

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised March 25, 1999

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-025-04934

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name:

Harry Leonard (NCT-C)

8. Well No. 7

9. Pool name or Wildcat

Eumont; Yates-7Rivers-Queen

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 "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

Chevron U.S.A. Inc

3. Address of Operator

P. O. Box 1150, Midland, TX 79702

4. Well Location

Unit Letter G : 1980 feet from the North line and 1980 feet from the East line

Section 36

Township 21S

Range 36E

NMPM

County LEA

10. Elevation (Show whether DR, RKB, RT, GR, etc.)
3507' GR

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☒

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

This well is part of the New Mexico "P&A Pilot Project" conducted by Benterra Corporation to demonstrate the plugging and abandonment process using highly compressed sodium bentonite nodules as the plugging medium.

CIBP @ 3145'

Perf Plug @ 2847 - 2950' 14 cu ft Zonite Tagged

Zonite Plug @ 1192' - 1215' 3 cu ft Zonite Tagged

Cavity Shot from 1163' - 1178'

Rustler Plug @ 1050' - 1173' 20 cu ft Zonite Tagged

Zonite Plug @ 324' - 355' 4 cu ft Zonite Tagged

Cavity Shot from 280' - 294'

Shoe/FW Plug @ 192' - 294' 26 cu ft Zonite Tagged

Top Plug @ 3' - 33' 4 1/2 cu ft Zonite

Set marker. Chevron to clean location.

Plugging operations began 8/28/01 and were completed 9/23/02.

Approved as to plugging of the Well Bore.
Liability under bond is retained until surface restoration is completed.

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

SIGNATURE G. Bledsoe TITLE HES Specialist

DATE 10/10/2002

Type or print name Garland Bledsoe

Telephone No. (915) 687-7156

(This space for State use)

APPROVED BY Gary Wink TITLE Ad Rep

DATE 2-12-03
FEB - 7 2003

Conditions of approval if any:

GARY W WINK
OC FIELD REPRESENTATIVE II/STAFF MANAGER

ACTUAL P&A

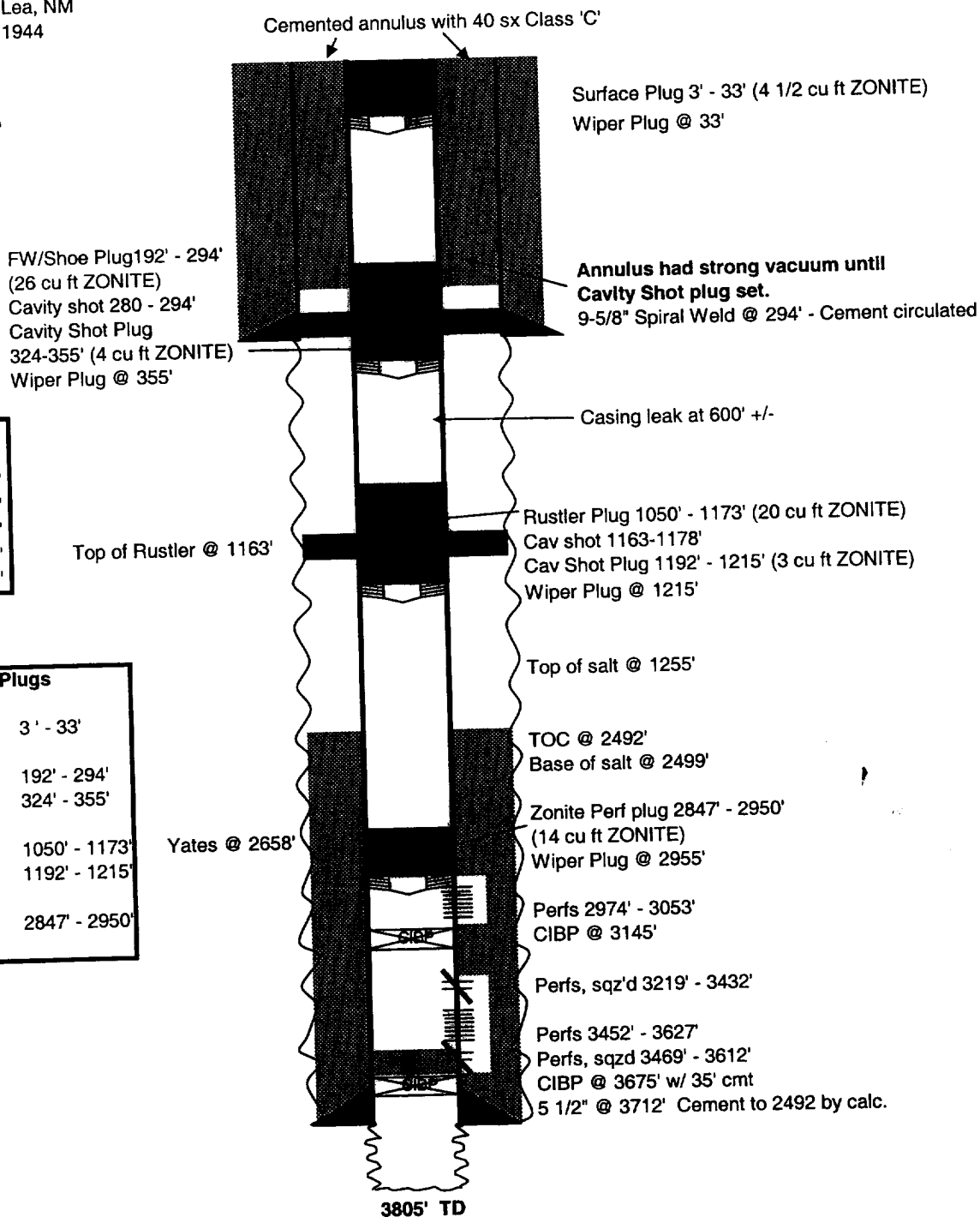
Well Name: Harry Leonard (NCT-C) #7
 API Number: 30-025-04934
 Coordinates: 1980 FNL & 1980 FEL, Unit G
 S - T - R: Sec 36, T21S, R36E
 County / State: Lea, NM
 Drilled: 1944

