# - Dstrict 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

Submit to appropriate District Of

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

 <del>-</del>
AMENDED REPC

Form C-

May 27, 2

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUCBACK OF ADD A ZONE

PLUGB	ACK, O	R Al	DD	A Z	ONE		,		,		,				
	<sup>1</sup> Operator Name and Address CHEVRON U.S.A. INC									4323	<sup>2</sup> O	GRID Numbe	·/		
				1.	5 SMITH	ROAD						4323	3	API Number	
				MIDL	AND, TE	EXAS 797						30 – 025-3	2902		
	erty Code 996						:	<sup>5</sup> Property R R SIM						° We	ll No.
		IF MA			d Pool 1	CENT CD VX	WI DO					10 Pro	posed	Pool 2	<del></del>
<sup>7</sup> Surface	Locatio		111X	/ KIVE	ERS QUE	EEN GRAY	BURG	i .							
UL or lot no	Section	Towns	hip	R	Range	Lot	Idn	Feet fre	om the	m the North/South line		Feet from the	East	t/West line	County
0	4	23S			37E			53	55	SOUTH		2030	EAS	ST	LEA
<sup>8</sup> Proposed				1						1					
UL or lot no	Section	Towns	ship	R	Range	Lot	Idn	Feet fro	om the	North/S	outh line	Feet from the	Ea	ast/West line	County
Addition		Infori	mat												
11 Work	Type Code P			12 We	ll Type Co O	ode		13 Cable	e/Rotary		14	Lease Type Code S		<sup>15</sup> Gro	and Level Elevation 3314'
	fultiple NO			<sup>17</sup> Pro	posed Dep 7250'	oth		-	mation BURG			19 Contractor			<sup>20</sup> Spud Date
Depth to Grou	ındwater					Distanc	e from r	nearest fres	sh water	well		Distance fro	m nea	rest surface w	ater
	Synthetic ed-Loop Sys			uls thick	Clay	☐ Pit V	olume_	bbl	s		ıllın <u>g Metl</u> esh Water	hod: Brine D	iesel/C	Oil-based	Gas/Air 🔲
<sup>21</sup> Propos	ed Casii	ng an	d C	emen	nt Prog	ram									
Hole S	Size			ing Size		Casın	g weigh	nt/foot	Setting Depth Sacks of Cement Estir		Estimated TOC				
NO CHA	ANGE										•				
												-			
														<del></del>	
Describe the CHEVRON U A PIT WILL	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 conscribe the blowout prevention program, if any Use additional sheets if necessary CHEVRON USA INC INTENDS TO RECOMPLETE THE SUBJECT WELL TO THE GRAYBURG FORMATION, ACIDIZE, & FRAC A PIT WILL NOT BE USED FOR THIS PLUGBACK  THE INTENDED PROCEDURE, & CURRENT & PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR THE PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR TH														
Permit Expires 1 Year From Approval Date Unless Briting Underway Plug back															
23 I heraby an	rtify that the	nfor-	natio	n muor	ahovo ra		_		149	משענ	-( ) <u> </u>	HA		99/	
23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief I further certify that the drilling pit will be constructed according to NMOCD guidelines , a general permit , or						OIL C	ONSERVA	ГЮ	N DIVIS	ION					
an (attached) alternative OCD-approved plan						Appro	ved by	Char	- 9/6	<del>,</del>	 د سه				
Printed name	Denise Pi	ıkerton		<u> </u>	WC/	J, U			Title C	DE DIS	TRICT S	UPERVISOR/	<i>CLL</i> Gen	FRAI MAN	MACED
Title Reg	ulatory Spe	cıalıst							Approv	val Date	LIAN			tion Date	TP-124"
E-mail Addre		@chevr	on.cc								1 37711	O , 2000			
Date 01-03-2008 Phone 432-687-7375					Conditi	ions of A <sub>l</sub>	oproval At	tached							

