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 10,199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 6 Copie
Fee Lease - 5 Copie

☐ AMENDED REPORT

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

1 Operator Name and Address	2 OGRID Number
CHEVRON USA INC 15 SMITH ROAD, MIDLAND, TX 79705	4323
	3 API Number 30-025-24022

4 Property Code	5 Property Name	6 Well No.
	H.T. MATTERN (NCT-B)	14

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
M	30	21-S	37-E		660'	SOUTH	660'	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	10 Proposed Pool 2
PENROSE SKELLY GRAYBURG	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
P	O	ROTARY	P	3519'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	6820'	GRAYBURG		7/15/2002

21 Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

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

CHEVRON U.S.A. INTENDS TO RECOMPLETE THE SUBJECT WELL FROM THE DRINKARD POOL TO THE GRAYBURG.

THE INTENDED PROCEDURE, CURRENT WELLBORE DIAGRAM, AND PROPOSED WELLBORE DIAGRAM 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 Denise Leake

Printed Name Denise Leake

Title Regulatory Specialist

Date 6/24/2002 Telephone 915-687-7375

OIL CONSERVATION DIVISION

Approved By: ORIGINAL SIGNED BY PAUL F. KAUTZ PETROLEUM ENGINEER

Title:

Approval Date: JUL 2 2002 Expiration Date:

Conditions of Approval:
Attached ☐

DeSoto/Nichols 3-94 ver 1.10

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State of New Mexico
Energy, Minerals and Natural Resources D tment

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10,199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-24022	50350	PENROSE SKELLY GRAYBURG

4 Property Code	5 Property Name	6 Well No.
	H.T. MATTERN (NCT-B)	14

7 OGRID Number	8 Operator Name	9 Elevation
4323	CHEVRON USA INC	3519'

10 Surface Location

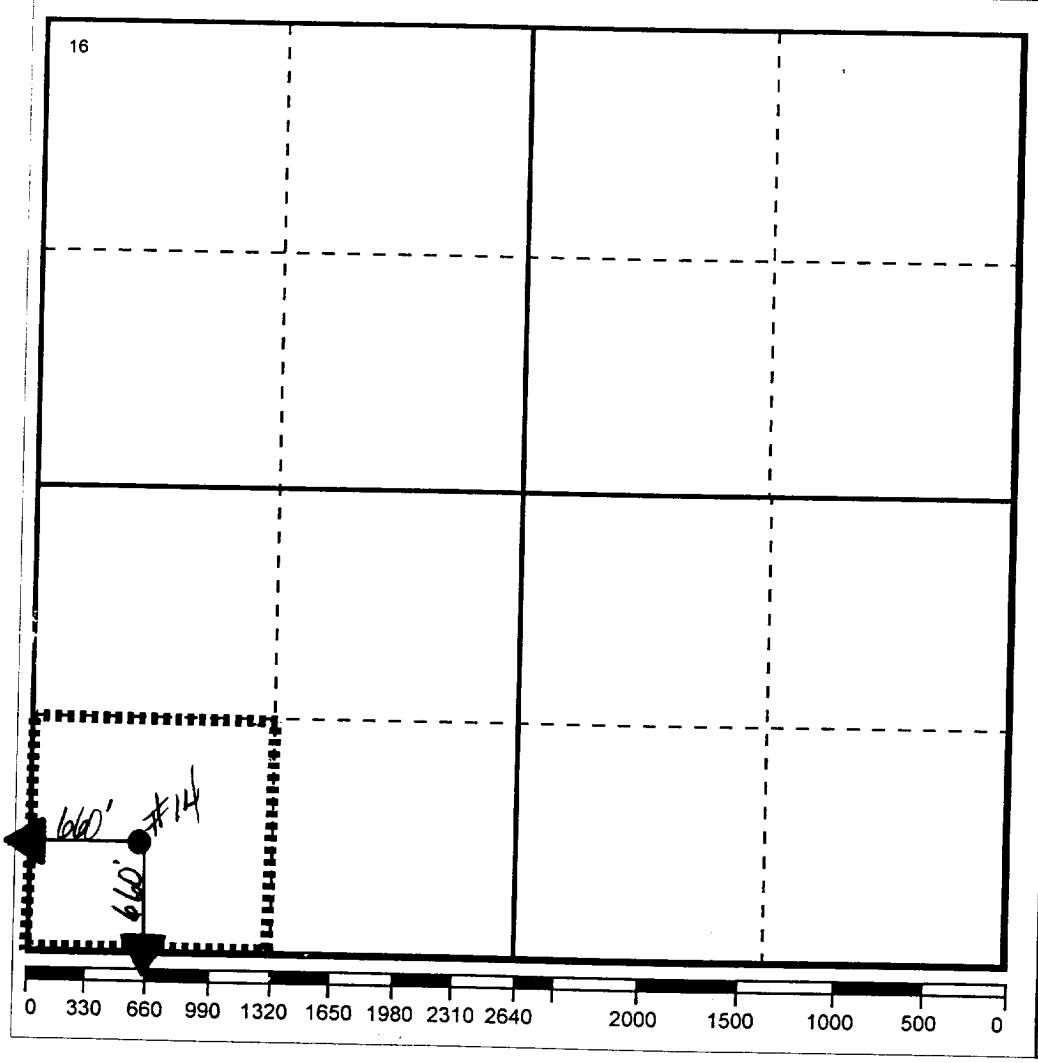
Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
M	30	21-S	37-E		660'	SOUTH	660'	WEST	LEA

