkard intervals: **Correlation will be made using the CBL.**

Safety Note: All 2-way radios and phones are to be turned off while perforating for a distance of 500'. Warning signs are to be posted on all incoming roads.

	Interval	NEP (ft)	Shots (@ 2SPF)
Upper Drinkard	6642' – 6662'	20'	41
	6738' – 6750'	12'	25
	Total	**32'**	**66 Holes**

RD Baker Atlas.

34. PU PPI tool with 30' spacing between elements and a mechanical collar locator (no spot control valve). TIH with 2 7/8" L-80 tubing and space out to straddle the bottom set of perforations from 6738' to 6750'. Top packer setting depth is 6730' with the bottom packer set at 6760'.

35. RU BJ and perform acid breakdown using 10 bbls of 15% NEFE across the initial set of perforations then continue to breakdown the remaining perforations as indicated below:

Setting	Perf. Interval Bottom to Top	Top Pkr Setting	Bottom Pkr Setting	Acid Vol Bbls.
2	6642' – 6662'	6635'	6665'	10

After both zones have been broken down, pick up to 6550', fish the standing valve and install frac valve and treating line with nitrogen actuated relief valve. Load and test the casing to 3000 PSIG. Test treating lines to 6,000 PSIG against treating valve. Release pressure, set treating line nitrogen actuated relief valve to 5,300 PSIG and test. Open the casing valve and leave open to the pit during breakdown. Pump acid breakdown across all Drinkard zones at 5 BPM using 3,000 gals of 15% NEFE and 75, 1.3 sg, 7/8 RCN ball sealers:

TREATING LINE TEST PRESSURE: A minimum 1000 psig over MATP	**6000**	**PSIG**
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system	**6280**	**PSIG**
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : **300 psig less than 90% MAWP or,** **300 psig over MATP**	**5300**	**PSIG**
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	**5000**	**PSIG**
MAXIMUM ANTICIPATED TREATING PRESSURE: Based on frac design	**3900**	**PSIG**

36. Release the PPI packer at 6550' and drop down through the Upper Drinkard perforations to 6770' to knock the ball sealers off the perforations. TOOH.

37. ND the BOP stack and install 10M WP rental treating tree as shown in the attachment. Hydraulically pressure test the hanger seal to 5,000 PSIG. Pressure test the tree to 6,000 PSIG.

38. RU BJ Services. Install treating line with nitrogen actuated relief valve. Test the treating line to 6000 PSIG and set the relief valve at 4200 PSIG. Pump the acid frac as per the attached BJ Services recommendation. **Tag the Upper Drinkard acid frac using a radioactive isotope.** Pump the treatment as follows at design rate of 10 BPM not to exceed 4000 PSIG.

TREATING LINE TEST PRESSURE: A minimum 1000 psig over MATP	**6000**	**PSIG**
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system. 90% of burst pressure for 5 ½" tubing head.	**4500**	**PSIG**
NITROGEN POP OFF SET PRESSURE: Relief pressure set at the lesser of : **300 psig less than 90% MAWP or,** **300 psig over MATP**	**4200**	**PSIG**
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	**4000**	**PSIG**
MAXIMUM ANTICIPATED TREATING PRESSURE: Based on frac design	**3300**	**PSIG**

Drinkard Acid Frac: This acid will be tagged using a single radioactive isotope.

a. Pump 3,000 gals of crosslinked 20% HCL XL Acid III at 10 BPM
b. Pump 1,500 gals of 20% NEFE HCL acid at 10 BPM containing 30, 7/8", 1.3 sg ball sealers
c. Pump 4,000 gals of crosslinked 20% HCL XL Acid III at 10 BPM
d. Pump 2,000 gals of 20% NEFE HCL acid at 10 BPM
e. Displace to bottom perforation with 7,000 gals of slick KCL water
f. Shut down and record 5, 10 and 15 minute pressures.
g. Disconnect BJ Services and RD
h. Flow back the well after the gel has broken until it dies.

39. PU retrieving head for 5 ½" RBP and TIH to reverse out ball sealers and sand. Latch on to the RBP set at 6,800'. Release the RBP and TOOH.

40. TIH with 2 7/8", L-80 production tubing with the natural gas anchor design (see attached) and 5 ½" tubing anchor. Space out the tubing to set the seating nipple at approximately 6,930' or 45' below the bottom perforation of the Lower Drinkard with the tubing anchor at approximately 6,600'.