R. R. Sims B # 1 Langlie Mattix Field T23S, R37E, Section 4

Job: PB To Grayburg Formation, Acidize, And Frac

## 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 12/20/2007. 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/500 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.
- 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. POH with rods and pump. Remove WH. Install BOP's and test as required. Release TAC. POH with 2 7/8" tbg string and TAC.
- 4. PU and GIH with 6 1/8" MT bit and 2 7/8" work string to approximately 5650'. Reverse circulate well clean from 5650' using 8.6 PPG cut brine water. POH with work string and bit. LD bit.
- 5. PU and GIH with tbg-set CIBP on 2 7/8" work string to 5600'. Set CIBP at 5600'. Pressure test CIBP and 7" casing to 500 psi. POH with 2 7/8" work string and setting tool. LD setting tool.
- 6. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CNL/CCL from 5600' up to 3200'. Send log to Midland Engineering for picking perfs. POH. GIH and conduct GR/CBL/CCL from 5600' up to 100' above top of cement. Run log with with 500 psi on casing. POH. Inspect logs for good cement bond from approximately 4100' up to 3400'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. GIH with 3 3/8" Predator casing guns and perforate from 3719-28', 3735-39', 3745-55', 3768-74', 3786-96', 3819-26', 3832-36', 3844-51', 3857-61', 3867-73', 3877-84', 3900-10', 3931-35', 3948-58, 3962-70', 3973-80', and 3984-94' with 4 JSPF at 120 degree phasing, using 32 gram premium charges. POH. RD & release electric line unit. Note: Use Halliburton Dual Laterolog Micro-SFL Log dated 5/8/1995 for depth correlation. Also, do not load guns using the perfs noted above. The exact perfs will change after receiving Compensated Neutron Log.

- 7. PU and GIH w/7" PPI pkr (with 12' element spacing) and SCV on 2 7/8" work string to approximately 4010'. Test tbg to 5500 psi while GIH. Pressure test csg from 4010-5600' to 2000 psi. Release PPI pkr. PUH to 3984'.
- 8. MI & RU DS Services. Acidize perfs 3719-3994' with 3,400 gals anti-sludge 15% HCl acid \* at a maximum rate as shown below and a maximum surface pressure of 3500 psi. Spot acid across perfs at beginning of each stage and let soak to lower breakdown pressure and prevent communication. Pump job as follows:

Interval	Amt. Acid	Max Rate	<b>PPI</b> Setting
3984-94'	200 gals	½ BPM	3983-95'
3973-80'	200 gals	½ BPM	3971-83'
3962-70'	200 gals	½ BPM	3960-72'
3948-58'	200 gals	½ <b>BPM</b>	3947-59'
3931-35'	200 gals	½ <b>BPM</b>	3930-42'
3900-10'	200 gals	½ BPM	3899-3911'
3877-84'	200 gals	½ BPM	3875-87'
3867-73'	200 gals	½ BPM	3864-76'
3857-61'	200 gals	½ BPM	3852-64'
3844-51'	200 gals	½ BPM	3840-52'
3832-36'	200 gals	½ BPM	3830-42'
3819-26'	200 gals	½ BPM	3815-27'
3786-96'	200 gals	½ BPM	3785-97'
3768-74'	200 gals	½ BPM	3765-77
3745-55'	200 gals	½ BPM	3744-56'
3735-39'	200 gals	½ BPM	3730-42'
3719-28'	200 gals	½ BPM	3718-30'

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

9. Release PPI pkr and PUH to approximately 3675'. Set pkr at 3675'. Fish SCV. 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.

- 10. Open well. Release PPI pkr. POH with tbg and PPI packer. LD PPI tool.
- 11. PU and GIH w/7" Arrow-Set 10K pkr & On-Off tool w/2.25" "F" profile and 117 jts. of 3 ½" EUE 8R L-80 work string, testing to 8500 psi. Set pkr at approximately 3600'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.
- 12. MI & RU DS Services and Tracer-Tech Services (Mike Mathis (866) 595-3115). Frac well down 3 ½" tubing at 40 BPM with 88,000 gals of YF125, 176,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs resin-coated 16/30 mesh CR1630 proppant. Observe a maximum surface treating pressure of 8000 psi. Tag frac with 2 radioactive isotopes (1 in regular sand stages, and 1 in resin-coated proppant stage). Pump job as follows:

Pump 2,000 gals 2% KCL water containing 55 gals Baker RE 4777-SCW Scale Inhibitor at 6 BPM

Pump 1,000 gals 2% KCL water spacer at 20 BPM

Pump 14,000 gals YF125 pad containing 5 GPT J451 Fluid Loss Additive at 40 BPM

Pump 14,000 gals YF125 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive

Pump 12,000 gals YF125 containing 1.5 PPG 16/30 mesh Jordan Sand

Pump 12,000 gals YF125 containing 2.5 PPG 16/30 mesh Jordan Sand

Pump 14,000 gals YF125 containing 3.5 PPG 16/30 mesh Jordan Sand

Pump 16,000 gals YF125 containing 4.5 PPG 16/30 mesh Jordan Sand

Pump 6,000 gals YF125 containing 5 PPG resin-coated 16/30 mesh CR1630 proppant.

