

Form 9-331
Dec. 1973Form Approved.
Budget Bureau No. 42-R1424UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well ☐ gas well ☐ other
2. NAME OF OPERATOR
Conoco Inc.
3. ADDRESS OF OPERATOR
P.O. Box 460, Hobbs, N.M. 88240
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: *2615' FSL & FEL*
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

- TEST WATER SHUT-OFF ☐
- FRACTURE TREAT ☐
- SHOOT OR ACIDIZE ☐
- REPAIR WELL ☐
- PULL OR ALTER CASING ☐
- MULTIPLE COMPLETE ☐
- CHANGE ZONES ☐
- ABANDON* ☐

(other) *revise csq. program AND DEPTH*

SUBSEQUENT REPORT OF:

- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

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HOBBS, NEW MEXICO

5. LEASE
LC - 031670A
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
SEMU
8. FARM OR LEASE NAME
SEMU Burger
9. WELL NO.
107
10. FIELD OR WILDCAT NAME
Blinbry / Drinkard
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 19, T-20S R-38E
12. COUNTY OR PARISH
NM
13. STATE
NM
14. API NO.
15. ELEVATIONS (SHOW DF, KDB, AND WD)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)*

We request approval to revise the csq. program for subject well as follows & complete it as a Blinbry / Drinkard dual oil well:

- 0' - 400' 20", 94", H-40, ST&C csq., set w/ 708 SX cmt.
- 0' - 2800' 13 3/4", 61", J-55, ST&C csq., set w/ 4692 SX cmt.
- 0' - 4250' 9 5/8", 47", N-80, LT&C csq., set w/ 1893 SX cmt.
- 4050' - 7015' 7", 26", K-55, LT&C csq., set w/ 640 SX cmt.

See attached drilling memo.

This well originally approved 5-15-79.

Subsurface Safety Valve: Manu. and Type

Set @ _____ Ft.

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

SIGNED *W. A. Dutterfield* TITLE *Admin. Supervisor* DATE *2/19/80*

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:
*USGS-5
NMFH-4
FILE*

APPROVED
MAY 5 1980
James H. Long
DISTRICT SUPERVISOR

TITLE _____ DATE _____

See Instructions on Reverse Side

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MAY 13 1980

OIL CONSERVATION DIV.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLATSupersedes 6-7-78
Effective 1-1-80

All distances must be from the outer boundaries of the Section.

Owner Continental Oil Co.		Lease SEMO Permian Burger		Section 107	
Section J	Section 19	Section 20 South	Section 38 East	Section Lea	
Acreage 2615		Line and South		Acreage 2615	
Feet from the 3536.7		Producing Formation Blinebry / Drinkard		Feet Blinebry Oil & Gas / Skaggs Drinkard	
				Estimated Acreage 40	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 interests of all owners been consolidated by communization, unitization, 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 communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

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CERTIFICATION

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

Signature
Wm. A. Butterfield
Position
Administrative Supervisor

Company
Conoco Inc.

Date
2/21/80

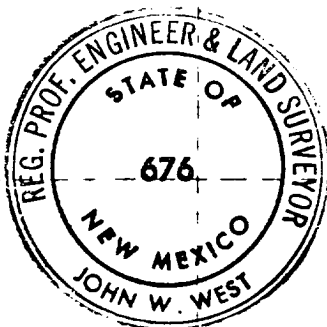
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
January 12, 1979

Registered Professional Engineer
and/or Land Surveyor

Signature
John W. West
Certificate No. John W. West

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OIL CONSERVATION DIV.

PRO DED WELL PLAN OUTLINE

WELL NAME: SEMU BURGER NO. 107

COUNTY: LEA

LOCATION: 2615' FSL & 2615' FEL
SEC. 19, T-20S, R-38E

STATE: NEW MEXICO

EST. KB: 3562'

EST. GL: 3550'