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 Acre	13 Joint or Infill	14 Consolidation Code	15 Order No.
40	No		

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
Denise Leake

Printed Name
Denise Leake

Positio
Regulatory Specialist

Date
6/24/2002

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 knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

DeSoto/Nichols 3/94 ver 1.10

H. T. Mattern B # 14
Penrose Skelly Field
T21S, R37E, Section 30
Job: PB To Grayburg Formation, Acidize, And Frac

Procedure:

1. MI & RU pulling unit. Bleed pressure from well, if any. Pump down csg with 2% KCl water, if necessary to kill well. Remove WH. Install BOP's and test to 1000 psi. POH LD 2 3/8" production tbg string.

2. PU and GIH with 4 ¾" MT bit on 2 7/8" work string to top of 4" liner at 5830'. Reverse circulate well clean from 5830' using 2 % KCl water. POH with work string and 4 ¾" bit. LD bit.

3. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH with gauge ring (for 4" 11.34# liner) and junk basket to approximately 6500'. POH. GIH and set 4" CIBP at 6475'. POH. GIH and dump bail 35' cmt on top of CIBP at 6475'. POH. GIH and set 5 ½" CIBP at 5500'. POH. Fill 5 ½" csg with 2% KCL water. GIH and conduct GR/CBL/CCL log from 5500' up to 100' above cmt top. 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 3 1/8" DP slick casing gun and perforate from 3728-30', 3734-36', 3742-52', 3760-62', 3780-84', 3802-12', 3834-38', 3848-50', 3855-57', 3862-64', 3872-74', 3878-84', 3892-95', 3905-08', 3915-21', 3926-32', 3938-46', and 3958-68' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. RD & release electric line unit.

4. PU and GIH w/ 5 ½" PPI pkr (with 12' element spacing) and SCV on 2 7/8" work string to approximately 3725'. Test tbg to 5500 psi while GIH.

5. MI & RU DS Services. Acidize perfs 3728-3968' with 3,600 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **4500 psi**. Spot acid to bottom of tbg at beginning of each stage. Pump job as follows:

Interval	**Amt. Acid**	**Max Rate**	**PPI Setting**
3958-68'	200 gals	½ BPM	3957-69'
3938-46'	200 gals	½ BPM	3936-48'
3926-32'	200 gals	½ BPM	3923-35'
3915-21'	200 gals	½ BPM	3912-24'
3905-08'	200 gals	½ BPM	3900-12'
3892-95'	200 gals	½ BPM	3885-97'
3878-84'	200 gals	½ BPM	3875-87'

