Submit 3 Copies To Appropriate District Office	E. my Minerals and Natural Resources				Form C- Revised March 25, 1	
<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240	Li gy, Minerais ai	ild Hatulai iles	Γv,	LL API NO.		
District II	OIL CONSERVA			-025-08761		
1301 W. Grand Ave., Artesia, NM 88210				Indicate Type of		
<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410		St. Francis Dr		STATE 2		
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM	Santa Fe,	NM 87505	6.	State Oil & G	as Lease No.	
(DO NOT USE THIS FORM FOR PROPOS	CES AND REPORTS ON ALS TO DRILL OR TO DEEPE	EN OR PLUG BACK	K TO A	Lease Name or	Unit Agreement Nar	me:
DIFFERENT RESERVOIR. USE "APPLIC. PROPOSALS.)	ATION FOR PERMIT" (FORM	C-101) FOR SUCH	H	arry Leonard (N	CT) D	
1. Type of Well:						
	er TA'd					
2. Name of Operator			8.	Well No. 11		
	on U.S.A. Inc		0	Pool name or	Wildcat	
3. Address of Operator	Box 1150, Midland, TX 7	79702		unice South;7 R		
4. Well Location	JOX 1150, Wildlind, 17()	2708		<u> </u>		
4. Wen Location						
Unit Letter J: 1980 feet fr	om the South line and 198	80 feet from the	East line			
	m 1: 00	C D	265	NDADM	County IEA	
Section 3	Township 22 10. Elevation (Show wh			NMPM	County LEA	
	3752' GR	ieiner DK, KKD,	KI, OK, etc.)			
11 Check A	ppropriate Box to Ind	licate Nature o	of Notice, Re	port or Other	Data	
NOTICE OF IN			SUBSE	QUENT RE	PORT OF:	
	PLUG AND ABANDON		EDIAL WORK		ALTERING CASING	; 🗌
						_
TEMPORARILY ABANDON	CHANGE PLANS	Сомг	MENCE DRILLI		PLUG AND ABANDONMENT	\boxtimes
PULL OR ALTER CASING	MULTIPLE COMPLETION		NG TEST AND ENT JOB			
OTHER:			R:			
12 Describe proposed or completed	operations. (Clearly state	e all pertinent de	tails, and give p	pertinent dates, i	ncluding estimated d	ate of
starting any proposed work). SE	E RULE 1103. For Multi	iple Completions	s: Attach wellb	ore diagram of p	roposed completion	or
recompilation.			·) • · ·		4	4h a
This well is part of the New	Mexico "P&A Pilot Pi	roject" conduc	cted by Bente	rra Corporati	on to demonstrate	: the
plugging and abandonment	process using highly c	compressed so	alum bentoni	te noquies as i	ine plugging mean	
Tag bottom @ 3768'						
Perf Plug @ 3650' - 3768'	10 cu ft 2		Tagged			
B/Salt Plug @ 2916' – 3020'	10 cu ft 2	Zonite	Tagged			
Rustler-Cavity Shot Plug 1615' Rustler Plug 1270' – 1615'	- 1628' 1 cu ft Z 105 sx C	onite lass C cement	Tagged Tagged	Cavity Shot	1558' 1568'	
FW/Shoe Cavity Shot Plug @ 4 4 ½" casing pulled from 409'	41' – 459 1 cu ft Z	onite	Tagged	Cavity Shot	t 399' – 409'	
FW/Shoe Plug @ 290' - 441'	38 cu ft 2	Zonite	Tagged		a f	
Top Plug @ 3' – 33'	12 cu ft 2	Zonite				
Set Marker. Chevron to clean lo Plugging operations began 10/12	ocation. 2/01 and were completed 3	3/26/02. Wellbo	re diagram atta	ched.		
I hereby certify that the information						
IV Dala	$11 \Lambda_c$	ITTLE <u>Regulato</u>			E 4/22/02	
SIGNATURE J.K. Kipley	Shaubt	-	<u>DIY OA</u>		phone No.(915)687-7	
Type or print name J.K. Ripley	Grund		<u> </u>	Tele		
(This space for State use)						
		~	, 0		-	
APPPROVED BY Conditions of approval, of any:	John I	TITLE Fla	Rep	,	_DATE 2-30 -	<u>0</u> 2

504

BENTERRA Corporation

9'