DEPTH	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE (IN)	CASING		FRACTURE PRESSURE GRADIENT (PPG)	FORMATION PRESSURE GRADIENT (PPG)	MUD	
					SIZE (IN)	DEPTH (FT)			WEIGHT (PPG)	TYPE
	Surface Recent Water SS. 70 -	Sand 175'	Drilling Time Recorder	26	20	400	12-13	8.3- 8.5	8.5- 9.0	Fresh Water
1000					H-40 STC 94#					
	Rustler Anhy. Salado Salt	1380' 1475'	Geolograph Deflection 0-TD							
2000					61# J-55 STC					
	Base Salt Yates SS.	2575' 2685'	10' Samples 2500'-TD	17-1/2	13-3/8	2800	12- 13	8.3- 8.5	9.0 10.0	Salt Gel
3000	Seven Rivers Dol.	2935'	GR-CNL-FDC GR-DLL-CAL. 2800'-4250'							
	Queen SS. Penrose SS. Grayburg Dol.	3500' 3645' 3820'	DST-Grayburg 3820'		47# N-50 LTC					
4000	San Andres Dol	4025'		12-1/4	9-5/8	4250	16- 17	14- 14.5	14.5- 15	Salt Gel
5000										
	Glorieta SS.	5330'	GR-CNL-FDC TD-4250'							
	Blaine Mkr.	5857' (-2295')	GR-DLL-CALIPER TD-4250'							
6000			PDC 5500'-TD							
	Tubb Mkr.	6352' (-2790')			Liner from 4050'- 7015'					
	Drinkard Dol.	6665'			26# K-55 LTC					
7000	Abq. Dol. TD	6995' 7015'		8-1/2	7	7015	14.9- 15.1	Less than 8.5	9.0- 10.0	Salt Gel
8000										
9000										

NOTE: 9-5/8" casing will not be run if Grayburg is reached

WELL NAME SEMU Burger No. 107 FIELD NMFU DATE 12-12-79
 AFE NO. ELEV. EST. GRD 3550' KB 3562' PROPOSED TO 7015'
 LOCATION (SURF.) 2615' FSL & 2615' FEL OF SEC 19 T 20S R 38E
 COUNTY LEA STATE NEW MEXICO SPACING 40 ACRES
 LOCATION (BOTTOM HOLE) Same as surface

GEOLOGICAL ESTIMATES

<u>ZONE</u>	<u>TOP</u>	<u>THICKNESS</u>	<u>CONTENT</u>	<u>ZONE</u>	<u>TOP</u>	<u>THICKNESS</u>	<u>C</u>
cent Sand	Surface			Grayburg Dol.	3820'		0, G, W
ter SS.	70-175'			San Andres Dol.	4025'		
stler Anhy.	1380'			Glorieta SS.	5330'		
lado Salt	1475'			Blinebry Mkr.	5857' (-2295')		0, G, W
se Salt	2575'			Tubb Mkr.	6352' (-2790')		0, G, W
tes SS.	2685'			Drinkard Dol.	6665'		0, G, W
ven Rivers Dol.	2935'			Abo Dol.	6995'		
een SS.	3500'			TD	7015'		
arose SS.	3645'						

<u>CORING NO.</u>	<u>TYPE</u>	<u>HORIZON</u>	<u>INTERVAL FROM-TO</u>	<u>FOOTAGE</u>	<u>REMARK</u>
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NONE

DRILL STEM TESTSWATER SHUT OFF TESTS

<u>NUMBER</u>	<u>HORIZON</u>	<u>NUMBER</u>	<u>HORIZON</u>	<u>NUMBER</u>	<u>HORIZON</u>	<u>NUMBER</u>	<u>HOR</u>
1	Grayburg	3820'					

WELL SURVEYS (List types by code numbers as follows: Directional and/or Deviation (1) Deflection (2) Caliper (3) Temperature (4) Electrical (5) Radi active (6) Geolograph (7) Photoclinometer (8) Mudlogging (9) Other (10) an name of that type.)

<u>DEPTH POINTS</u>	<u>TYPE</u>	<u>HOLE SIZE</u>	<u>REMARKS</u>
TD	(7) Geolograph	26", 17-1/2", 12-1/4", 8-1/2"	One every 250' to base of salt; one every 500' thereafter 2" & 5" Scales 2" & 5" Scales 2" & 5" Scales 2" & 5" Scales
TD	(1) Deviation	26", 17-1/2", 12-1/4", 8-1/2"	
300'-4250'	(6) GR-CNL-FDC	12-1/4"	
00'-4250'	(5) GR-DLL-CAL.	12-1/4"	
250'-TD	(6) GR-CNL-FDC	8-1/2"	
250'-TD	(5) GR-DLL-CAL.	8-1/2"	
00'-TD	(6) PDC	7" Casing	

FUEL AND WATER (SOURCE)

Conoco to furnish water.
 Contractor to furnish fuel.