Flush to 3600' with 1,315 gals WF125. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and Tracer-Tech Services. **Leave well SI overnight.** 

- 13. Open well. Bleed pressure from well, if any. Release pkr. POH LD 3 ½" work string, on-off tool, and pkr.
- 14. PU and GIH with 6 1/8" MT bit on 2 7/8" work string to approximately 4300'. If fill is tagged above 4300', cleanout to 4300' using 8.6 PPG cut brine water and air unit if necessary. POH with 2 7/8" work string and bit. LD bit.
- 15. PU & GIH with 7" pkr on 2 7/8" work string to 3600'. Set pkr at 3600'. Open well. GIH and swab well until there is no sand inflow. Swab well for at least 3 hours before logging. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct after-frac PRISM GR/Temp/CCL log from 4300' up to 3300'. POH. RD & release electric line unit.

  Note: Correlate logs and run flat with Baker Atlas GR/CBL/CCL Log conducted in Step # 6.
- 16. Release pkr. POH LD 2 7/8" work string and pkr.

- 17. 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, 14 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 117 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3650', with EOT at 4115' and SN at 4080'.
- 18. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.
- 19. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH 12/20/2007

### Location:

535' FSL & 2030' FEL Section: 4 Township: 23S Range: 37E County: Lea State: NM

Elevations:

GL: 3314' KB: 3326' DF: 3325'

## Current Wellbore Diagram

Well ID Info: Chevno: BC4538 API No: 30-025-32902 L5/L6: UCU820400 Spud Date: 4/27/95 Compl. Date: 8/16/95

Surf. Csg: 9 5/8\*, 36#, WC-50 Set: @ 1182\* w/ 650 sks Hole Size: 12 1/4" Circ: Yes TOC: Surface TOC By: Circulated

### Tubina Detail:

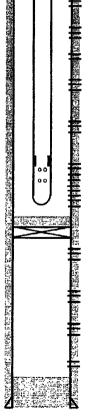
~		
#Jts:	Size:	Footage
	KB Correction	12 00
180	Jts. 2 7/8" EUE 8R J-55 Tbg	5580.00
	TAC	2 72
22	Jts. 2 7/8" EUE 8R J-55 Tbg	692 28
	SN	1.10
	2 7/8' x 4' Perf Tbg Sub	4.10
t	Jt. 2 7/8" EUE 8R J-55 Tbg	31.20
	Bull Plug	0.50
203	Bottom Of String >>	6323,90

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 @ 6400' (20° cmt on top)

COTD: 6378' PBTD: 6380' TD: 7250'

Updated: 12/20/2007



5712-19 Blinebry - Open 5725-38 Blinebry - Open 5745-47 Blinebry - Open 5758-65 Blinebry - Open 5773-81 Blinebry - Open 5788-95 Blinebry - Open 5812-16 Blinebry - Open 5843-45 Blinebry - Open 5868-72° Blinebry - Open 6116-6250 Tubb - Open 6460-64' Drinkard - Below CIBP 6488-98 Drinkard - Below CIBP 6508-12 Drinkard - Below CIBP 6540-63 Drinkard - Below CIBP 6571-97 Drinkard - Below CIBP

Status:

Blinebry - Open

Blinebry - Open

Perfs:

5679-81

5698-5702

6605-17	Drinkard - Below CIBP			
6631-35"	Drinkard - B	ielow CIBP		
6723-28'	6990-96'	Abo - Below CIBP		
6737-48'	6999-7001	Abo - Below CIBP		
6758-62*	7004-15'	Abo - Below CIBP		
6884-94"	7028-30'	Abo - Below CIBP		
6902-04'	7040-431	Abo - Below CIBP		
6907-10*	7048-54'	Abo - Below CIBP		
6918-32*	7062-72	Abo - Below CIBP		
6940-42*	7096-7102	Abo - Below CIBP		
6948-53'	7120-32	Abo - Below CIBP		
6956-58'	7142-44'	Abo - Below CIBP		
6961-71'		Abo - Below CIBP		

Prod. Csg: 7", 23#, 26#, & 32# K-55 & L-80 Set: @ 7250' w/ 3000 sks Hole Size: 8 3/4" Circ: Yes TOC: Surface TOC By: Circulated

Section: 4

Township: 23S

Range: 37E

535' FSL & 2030' FEL

County: Lea State: NM

Surf. Csg: 9 5/8", 36#, WC-50 Set: @ 1182' w/ 650 sks Hole Size: 12 1/4" Circ: Yes TOC: Surface TOC By: Circulated

### Proposed Wellbore Diagram

Well ID Info: Chevno: BC4538 API No: 30-025-32902 L5/L6: UCMK90400 Spud Date: 4/27/95 Compl. Date: 8/16/95 37240

Elevations: GL: 3314' KB: 3326' DF: 3325'

Location:

Wr.D

Tubina	Dataile

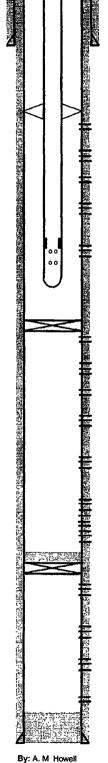
Name	Tanana and		
117 Jts 2 7/8* EUE 8R J-55 Tbg 3627.00 TAC 2 72 14 Jts 2 7/8* EUE 8R J-55 Tbg 434 00 SN 1.10 2 7/8* x 4* Perl Tbg Sub 4.10 1 Jt. 2 7/8* EUE 8R J-55 Tbg 31 20 Bull Plug 0.50	ilta:	Size:	Footage
TAC 2.72 14 Jts 2.7/8' EUE 8R J-55 Tbg 434 00 SN 1.10 2.7/8' x-4' Perl Tbg Sub 4.10 1 Jt. 2.7/8' EUE 8R J-55 Tbg 31 20 Bull Plug 0.50		KB Correction	12.00
14 Jis 2 7/8* EUE 8R J-55 Tbg 434 00 SN 1.10 2 7/8* x 4* Perl Tbg Sub 4.10 1 Jit 2 7/8* EUE 8R J-55 Tbg 31 20 Bull Plug 0.50	117	Jts 27/8" EUE 8R J-55 Tbg	3627.00
SN 1.10 2 7/8" x 4" Perl Tbg Sub 4.10 1 Jt. 2 7/8" EUE 8R J-55 Tbg 31 20 Bull Plug 0.50		TAC	2 72
2 7/8" x 4" Perl Tbg Sub 4.10 1 Jt. 2 7/8" EUE 8R J-55 Tbg 31 20 Bull Plug 0.50	14	Jts 27/8" EUE 8R J-55 Tbg	434 00
1 Jt. 2 7/8" EUE 8R J-55 Tbg 31 20 Bull Plug 0.50		SN	<b>1.10</b>
Bull Plug 0.50		2 7/8" x 4" Peri Tbg Sub	4.10
	1	Jt. 2 7/8" EUE 8R J-55 Tbg	31 20
			0.50
	132		4112.62

CIBP @ 5600' (No cmt on top)

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.

COTD: 5600' PBTD: 5600' TD: 7250'

Updated: 12/20/2007



Status: Perfs: 3719-28 Grayburg - Open Grayburg - Open 3735-39 Grayburg - Open 3745-55 3768-74 Grayburg - Open 3786-96 Grayburg - Open 3819-26 Grayburg - Open Grayburg - Open 3832-36 3844-51 Grayburg - Open 3857-61 Grayburg - Open 3867-73' Grayburg - Open Grayburg - Open 3877-84 3900-10 Grayburg - Open 3931-35 Grayburg - Open 3948-58' Grayburg - Open 3962-70' Grayourg - Open 3973-80 Grayburg - Open 3984-94 Grayburg - Open

Perfs:	Status:
5679-81*	Blinebry - Open
5698-5702	Blinebry - Open
712-19'	Blinebry - Open
5 <b>725</b> -38'	Blinebry - Open
745-47	Blinebry - Open
5758-65'	Blinebry - Open
5773-81"	Blinebry - Open
5788-95'	Blinebry - Open
812-16'	Blinebry - Open
5843-45'	Blinebry - Open
868-72	Blinebry - Open
3116-6250'	Tubb - Open

0110-0230	rubb - Open
6460-64'	Drinkard - Below CIBP
6488-98"	Drinkard - Below CIBP
6508-12*	Drinkard - Below CIBP
6540-63*	Drinkard - Below CIBP
6571-97	Drinkard - Below CIBP
6605-17	Drinkard - Below CIBP
6631-35'	Drinkard - Below CIBP
6723-28'	6990-96' Abo - Below CIBP
6737-481	6000-7001' Abo - Balow CIRD

6737-48'	6999-7001'	Abo - Below CiBP
675 <b>8-62</b> *	7004-15'	Abo - Below CIBP
6884-94'	7028-30"	Abo - Below CIBP
6902-04'	7040-43'	Abo - Below CIBP
6907-10'	7048-54	Abo - Below CIBP
6918-32"	7062-72	Abo - Below CIBP
6940-42'	7096-7102	Abo - Below CIBP
6948-53'	7120-32	Abo - Below CIBP
6956-58'	7142-44	Abo - Below CIBP
6961-71'		Abo - Below CIBP

Prod. Csg: 7", 23#, 26#, & 32# K-55 & L-80 Set: @ 7250' w/ 3000 sks Hole Size: 8 3/4"

Circ: Yes TOC: Surface TOC By: Circulated