Mid-Continent Region

Final P&A Schematic

Well Name: API Number Coordinates: S - T - R County / State: Drilled:	Harry Leonard (NCT-D) #11 30-025-08761 1980 FNL & 1980 FEL 3 - 22S - 36E Unit J Lea, NM 1959	Operator: Field: Date: By:	Chevron Eunice S. (Y7RQ) 4/11/2002 CRS/MCB
RKB = 9'			



3818' TD



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OPERATOR			DATE			
Chevron U.S.A. Production Company				See Below		
LEASE & WELL NUMBER			COUNTY & STATE			
Harry Leonard (NCT-D) #11				Lea, New Mexico		
FIELD				FORMATION		
Eumont				Y7RQ		
TD	PBD	RKB	PERFS	RFS		
3818'	3812'	9'	3752' – 3807'			
SURFACE	INTERMEDIATE	PRODUCTION	CIBP DEPT	СІВР ДЕРТН		
85/8" @ 409'		4½" @ 3817'	None			
OPERATOR CH	ARGE CODE		BENTERRA	Charge Code		
UWPWBA1035	SABN		NWNMR-00	NWNMR-00102-019		
				d by Benterra Corporation to demonstrate the bentonite nodules as the plugging medium.		
10/12/01						
WH & closed w 10/15/01 MIRU Benterra Poured add'l 1	vell in for weekend. #4. SIP = strong cu ft ZONITE – dic	RD Benterra.	/H. WIH with	SB and tagged plug at 3650'. FL at 3600'.		
of 8:05 AM 10/	15/01. Dumped 50	bbl freshwater ir	nto well due to	low FL. SWI and RD Benterra.		
10/22/01						
OK. FL @ 30'		install WH & SW	I. RD and m	Remove WH & WIH w/ SB, tagged at 3650', ove off. FL seemed too high and needed to g.		
10/25/01						
FS. Pushed 4 ZONITE, wait a cu ft ZONITE a	1/2" wiper rubber to and tag at 2916'.	3020'. Poured Fluid at surface a 5/01. RD Benterr	5 cu ft ZONI fter this pour. a and did not	2" FLT and tag plug at 3650'. OK. FL = 50' TE, wait and tag at 2970'. Poured 5 cu ft B/Salt plug set from 2916' – 3020' with 10 set cavity plug this day because of fluid run-		
10/26/01	26/01					
	RU Enviro-Vac & re wait & tag @ 1615'			rubber to 1628', FL @ surface. Poured < 1 ce. RD Benterra.		

Harry Leonard "D" #11

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MIRU Key Energy WL, including mast. WIH w/ $24 - 2\frac{1}{4}$ " x $4\frac{1}{2}$ " cast boosters w/ prima-cord threaded through all boosters – contained in 3" stovepipe. Stovepipe hung on 27' Nylon cord with conductor wire connected to 5/16" electric line. Installed cap to prima cord, WIH & placed cavity shot opposite 1558 – 1568' (9' RKB). Fired shot & pulled WL simultaneously. Had slight oil spray out pack-off (note: $4\frac{1}{2}$ " csg outlet tied into Key vac truck when shot was fired). POH w/ WL – rec all of WL & all of nylon cord. RD Key WL. RU Key pump truck to tbg head & vac truck to 85/8" x $4\frac{1}{2}$ " annulus. Pump into $4\frac{1}{2}$ " csg w/ $\frac{3}{4}$ BPM & 500 psi, did not circ out 85/8" x $4\frac{1}{2}$ " annulus. Pumped total of 45 bbl freshwater & "locked up". Held 500 psi for 15 minutes w/ no bleed-off. Rel pressure to truck, rec 6 BW & still had 75 psi. SWI & moved trucks to Arnott Ramsey C #8. RU Vac truck to $4\frac{1}{2}$ " csg +/- 2 hrs later, SIP = 25 psi. Flowed back 5 BW @ 0 psi. SWI & release vac truck.

