

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

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HOBBSSUCD
State of New Mexico
Energy Minerals and Natural Resources
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

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

¹ Operator Name and Address CHEVRON U.S.A. INC. 15 SMITH ROAD MIDLAND, TEXAS 79705		² OGRID Number 4323
		³ API Number 30 - 025-24120
³ Property Code 2682	⁵ Property Name H.T. MATTERN NCT-B	⁶ Well No. 16
⁹ Proposed Pool 1 EUNICE SAN ANDRES		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no. D	Section 31	Township 21-S	Range 37-E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 330	East/West line WEST	County LEA
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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
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Additional Well Information

Work Type Code P	¹² Well Type Code O	¹³ Cable/Rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3511' GL
¹⁶ Multiple NO	¹⁷ Proposed Depth	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
NO CHANGE					

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 INTO EUNICE; SAN ANDRES POOL.

THE INTENDED PROCEDURE AND CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

ALSO ATTACHED, IS THE PIT INFO & C-102 PLAT.

**Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Plugback**

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

Signature:

Denise Pinkerton

Printed name:
DENISE PINKERTON

Title:
REGULATORY SPECIALIST

E-mail Address:
leakejd@chevron.com

Date:
02-09-2011

Phone:
432-687-7375

OIL CONSERVATION DIVISION

Approved by:

[Signature]

Title:
PETROLEUM ENGINEER

Approval Date:
FEB 11 2011

Expiration Date:

Conditions of Approval Attached ☐

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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 July 16, 2010

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

RECEIVED

FEB 10 2011

HOBBS

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-24120	² Pool Code 24150	³ Pool Name EUNICE; SAN ANDRES
⁴ Property Code 2682	⁵ Property Name H.T. MATTERN NCT-B	⁶ Well Number 16
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁹ Elevation 3511' GL

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
D	31	21S	37E		330	NORTH	330	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 40	¹³ Joint or Infill	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>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.</i> Signature Date 02-09-2011 DENISE PINKERTON Printed Name REGULATORY SPECIALIST leakejd@chevron.com E-mail Address			
	¹⁸ SURVEYOR CERTIFICATION <i>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.</i> Date of Survey Signature and Seal of Professional Surveyor:			
	Certificate Number			

H. T. Mattern (NCT-B) # 16
Drinkard Field
T21S, R37E, Section 31

Job: Plugback To San Andres Formation, Acidize And Return To Production

Procedure:

1. *This procedure is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of 2/3/2011. Verify what is in the hole with the well file in the Eunice Field office. Discuss w/ WEO Engineer, Workover Rep, OS, ALS, and FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.*
2. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. 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/1000 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report. **Note: Prior to performing this step of the procedure, ensure that all valves, pipe, and fittings that will be exposed to test pressure are rated higher than the planned test pressure.**
3. MI & RU workover unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. Remove WH. Install BOP's and stripper head. PU AS1X 5 1/2" x 2 7/8" pkr. RIH to approximately 25'. Test csg to 500 psi. Test BOP's to 250 psi low, 2000 psi high. LD jt of 2 7/8" tbg and pkr.
4. PU 4 3/4" MT bit and GIH on 2 7/8" L-80 work string to 4300'. POH with 2 7/8" work string and bit. LD bit.
5. MI & RU Baker Atlas electric line unit. Install lubricator and test to 2000 psi. GIH and conduct GR/CBL/CCL log from 5475' up to 200' above cement top. Conduct log with 500 psi casing pressure. POH. Inspect logs for good cement bond from approximately 4100' up to 3800'. 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 3/8" RHSC Gunslinger casing guns (0.42" EH & 47" penetration) and perforate from 3982-87', 3990-95', 4002-07', 4009-11', and 4030-34' with 4 JSPF at 120 degree phasing, using 25 gram premium charges. POH. RD & release electric line unit. **Note: Use Welex Compensated Acoustic Velocity Log dated 5/22/1972 for depth correlation.**
6. PU and GIH w/ 5 1/2" PPI pkr (with 12' element spacing) and SCV on 2 7/8" work string to approximately 4034'. Test tbg to 5500 psi while GIH.
7. MI & RU Schlumberger Services. Acidize perfs 3982-4034' with 1,000 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface treating pressure of **3500 psi**. Spot acid to bottom of tbg at beginning of each stage. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
4030-34'	200 gals	½ BPM	4028-40'
4002-11'	400 gals	½ BPM	4001-13'
3990-95'	200 gals	½ BPM	3988-4000'
3982-87'	200 gals	½ BPM	3876-88'