41. ND the BOP stack and install the B-1 adapter flange. See attached pumping wellhead "Type 3" drawing (beam pumping configuration with a choke on the casing). Pump corrosion inhibitor down the tubing to coat the rods and pump as they are run in the hole. PU 1.75" RHBC pump on 7/6 Class "KD" rod design and RIH to hang on beam pump. RD and move off.

42. Report daily well tests and fluid levels to the Midland office for 30 days or until it pumps off and the production rate has stabilized.

43. Notify Champion of production so that the Cl concentration can be adjusted for production volumes.

1980, Hobbs. NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd. Aztec, NM 87410

District IV
PO Box 2088, Santa Fe. NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Revised February 21,
instructions on
Submit to Appropriate District O
State Lease - 4 Co
Fee Lease - 3 Co

☐ AMENDED REPC

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	2 Pool Code	3 Pool Name
30-025-35835	85410	Skaggs Abo (Gas)

4 Property Code	5 Property Name	6 Well Number
	SEMU	#165

7 OGRID No.	8 Operator Name	9 Elevation
005073	Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500	3546'

10 Surface Location

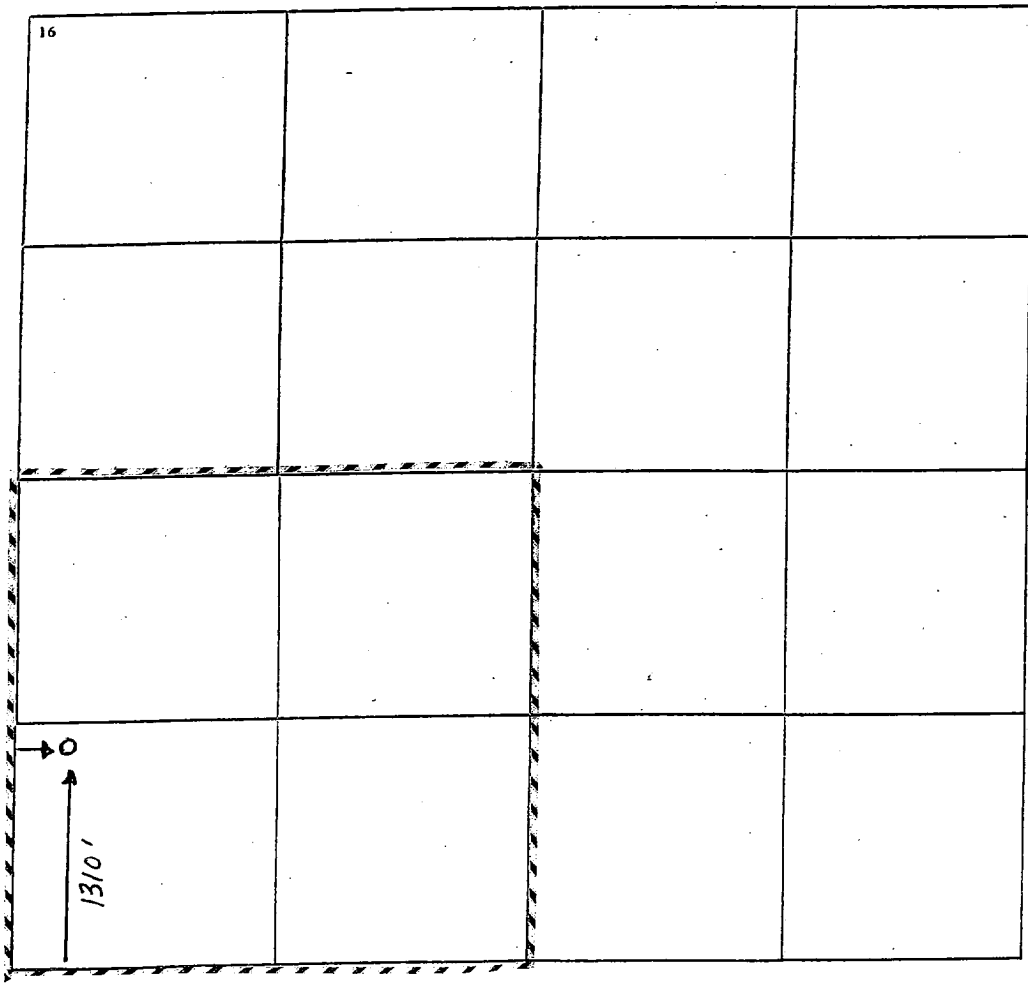
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	14	20S	37E		1310	South	480	West	Lea