11/20/01

MIRU Benterra. SIP = strong vac on $4\frac{1}{2}$ " csg, 85/8" x $4\frac{1}{2}$ " annulus = static. Poured 1 cu ft ZONITE. WIH with $3\frac{1}{2}$ " FLT and tag at 1357' = +/-200 above cavity shot. Made trip with 2" SB, also tagged at 1357'. WIH with $3\frac{1}{2}$ " SB tag several times at 1357', no movement. POH with $3\frac{1}{2}$ " SB. RU Key pump truck. Pump 20 bbls freshwater at 1 BPM and 500 psi. Rel press and bled well back to truck. Est rec of 5 BW. Made trip with $3\frac{1}{2}$ " SB and still tagged at 1357'. RD Benterra and Key pump truck. NU WH equipment and SWI.

MIRU Key Energy Unit #99. Remove WH and install BOP. WIH with 37/8" bit (junk) on 23/8" tbg, tagged at 1378'. RU stripper rubber, Key pump and vac trucks. Circ at 2 BPM (10 BW to load) and attempt to rotate and wash down – hard btm and bit would torque and jump when weight applied. No progress, circ hole with 40 bbl freshwater at 4 BPM and 350 psi. RD Key trucks. POH with bit. No add'l damage to bit. WIH with 15' x 23/8" mule-shoed tbg jt on 23/8" tbg. Tag at 1378' and took 2-4 pts to pull free. Rotate mule-shoe in an attempt to fall off into hole. Made +/- 1½' but required 10 – 12,000# to pull free. POH. Found end of mule-shoed pinched and some ZONITE on inside of pipe. SDON. Discussed well with E.L. Gonzalez with NMOCD, he approved squeezing $4\frac{12}{2}$ " csg from above 1378', suggested using cmt retainer.

12/4/01

Dug and fenced workover pit. Resume unit operations at 10:00 AM. WIH w/ $4\frac{1}{2}$ " cmt retainer on 23/8" tbg to 1295'. Ru Schlumberger Services. Cleared tbg and $4\frac{1}{2}$ " csg with 20 bbl freshwater, required 10 bbls to load and circ. Set retainer at 1295' and test tbg to 1000 psi, OK. Press 85/8" x $4\frac{1}{2}$ " annulus to 500 psi, OK. Pumped down tbg and establish injection rate of .4 BPM at 500 psi. Mix and pump +/- 105 sx Class C with 2% CC. Increased rate to 1.4 BPM at +/- 300 psi when cmt on spot. Displaced tbg with $3\frac{1}{2}$ " BW @ 1.4 BPM. "Hesitate" squeeze in 3 stages, max press 425 psi, final press 300 psi. Close retainer, PU 10' and rev out 5 sx cmt. T/Salt-Rustler plug in place as of 3:00 PM 12/4/01. RD Schlumberger. POH and LD 23/8" tbg. Remove BOP, install WH and close well in. RD&PU.

12/10/01

SIP = slight vac on $4\frac{1}{2}$ " csg.

12/19/01

SIP = static.

12/26/01

MIRU Benterra #4. SIP = slight blow. Removed WH, made trip wth SB to top of plug @ 1270'. (CR set @ 1295' & capped with cement). RD Benterra.

1/9/02

SIP = static.

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Harry Leonard "D" #11

1/16/02

MIRU Benterra Unit #4. Push 41/2" wiper rubber to 459' and cap with ZONITE to 441'. RD Benterra #4. MIRU Key WL and mast. Install well control equip and prep cavity shot, 26 - 21/4" x 41/2" long cast boosters = 10'. RU Key vac and pump trucks. Load 41/2" casing with 3 BW. WIH with cavity shot on 17' of nylon rope attached to WL. Tag btm 440' (9' RKB) and place shot at 399' - 409'. Fired shot, appeared to have some flow from 41/2" casing to vac truck. Surface pipe open - had oil flow and lost 1/2 BO before closing valve and RU to vac truck. POH and recovered all WL and nylon rope. Attempt to remove WL BOP. Found 41/2" csg had "jumped" approximately 3' and was wedged into BOP at WL rams. Elected to leave BOP in place in order to circ hole. RD Key WL and mast. Circ down 41/2" csg and out 85/8" x 41/2" annulus, gained circ with 10 bbl and pumped total of 45 bbls fresh water. Fluid cleaned up, recovered 1 BO or less. RD trucks, SWI.

1/17/02

Used Key backhoe to pick up WL BOP and was able to remove BOP from wellhead. Pick-up on 41/2" csg with chain and front-end loader of backhoe, pipe was free. SD operations until winch truck is available.