Operator: Chevron
 Field: Eumont (Y7RQ)
 Date: 10/7/02
 By: M. Bondy/CRS

RKB = 8'

Formation Tops	
Salt	1255'
Yates	2658'
7 Rivers	2886'
Queen	3350'
Penrose	3445'

ZONITE Plugs	
Surface	3' - 33'
FW/Shoe Plug	192' - 294'
Cavity Shot Plug	324' - 355'
Rustler Plug	1050' - 1173'
Cavity Shot Plug	1192' - 1215'
Perf Plug	2847' - 2950'



OPERATOR Chevron U.S.A. Production Company			DATE See Below	
LEASE & WELL NUMBER Harry Leonard (NCT-C) #7			COUNTY & STATE Lea, New Mexico	
FIELD Eumont			FORMATION Yates Seven Rivers Queen	
TD 3805'	PBD 3640'	RKB 8'	PERFS 2974' - 3053' overall	
OPERATOR CHARGE CODE UWPWBA0008ABN			BENTERRA CHARGE CODE NWNMR-00101-006	
This well is part of the New Mexico "P&A Pilot Project" conducted by Benterra Corporation to demonstrate the plugging and abandonment process using highly compressed sodium bentonite nodules as the plugging medium.				
8/28/01				
<p>MIRU Benterra Unit #4. Blew well down in 11 1/2 hours. Removed WH equip and installed well control valve. Allowed freshwater to trickle down casing while installing valve. WIH w/ 3 1/2" sinker bar and tag btm @ 3145'. Pushed 5 1/2" wiper plug to 2950' in 1 hour using 3 1/2" sinker bar on WL. Dumped 5 linear feet of ZONITE™ highly compressed sodium bentonite nodules into wellbore. Tag w/ WL at 2943'. Dumped additional 13 cubic feet ZONITE in two stages and tagged top of plug at 2838' = 112' bottom plug from 2838 - 2950'. Removed well control valve, installed WH equip and left well closed in. RD Benterra equip and stationed at Pool yard in Eunice overnight.</p> <p style="text-align: center;">Operations witnessed by E. L. Gonzalez of the NMPCD.</p>				
8/30/01				
<p>Waited approx 46 hours for plug to hydrate. RU Key Energy pump truck. Loaded casing w/ 61 bbl freshwater and pump pressure hit 200 psi before it could be shutdown. Pressure bled to 0 psi. Re-press to 200 psi - initially held and then immediately dropped to 0 psi and it appeared that something had given away. Well on vac - took 4 BW to catch pressure. RD Key truck and RU Benterra equip. Removed WH and tag plug at 2957', which meant that it had moved 112' and bottom of plug is now at 3062', or approx the same depth as the bottom perf = 3053'. It appears that plug dislodged and moved as a "piston" downward until the bottom perf was covered and then there was no avenue for displacing fluid and moving the plug deeper. The plug dislodged at a differential press from above of approx 1325 psi. Theoretically, the plug should have held up to 1385 psi had it been in place 72 hours. The assumption is that the well was loaded and pressured before the ZONITE™ highly compressed sodium bentonite nodules had fully hydrated to its point of maximum resistance to movement. Installed WH equip and left well shut-in. Tagged FL at approx 600'.</p> <p>Spoke with E. L. Gonzalez w/ NMOCD and he approved setting another plug from 2850 - 2957'.</p> <p style="text-align: center;">Operations reviewed on-site by E. L. Gonzalez of the NMOCD.</p>				
9/4/01				
<p>MIRU Benterra Unit #4. Removed WH equip & installed well control valve. Re-tag top of plug w/ WL at 2955'. FL at +/- 800'. Dropped 2 cubic feet of ZONITE and tagged at 2918'. Dropped add'l 12 cubic feet ZONITE and tagged top of plug at 2850'. Removed well control valve, installed WH and RD Benterra equip. Moved to H. T. Mattern F #4.</p>				