3872-74'	200 gals	½ BPM	3865-77'
3855-64'	400 gals	½ BPM	3854-66'
3848-50'	200 gals	½ BPM	3840-52'
3834-38'	200 gals	½ BPM	3828-40'
3802-12'	200 gals	½ BPM	3801-13'
3780-84'	200 gals	½ BPM	3776-88'
3760-62'	200 gals	½ BPM	3755-67'
3742-52'	200 gals	½ BPM	3741-53'
3728-36'	400 gals	½ BPM	3726-38'

Displace acid with 2% KCl 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 2 runs of 250 gals acid each, 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

6. Release PPI pkr and PUH to approximately 3700'. 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.**

7. Open well. Release PPI pkr. POH with tbg and PPI packer. LD 2 7/8" work string and PPI tool.

8. 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 7000 psi. Set pkr at approximately 3650'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

9. MI & RU DS Services. Frac well down 3 ½" tubing at **40 BPM** with 68,000 gals of YF135/140, 127,000 lbs. 16/30 mesh Jordan Sand, and 33,000 lbs **resin-coated** 16/30 mesh CR4000 proppant. Observe a maximum surface treating pressure of **6500 psi**. Pump job as follows:

   Pump 28,000 gals YF140 pad containing 5 GPT J451 Fluid Loss Additive

Pump 4,000 gals YF135 containing 1 PPG 16/30 mesh Jordan Sand
Pump 4,000 gals YF135 containing 2 PPG 16/30 mesh Jordan Sand
Pump 6,000 gals YF135 containing 3 PPG 16/30 mesh Jordan Sand
Pump 8,000 gals YF135 containing 4 PPG 16/30 mesh Jordan Sand
Pump 10,000 gals YF135 containing 5 PPG 16/30 mesh Jordan Sand
Pump 2,500 gals YF135 containing 6 PPG 16/30 mesh Jordan Sand
Pump 5,500 gals YF135 containing 6 PPG **resin-coated** 16/30 mesh CR4000 proppant

Flush to 3650' with 1,333 gals WF135. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services. **Leave well SI overnight.**

10. Open well and swab/backflow until well cleans up with no frac sand in returns and a stabilized flow rate is obtained. Report recovered fluid volumes, choke sizes and flowing pressures. SWI.

11. If well flows, GIH and set tbg plug in "F" profile. Release on-off tool and POH with 3 ½" work string and top half of on-off tool. Lay down work string. PU and GIH w/ top half of on-off tool on 2 7/8" tbg, testing to 5000 psi. Displace annulus with inhibited packer fluid. Re-engage on-off tool. Remove BOP's and install flanged WH rated at 3000 psi WP. Pressure test tbg and WH to 3000 psi. Pressure test casing to 500 psi. GIH and swab fluid level in tubing down until differential across tbg plug is balanced. GIH and retrieve tbg plug from "F" nipple. Swab well if necessary to initiate flow. RD & release pulling unit.

12. If well does not flow, release pkr and POH with 3 ½" work string. Lay down work string and pkr.

13. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 12 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 119 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Suspend tbg with EOT at 4100', SN at 4065', and TAC at 3700'.

14. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.

15. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH
6/21/2002

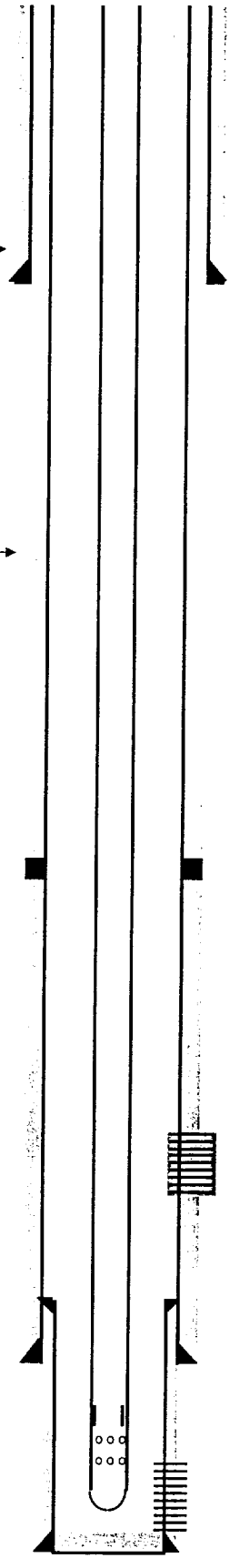
Well: **H. T. Mattern (N(,) #14** Field: **Drinkard** Reservo. **inkard**