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 Infil	14 Consolidation Code	15 Order No.
160			NSL-4696-A

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: Kay Maddox

Printed Name: Kay Maddox

Title: Regulatory Agent

Date: September 17, 2002

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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

ct I
ox 1980, Hobbs. NM 88241-1980

strict II
O Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd. Aztec, NM 87410

District IV
PO Box 2088, Santa Fe. NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Revised February 21, 19
instructions on ba
Submit to Appropriate District Off
State Lease - 4 Cop
Fee Lease - 3 Cop

☒ AMENDED REPOI

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	2 Pool Code	3 Pool Name
30-025-	63840	Weir Drinkard

4 Property Code	5 Property Name	6 Well Number
	SEMU	# 165

7 OGRID No.	8 Operator Name	9 Elevation
005073	Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500	3546'

10 Surface Location

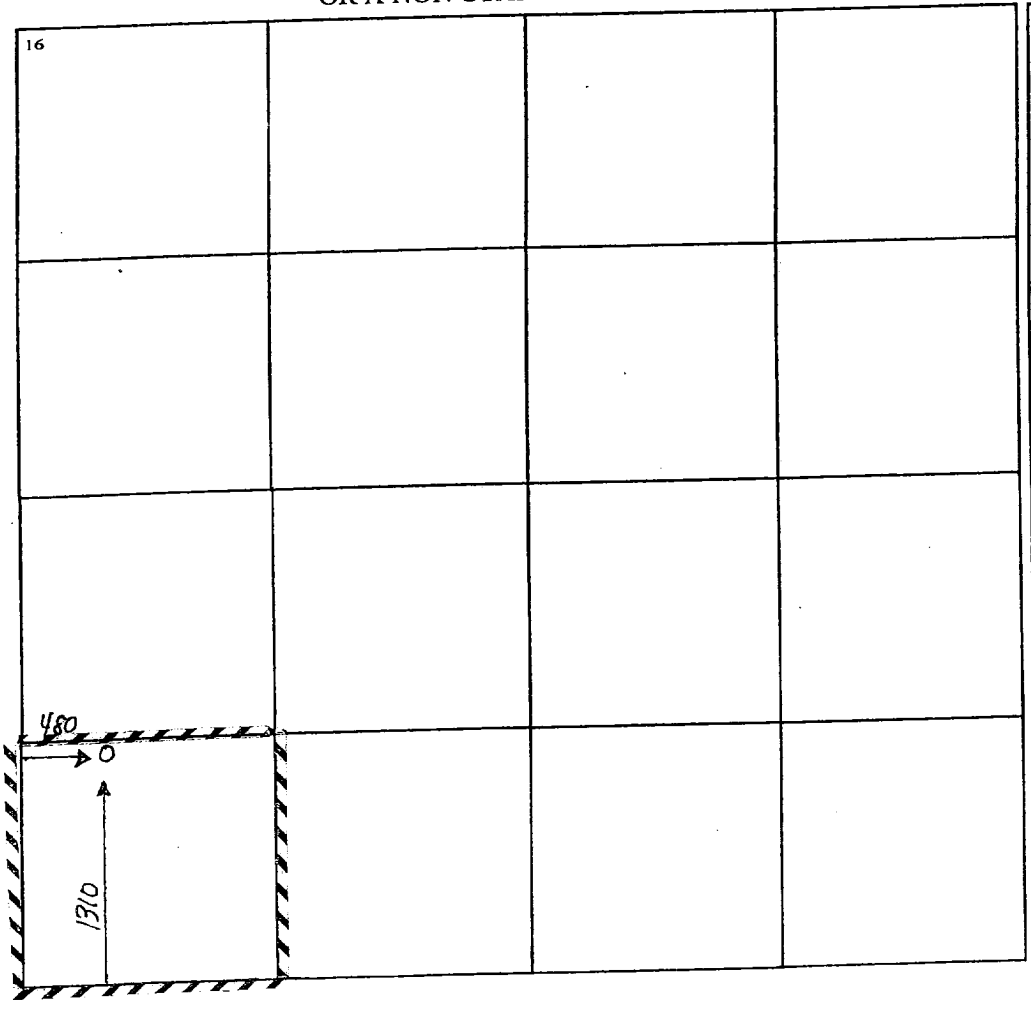
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	14	20S	37E		1310	South	480	West	Lea

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.

Signature: Kay Maddox

Kay Maddox
Printed Name

Regulatory Agent
Title

January 9, 2002
Date

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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number