Harry Leonard C #7

9/10/01

SIP = slight vac.

9/11/01

Key PT loaded WB with 70 bbls FW.

9/18/01

Benterra tagged top of plug at 2880' = 30' low. FL at 1380' FS. (Questionable FL)

9/19/01

Key PT loaded wellbore with 15 bbl FW = +/- 630'.

10/8/01

MIRU Benterra Unit #4. SIP = static. Check top of plug at 2880' = 30' low. FL @ 250'. RD Benterra.

10/9/01

Elected to add ZONITE to increase plug length. MIRU Benterra Unit #4. Poured 4 cu ft ZONITE. Wait and tag tip at 2850'. RD Benterra.

10/11/01

Key loaded hole with 5 bbl FW. FL at +/- 200'.

10/16/01

Benterra loaded hole +/- 5 bbl FW. FL at +/- 200'.

10/22/01

Csg on firm vacuum. Benterra loaded hole +/- 4 bbl FW. FL at +/- 164'.

10/26/01

Csg on firm vacuum. Closed surface pipe riser to check for communication at next press check.

10/29/01

Surface pipe static. Vac on tbq head. Benterra loaded hole with 4 BW.

11/9/01

Slight vac on tbq head. Benterra loaded with 4 - 5 bbls.

11/15/01

Discussed well with Gary Wink with NMOCD on 11/13/01. He wanted to locate leak to assure that it was not the ZONITE plug that was leaking. MIRU Key Energy #99. Install BOP & SDON.

11/16/01

WIH with 5½" AD-1 packer (Key's) on 23/8" work string to +/- 780'. Could not get pkr to set. POH and exchanged for different AD-1. WIH with 3 jts and set pkr, OK. Cont'd in hole to +/- 780', again unable to set pkr. POH and tried to set at various depths between 400' - 780', each time pkr failed when pressured up. Attempted to test w/o pkr set. Press to 500# and pump in at ¼ BPM, bled from 500# to 0# in 30 seconds when pumping ceased. POH, top half of pkr slips fouled with iron sulfide/paraffin. Elected to make scraper trip before running different style pkr. Made trip with 4¾" bit and 5½" csg scraper to btm at 2866' SLM. WIH with 5½" FBRC (Hudson Packer - Hobbs) and set at +/- 667'. RU Key PT and press 23/8" x 5½" annulus to 500 psi, pumped in at ¼ BPM and bled to 0# after pumping stopped. RU to tbg and press 5½" csg from 667' - 2866' and ZONITE btm plug with 500 psi, held 10 min with no press loss. Rel pkr, POH to +/- 572', press 23/8" x 5½" annulus to 500 psi, held OK. Reset pkr at +/- 604', press 23/8" x 5½" annulus to 500 psi, pump in at ¼ BPM and eventually had circulation out 95/8" x 5½" annulus. Re-connect to tbg and press tbg and 5½" csg from 604' - 2866' and ZONITE plug with 500 psi, held OK. Rel pkr and POH, layed down tbg and pkr. SDON and weekend. Leak in 5½" csg is located between 572' and 604'.