PROPOSED WELL PLAN

WELL NAME <u>SEMU BURGER NO. 107</u>		FIELD	NMFU
<u>ATTACHMENT</u>	<u>NO.</u>	<u>REQUIRED</u>	<u>NOT REQUIRED</u>
CASING CENTRALIZERS, SCRATCHERS	_____	X	_____
CEMENTING	_____	X	_____
MUD PROGRAM	_____	X	_____
WELL PLAN OUTLINE	_____	X	_____
PORE PRESSURE - FRAC GRADIENT	_____	_____	_____
PROJECTED PROGRESS	_____	_____	_____
CROSS SECTION OR WELL COURSE	_____	_____	_____
HYDRAULICS PROGRAM	_____	_____	_____
BIT PROGRAM	_____	_____	_____
VENDER USAGE LIST	_____	_____	_____

DRILLING AND COMPLETION PROCEDURE

- 0'-400' Drill 26" hole. Set and cement 20" surface casing. WOC 18 hours. Pressure test to 600 psi for 30 minutes. Drill out.
- 400'-2800' Drill 17-1/2" hole. Set and cement 13-3/8" intermediate casing. WOC 18 hours. Pressure test to 1000 psi for 30 minutes. Use ECP and DV stage tool if water flow is encountered. Drill out shoe and test formation to 700 psi using 10# mud.
- 2800'-4250' Drill 12-1/2" hole. Weight up mud as necessary to control pressures encountered. Set and cement 9-5/8" intermediate casing with DV stage tool and ECP inside 13-3/8" casing @ 2800'. WOC 18 hours. Pressure test to 1000 psi for 30 minutes.
- 4250'-TD-Drill out shoe and pressure test formation to 300 psi. Drill 8-1/2" hole to TD. Run OH logs. Set and cement 7" production liner WOC 18 hours. Pressure test to 1000 psi for 30 minutes.
- Detailed completion procedure to be prepared from OH log analysis. Anticipate stimulation of Blinbry and Drinkard zones.

NOTE: 1. 9-5/8" casing will not be run if Grayburg is normal pressured.
 2. If 9-5/8" casing is run, a 7" liner will be run to TD-4050'.
 3. If 9-5/8" casing is not run, reduce hole size to 8-1/2" at 4250'-TD and run a full 7" casing string to TD.

LIST TYPE OF STRING BY CODE LITERS, I.e. CONDUCTOR (C); SURFACE (S); INTERMEDIATE (I); PRODUCTION (P); LITER (L); PERFORATIONS (FP)

TYPE OF STRINGS &
INTERVAL (FT)

TYPE OF STRING & INTERVAL (FT)	OD	DRIPT ID	WT PER FT	GRADE	THREAD	AMT	WT. IN AIR, WT. IN MUD		REMARKS
							1000 LBS	1000 LBS	
(S) 0 - 400'	20"	18.936	94#	H-40	STC	400'	37.6		Use DV tool & ECP if water flow is encountered
(I) 0 - 2800'	13-3/8"	12.359"	61#	J-55	STC	2800'	170.8		
(I) 0 - 4250'	9-5/8"	8.525"	47#	N-80	LTC	4250'	199.8		DV tool & ECP inside 13-3/8" @ 2800'
(L) 4050'-7015'	7"	6.151"	26#	K-55	LTC	2965'	77.1		Sandblast $\pm 1200'$ casing across pay section

CENTRALIZERS
INTERVAL

OTHER ACCESSORY EQUIPMENT
(SUCH AS DEGRASSERS, MUD, CENTRIFUGE
FLOAT COLLARS, ETC. - SPECIFY)

TYPE OF STRING NO. FROM-TO REMARKS

(S) Surface	(4) 2 ea. on bottom 2 joints (2) 1 every 4 joints to surf.	Guide shoe & float collar	
(I) Intermediate	(4) 2 ea. on bottom 2 joints (11) 1 every 4 joints to 1000'	Float shoe & float collar ECP & DV stage tool (if required)	
(I) Intermediate	(8) 2 ea. on bottom 4 joints (6) 1 every 4 joints to 3000'	Float shoe & float collar ECP & DV stage tool	
(L) Production	(4) 2 ea. on bottom 2 joints (10) 1 every 3 joints to 5700'	Float shoe & float collar, Liner hanger w/PBR & tie back sleeve.	