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 500 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 3950'. 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 on an hourly basis. **Note:** Selectively swab perfs as directed by Engineering if excessive water is produced.
9. Open well. Release PPI pkr. POH LD 2 7/8" work string and PPI packer.
10. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 1 jt 2 7/8" EUE 8R J-55 IPC tbg, 5 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 126 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3920', with EOT at 4180' and SN at 4145'.
11. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALCR recommended design. RD & release pulling unit.
12. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

Well: H. T. Mattern (NCT-B) # 16

Field: Drinkard

Reservoir: Drinkard

Location:
330' FNL & 330' FWL
Section: 31
Township: 21S
Range: 37E Unit: D
County: Lea State: NM

Elevations:
GL: 3511'
KB: 3523'
DF: 3522'

**Current
Wellbore Diagram**

Well ID Info:
Chevno: FG8797
API No: 30-025-~~22412~~ 24120
L5/L6: UCU415000
Spud Date: 5/11/72
Compl. Date: 5/30/72

Surf. Csg: 8 5/8" 24#, K-55
Set: @ 1237' w/ 400 sx cmt
Hole Size: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
KB Correction		12.00
None		
0	Bottom Of String >>	12.00

This wellbore diagram is based on the most recent information regarding wellbore configuration and equipment that could be found in the Midland Office well files and computer databases as of the update date below. Verify what is in the hole with the well file in the Eunice Field Office. Discuss w/ WEO Engineer, WO Rep, OS, ALS, & FS prior to rigging up on well regarding any hazards or unknown issues pertaining to the well.

CIBP @ 5510'
(35' cmt on top)

Perfs:	Status
5532-34'	Blinebry - Cmt Sqzd
5565-67'	Blinebry - Cmt Sqzd
5617-19'	Blinebry - Cmt Sqzd
5647-49'	Blinebry - Cmt Sqzd
5694-96'	Blinebry - Cmt Sqzd
5729-31'	Blinebry - Cmt Sqzd

Prod. Csg: 5 1/2", 14# & 17#, K-55
Set: @ 5877' w/ 735 sx cmt
Hole Size: 7 7/8"
Circ: No **TOC:** 2080'
TOC By: Temperature Survey

CIBP @ 6450'
(35' cmt on top)

Perfs:	Status
6501-04'	Drinkard - Below CIBP
6554-57'	Drinkard - Below CIBP
6584-87'	Drinkard - Below CIBP
6616-19'	Drinkard - Below CIBP
6648-51'	Drinkard - Below CIBP
6668-71'	Drinkard - Below CIBP
6700-03'	Drinkard - Below CIBP
6732-35'	Drinkard - Below CIBP

COTD: 5475'
PBTD: 5475'
TD: 6810'

Updated: 2/3/2011

By: A. M. Howell

4" OD 11.34# FJ K-55
Liner f/ 5780-6809'. (4 3/4" hole)
Cmtd w/65 sx. Cmt Circ.

Well: H. T. Mattern (NCT-B) # 16

Field: Eunice SW; SA Reservoir: San Andres

**Proposed
Wellbore Diagram****Location:**

330' FNL & 330' FWL
Section: 31
Township: 21S
Range: 37E Unit: D
County: Lea State: NM

Elevations:

GL: 3511'
KB: 3523'
DF: 3522'

Well ID Info:

Chevno: FG8797
API No: 30-025-22442-2412-0
L5/L6: UCLB10500
Spud Date: 5/11/72
Compl. Date: 5/30/72

Surf. Csg: 8 5/8" 24#, K-55
Set: @ 1237' w/ 400 sx cmt
Hole Size: 11"
Circ: Yes TOC: Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	12.00
126	Jts. 2 7/8" EUE 8R J-55 Tbg	3906.00
	TAC	2.75
5	Jts. 2 7/8" EUE 8R J-55 Tbg	188.08
1	Jt. 2 7/8" EUE 8R J-55 IPC Tbg	31.91
	SN	1.10
	2 7/8" x 4' Perf Tbg Sub	4.00
1	Jt. 2 7/8" EUE 8R J-55 Tbg	31.05
	Bull Plug	0.50
133	Bottom Of String >>	4177.39

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(35' cmt on top)

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(35' cmt on top)

COTD: 5475'
PBTD: 5475'
TD: 6810'

Updated: 2/3/2011

By: A. M. Howell

Perfs:	Status
3982-87'	San Andres - Open
3990-95'	San Andres - Open
4002-07'	San Andres - Open
4009-11'	San Andres - Open
4030-34'	San Andres - Open

Perfs:	Status
5532-34'	Blinebry - Cmt Sqzd
5565-67'	Blinebry - Cmt Sqzd
5617-19'	Blinebry - Cmt Sqzd
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4" OD 11.34# FJ K-55
Liner f/ 5780-6809'. (4 3/4" hole)
Cmtd w/65 sx. Cmt Circ.