11/19/01

Ran tbg from derrick and POH laying down. Removed BOP and installed WH. SWI. RD & RPU.

11/21/01

SIP = slight vac. Remove WH. MIRU Benterra Unit #4. Made trip with SB and tag btm plug at 2847' WLM. FL at 185' FS. Pushed 5 ½" wiper rubber to 1215'. Poured 3 cu ft ZONITE, wait and tag at 1192'. Install WH, RD Benterra #4. Cavity Shot plug now in place for Rustler-T/Salt plug.

1/7/02

MIRU Key WL truck and mast. SIP = static on 5½", slight blow on surface pipe. Prepared cavity shot explosive charge = 30 cast boosters of 2¼" OD and 4½" length for total length of 11¼'. RU Key pump and vac trucks. Load 5½" csg with 8 bbl freshwater. WIH with shot on 24' nylon rope with prima cord strung through all cast boosters. Pack-off installed on WH. RU Key vac truck to 5½" csg outlet and had 95/8" x 5½" annulus open. Tag btm at +/- 1199' (8'RKB) and placed shot at 1163' - 1174'. Fired shot - had spray out surface pipe and into vac truck from 5½" csg, equalized quickly. POH - nylon rope was balled at end of WL - rec all WL and rope. WIH with 2¼" OD x 18' aluminum tbg on WL, indic of tag at +/- 1171' but cleared to 1178'. Did not go deeper so as to keep WL connection above shot area. POH with aluminum tbg. RD Key WL and mast. RU Key pump truck to 5½" csg and vac truck to surface csg. Circ out 9 5/8" x 5½" annulus with 2 BPM at 0 psi, circ total 75 bbl freshwater. RD Key trucks. MIRU Benterra Unit #4. Poured 10 gals ZONITE, wait and GIH with aluminum tbg, went to 1173' without tagging. Poured 10 gal Zonite, wait and tag with aluminum tbg at 1165' = 2' above of shot. Install WH and RD Benterra. Will recheck 1/8/02 to determine if ZONITE stays in place.

1/9/02

SIP = 5½" csg static, 95/8" x 5½" annulus on strong vac. Made trip with 3½" SB, tagged at 1160' (8' RKB). Wait on Key PT and load with 12 BFW and circ 20 bbls. Made trip with 3½" SB and tag at 1164'. Poured 5 gal ZONITE, wait and tag at 1160'. Poured 6 cu ft Zonite, wait and tag at 1112'. Poured 8 cu ft ZONITE, wait and tag at 1050'. Rustler-T/Salt set 1050' - 1173' with total of 20 cu ft ZONITE. Install WH & RD.

1/14/02

SIP = surface on strong vac, 5½" static. Load 5½" with 4 bbl FW, had blow out surface pipe while loading.

1/17/02

SIP = surface csg on strong vac. Load 5½" with 2 BW, blow on surface csg. Valve on 5½" csg began leaking. Connect water to surface – pipe riser, had immediate communication to 5½". SWI after replacing leaking valves. RD Benterra.

1/31/02

SIP = vac. N.D. well. R.I.H. w/ 3" SB and tag @ 1047'. Pushed 5 ½" wiper rubber to 355'. Poured 4 cu ft ZONITE. RIH w/ SB and tag @ 524'. N.U. well.

2/7/02

SIP: 5½" = static; 95/8" x 5½" annulus = vac. Loaded annulus w/ 2½ bbls FW.

All measurements = 8' RKB. RU Key WL. RU mast and installed WL BOP. Prepped cavity shot w/ 26 – 2¼" OD x 4 ½" (10') cast boosters strung on prima cord and 17' nylon cord attached to WL. WIH and tagged btm @ 321'. Positioned in 5½" csg from 284' – 294' and fired. Had blow from 95/8" x 5½" annulus that lasted under a minute – FW and explosion generated gas. POH and recovered all WL and nylon rope. WIH w/ 18' aluminum tbg on Key WL and tagged at 280' = 4' above shot. RD Key. MIRU Benterra #4. Benterra tagged w/ aluminum bar @ 290' = 6' below top of shot. FL = 165' FS. Pour 5 gal ZONITE and then tag @ 282' = 8' fill. Switch to 3½" bar and tagged @ 284'. Pour 5 gal ZONITE and then tag @ 284'. Poured additional 55 gal ZONITE in 5 and 10 gal stages (3 x 5 gal and 4 x 10 gal). Tags after each pour remained @ 283 – 284'. Total pour volume = 65 gals.