Current Wellbore Diagram

Location:
660' FSL & 660' FWL
Section: 30
Township: 21S
Range: 37E Unit: M
County: Lea State: NM

Elevations:
GL: 3519'
KB: 3529'
DF: 3528'

Well ID Info:
Chevno: FG9493
API No: 30-025-24022
L5/L6: U415000
Spud Date: 2/25/72
Compl. Date: 3/14/72



Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1249' w/400 sx cmt
Size of hole: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Mar-72	**Perf** Blinebry zone f/ 5522-5811'.
	Acdz w/1500 gals 15% NE acid.
	Frac w/36,000 gals gel wtr & 1-3#
	20-40 SPG.

Subsequent Workovers/Reconditionings/Repairs:

Feb-76	Sqzd Blinebry perfs in 3 stages.
	Drilled deeper to 6820'. Set 4" liner
	f/ 5830-6819'. **Perf** Drinkard zone in
	4" liner w/4-1/2" JHPF f/6499-6743'.
	Acdz w/4,000 gals 15% NE acid.
	Frac perfs w/12,000 gals gel brine
	& 1-2# 20-40 SPG.
	Ran 4" Guiberson pkr and 2-3/8" tbg.
	Set pkr @ 6438'. Returned to prod.

Tbg Detail:
EOT @ 6764'
1 jt. OP & slotted 2-3/8" CS Hydril tbg
2 3/8" CS Hydril SN @ 6743'
31 jts. 2-3/8" CS Hydril N-80 tbg
187 jts. 2-3/8" EUE 8R J-55 tbg

DV Tool @ 3948'

Perfs	Status
5522-26'	Blinebry Oil - Squeezed
5550-54'	Blinebry Oil - Squeezed
5576-80'	Blinebry Oil - Squeezed
5622-26'	Blinebry Oil - Squeezed
5651-55'	Blinebry Oil - Squeezed
5807-11'	Blinebry Oil - Squeezed

Prod. Csg: 5-1/2", 14# & 15.5#, K-55
Set: @ 5903' w/735 sx cmt
Size of hole: 7-7/8"
Circ: No **TOC:** 2170'
TOC By: Temperature Survey

Perfs	Status
6499-6502'	Drinkard Oil - Open
6549-52'	Drinkard Oil - Open
6608-11'	Drinkard Oil - Open
6655-58'	Drinkard Oil - Open
6694-97'	Drinkard Oil - Open
6740-43'	Drinkard Oil - Open

Liner: 4", OD 11.34# K-55
Set: f/ 5830-6819' in 4-3/4" hole
Circ w/75 sx cmt to 5830'

COTD: 6778'
PBTD: 6778'
TD: 6820'

Updated: 5/21/02

By: K. M. Jackson

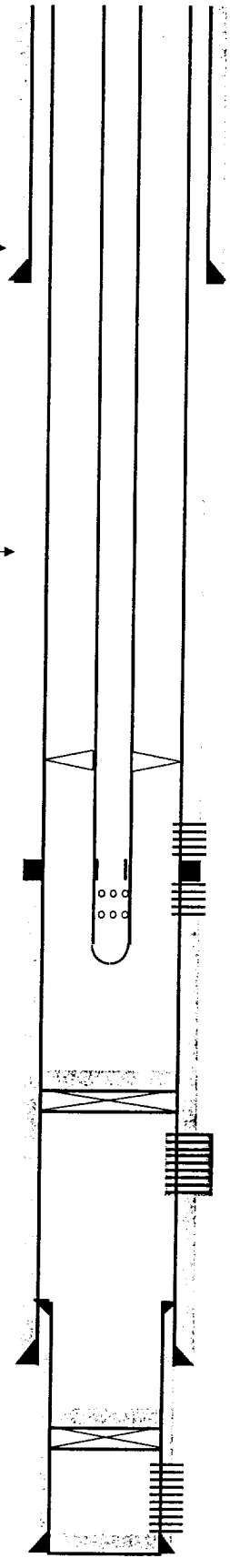
Well: **H. T. Mattern (N B) #14** Field: **Penrose Skelly** Reserv **Grayburg** 50390