MUD PROGRAM

<u>DEPTH INTERVAL</u> <u>FROM-TO</u>	<u>WEIGHT</u> <u>LLS/CAL</u>	<u>TYPE</u>	<u>OIL %</u>	<u>pH</u>	<u>WATER LOSS</u> <u>(cc)</u>	<u>VIS. (sec.)</u>	<u>YIELD</u> <u>POINT</u>	<u>THINNING</u> <u>AGENTS</u>	<u>WATER LOSS</u> <u>AGENTS</u>
0 - 400'	8.5-9.0	SPUD		9.0+					As Required
400' - 2800'	9.0-10.0	SALT GEL		9.0-10.0					As Required
2800' - 4250'	*14.5-15	SALT GEL		9.0-10.0					As Required
4250' - 7015'	9.0-10.0	SALT GEL		9.0-10.0	10-12+	35-40			As Required

*Weight up as necessary to control water flow.

REMARKS

1. Below 1400', drill w/saturated brine to keep hole enlargement to a minimum.
2. Add gelling agent as required to carry cuttings.
3. Keep pressure surges to a minimum below 1600'.
4. Condition mud to reduce water loss 50' above Blinebry Marker.
5. Condition mud to reduce viscosity prior to pumping cement.

TYPE OF SUMP

PROPOSED (ft)

PROPOSED (ft)

SLURRY WEIGHT (lb./cu. ft.)

FIELD YIELD (cu./cu. ft.)

(cu./cu. ft.)

TOTAL AMT. REQUIRED SKX/CF

FILL UP

BHT

SIZE

REMARKS

(S) 0 - 400' Class C (Lead) 47 2% 13.8 1.88 480/902 Circ. 75°F 26" 100% excess add 1/4#/sk flocele if lost circ. occurs

Class C (Tail-in) 2% 14.8 1.32 228/301

(I) 0 - 2800' Class C Light (Lead) 18% 13.2 1.92 4392/5977 Circ. 90°F 17-1/2" 200% excess add 1/4#/sk flocele if lost circ. occurs

Class C (Tail-in) 18% 15.2 1.38 300/414

DV STAGE TOOL @ 2800'

(I) 0'-4250' (1st Stage) Around shoe
Class C (Lead) *16.0 1.10 826/908 To ECP @ 2800'
100°F 12-1/4" 100% excess add 1/4#/sk flocele if lost circ. occurs 1% CFR-2

(2nd Stage) Thru DV tool
Class C (Lead) *16.0 1.10 1067/1174 Circ. 90°F 12-1/4" 20% excess 1% CFR-2

NOTE:

*Increase cement weight to be 1.0 ppg greater than mud weight and use weighted mud flush 0.5 ppg greater than mud weight.
Pump cement and mud flush at 3 BPM or less to keep sweep efficiency high.

CEMENT

TYPE OF STRING INTERVAL (FT) FROM-TO TYPE MIX	CEMT %	SALT %	CaCl ₂	SLURRY WEIGHT LB./GAL	SLURRY YIELD OF/SEX	TOTAL AMT. REQUIRED SKX/CF	FILL UP			REMARKS
								BHT	SIZE	
(1) 4050-7015' Class C Light (Lead)				12.7	1.84	440/811	9-5/8"	csg. 110°F	8-1/2"	100% excess add 1/4#/sk floccle if lost circ. occurs
Class C (Tail-in)			2%	14.8	1.32	200/264				

REMARKS:

1. Lab test slurry for production casing.
2. Condition mud to have low plastic viscosity and yield strength.
3. Precede cement w/500 gals. mud flush.
4. Utilize top and bottom plugs. Pump top plug w/TFW.
5. Reciprocate casing while cementing.
6. Recalculate cement volumes from OH caliper log.
7. Condition mud to reduce viscosity prior to cementing.