1/18/02

Obtain hot work permit form Chevron. RU Key "rig-move" truck. Cut bolts from 85/8" wellhead and cut slots in 41/2" csg for cable hooks. Latched onto tbg head and removed. Latched onto 41/2" csg and POH with approx 18'. Hammered on 41/2" slips to make reset into 85/8" WH and cut 16' 10" of csg, left 11" stub in wellhead. Replace tog hd onto wellhead. Should now have +/- 18' gap in 41/2" csg from approximately 381' to top of shot at 399'. MIRU Benterra #4. Made trip with 18' x 21/4" OD aluminum tbg to btm tag at 393' = 6' above top of cavity shot. Poured 5 gals ZONITE, wait and tag at 393'= no fillup. Poured 5 gal ZONITE, wait & tag at 388' = 5' fillup. Poured 5 gal ZONITE and tag at 381' = 7' fillup. Poured 5 gal ZONITE, tag at 369' = 12' fillup. Volumetrics not consistent with being inside 85/8" csg - fillup is too great for volumes poured. RU Key pump and vac trucks. Pump 25 bbls freshwater at 2 BPM and 200 psi. Re-tag ZONITE at 379', 10' below previous tag. Poured 5 gals ZONITE, tag at 374' = 5' fillup. Key pump 50 BW at 21/2" BPM and 250 psi. Retag ZONITE at 374', no movement. Volumetrics still inconclusive. Release trucks, install WH and SDON and weekend.

1/21/02

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MIRU Benterra #4. SIP = static. Made trip with 2" SB and tag at 375'. FL @ 50' FS. No movement of plug. Install WH, SWI & RD.

1/28/02

MIRU Benterra #4. SIP: 41/2" = vac, 85/8" x 41/2" annulus = static. Removed WH and made trip with SB to top of plug @ 376'. No movement of plug. Install WH & RD.

2/4/02

Monitor well - no problems observed.

2/7/02

RU Key pump & vac trucks. Connect to 41/2" csg, loaded immediately and press to 400 psi, held. No communication to annulus. Connect to annulus, loaded w/ 5 BFW and pressured to 150 psi, wellhead connections leaked but it appeared that the annulus would hold 150 psi. No communication to 41/2". With cavity shot at +/- 400', the total hydrostatic head on any ZONITE seal in the annulus = 323 psi. Release press and RD Key trucks.

2/8/02

Obtained Hot Work Permit from Chevron. Removed tubing head from wellbore and welded on 4' long pull nipple to the stub of $4\frac{1}{2}$ csg.

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Harry Leonard "D" #11

2/11/02

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1.16

MIRU Key Energy PU. RU csg tools & latched onto 41/2" csg. Removed slips and POH w/ 12 its of 41/2" 9.5# J55 csg. Casing pulled "wet" - found estimated 14' ZONITE plug in bottom it of casing. Cavity shot area was recovered at bottom of last it - several "banana peeled" shards of casing remained attached. Top of cavity shot was belled-out over 7" length and some shards were 7' - 8' in length. It appeared that bottom of cavity shot was opposite a coupling as threads could be seen on one of the shards. There was no damage to any of the 41/2" casing above the top of the shot. Had to break/cut shards from bottom joint in order to remove Foster tongs from casing. A ZONITE plug (approx 1' long) was lodged in the cavity shot area in between the shards. LD total of 12 jts of "good" casing (357.31') and two cut jts (40.70'). RD&RPU.

2/12/02

MIRU Benterra #4. Made trip with 31/2" SB to top of plug @ 390'. Poured 26 cu ft Zonite, wait & tag @ 318'. Poured 10 cu ft ZONITE, wait & tag at 290'. Fresh water - 85/8" shoe plug in place as of 9:25 AM 2/12/02. Pushed 8 5/8" wiper rubber to 33', poured 12 cu ft ZONITE & filled 85/8"csg to surface. Top plug in place as of 11:35 AM 2/12/02. Add water to fill hole. RD Benterra.

20/02 100.0

Check location - no problems.

Check location - no problems.

Water on top of plug - no bubbling.

3/48/02

Key Energy Services dug out cellar and cut off 85/8" csg and WH to 4' below GL. Welded on plate with 1/2" brass valve and installed dry hole marker with well identification. Dug out & cut off guywire anchors at 4' below GL. Back filled all excavations. Turned over to ChevronTexaco for location cleanup & OCD inspection. Final Report.

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