Proposed Wellbore Diagram

Location:
660' FSL & 660' FWL
Section: 30
Township: 21S
Range: 37E Unit: M
County: Lea State: NM

Elevations:
GL: 3519'
KB: 3529'
DF: 3528'

Well ID Info:
Chevno: FG9493
API No: 30-025-24022
L5/L6: U490300
Spud Date: 2/25/72
Compl. Date: 3/14/72



Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1249' w/400 sx cmt
Size of hole: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Mar-72	**Perf** Blinebry zone f/ 5522-5811'.
	Acdz w/1500 gals 15% NE acid.
	Frac w/36,000 gals gel wtr & 1-3#
	20-40 SPG.

Subsequent Workovers/Reconditionings/Repairs:

Feb-76	Sqzd Blinebry perfs in 3 stages.
	Drilled deeper to 6820'. Set 4" liner
	f/ 5830-6819'. **Perf** Drinkard zone in
	4" liner w/4-1/2" JHPF f/6499-6743'.
	Acdz w/4,000 gals 15% NE acid.
	Frac perfs w/12,000 gals gel brine
	& 1-2# 20-40 SPG.
	Ran 4" Guiberson pkr and 2-3/8" tbg.
	Set pkr @ 6438'. Returned to prod.

Tbg Detail:
BP @ 4100'
1 jt. 2 7/8" tbg
2 7/8" x 4' perf sub
SN @ 4065'
12 jts. 2 7/8" EUE 8R J-55 tbg
TAC @ 3700'
119 jts. 2 7/8" EUE 8R J-55 tbg

Perfs	Status
3728-30'	Grayburg - Open
3734-36'	Grayburg - Open
3742-52'	Grayburg - Open
3760-62'	Grayburg - Open
3780-84'	Grayburg - Open
3802-12'	Grayburg - Open
3834-38'	Grayburg - Open
3848-50'	Grayburg - Open
3855-57'	Grayburg - Open
3862-64'	Grayburg - Open
3872-74'	Grayburg - Open
3878-84'	Grayburg - Open
3892-95'	Grayburg - Open
3905-08'	Grayburg - Open
3915-21'	Grayburg - Open
3926-32'	Grayburg - Open
3938-46'	Grayburg - Open
3958-68'	Grayburg - Open
5522-26'	Blinebry Oil - Cmt Sqzd
5550-54'	Blinebry Oil - Cmt Sqzd
5576-80'	Blinebry Oil - Cmt Sqzd
5622-26'	Blinebry Oil - Cmt Sqzd
5651-55'	Blinebry Oil - Cmt Sqzd
5807-11'	Blinebry Oil - Cmt Sqzd

Prod. Csg: 5-1/2", 14# & 15.5#, K-55
Set: @ 5903' w/735 sx cmt
Size of hole: 7-7/8"
Circ: No **TOC:** 2170'
TOC By: Temperature Survey

Perfs	Status
6499-6502'	Drinkard Oil - Open
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6655-58'	Drinkard Oil - Open
6694-97'	Drinkard Oil - Open
6740-43'	Drinkard Oil - Open

Liner: 4", OD 11.34# K-55
Set: f/ 5830-6819' in 4-3/4" hole
Circ w/75 sx cmt to 5830'

COTD: 5465'
PBTD: 5465'
TD: 6820'

Updated: 5/21/02 **By:** K. M. Jackson

RECEIVED Hobbs OCD