Rat hole volume = 26 gals. It appears that ZONITE is going outside 5½" casing and into annulus or cavity.

2/8/02

SIP: 5½" = static; 95/8" x 5½" annulus = static.

Made trip w/ 3½" SB and tag @ 282'. Fluid level @ 165'. Poured 2 – 10 gal stages and 1 - 15 gal stage of ZONITE and tagged each time @ 282'. Poured Stage #4, 20 gals of ZONITE, wait and tagged @ 268' = 14' fillup. Volumetric summary: poured total of 120 gals or 16 ft³ of ZONITE; assuming the 26' of 5½" rathole below bottom of cavity shot required 3.5 ft³ to fill and allowing for 2 ft³ to fill 5½" csg from 268 – 282', then approx 10.5 ft³ of ZONITE is projected as having entered the cavity. Capacity of 10' of 95/8" casing in the cavity area is approx 3.6 ft³, therefore, the amount of ZONITE required to fill the cavity was almost 3X the calculated volume. Finished placing ZONITE for 95/8" shoe/freshwater plug w/ 10 ft³ Zonite. Shoe / fresh water plug set from 192 – 294' as of 11:30 AM 2/8/02. Attempted to load 5½" casing, would fill to top but immediately begin dropping. Added 2 bbl freshwater to 95/8" x 5½" annulus. Installed WH and SWI to wait on ZONITE to hydrate.

2/12/02

ND well. RIH w/ 3" SB. Tag @ 192'. POOH w/ SB. Pushed 5½" rubber to 33'. Poured 4 1/2 cu ft of ZONITE. Surface Plug set from 3' – 33' w/ total of 4 1/2 cu ft ZONITE as of 7:55 am on 2-12-02.

2/20/02

Well bore static. No pressure or vac on surface pipe.

Harry Leonard C #7

3/14/02

Check location; no blow or vac on surface pipe

3/18/02

Check location; add ½ gal water to top ZONITE plug in 5½" csg – no bubbling. Surface pipe open & static. SI to monitor for press or vac build up.

3/20/02

Attempted to load annulus. Added 150 gallons of fresh water. Would not load. SD.

3/21/02

Rigged up Benterra truck and loaded annulus with 7 BBLS of fresh water.

3/22/02

Topped off annulus with fresh water.

4/18/02

Checked well. No problems.

9/13/02

RU Key pump truck to 95/8" x 5½" annulus. Pump into annulus w/ fresh water, loaded after pumping 4 bbls. Continue pumping @ ¾ BPM and press gradually increased to 160 psi after pumping approx 7½ bbls. Slowed to ½ BPM @ 150 psi and cont'd pumping – at 12 bbls pumped, pressure declined to 130 psi. At end of 20 bbls, pressure was 120 psi and ISIP = 100 psi. 15 min SIP = 0, did not go on vac. (note : annular vol to 95/8" shoe is approx 15 bbls) RD Key. Discussed w/ Gary Wink with the NMOCD and let him know that we planned to cement this annulus from the top.

9/16/02

MIRU Schlumberger cementing services. Mixed and pumped 40 sx Class C w/ 2% CaCl₂ down 95/8" x 5½" annulus (.7 BPM & <100 psi) and had cement returns from ground, approximately 7' west of WH. Ceased cementing operations and shut-in well. Washed up into vac truck and RD Schlumberger.

9/19/02

Discussed operations with NMOCD District 1 Supervisor Chris Williams and Deputy Inspector Gary Wink and received approval to cut-off well head and complete P&A.

9/23/02

Cut off casings and WH to 4' below GL. Welded cap onto casing and installed dry hole marker with well identification. Dug out and cut off guywire anchors to 4' below GL. Back filled all excavations. Turned over to ChevronTexaco for location cleanup and NMOCD inspection. Final Report.