

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Synergy Operating, LLC

OGRID # 163458

3. Address and Telephone No.

PO Box 5513 (505) 325-5449
Farmington, NM 87499

4. Location of Well (Footage, Sec, T. R., M, or Survey Description)

Unit E, 1640' FNL & 880' FWL, Sec 20, T29N, R04W

FORM APPROVED

Budget Bureau No. 1004-0135

Expires March 31, 1993

5. Lease Designation and Serial No.

NMNM-18319

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

29-4 Carson 20 # 1

9. API Well No.

30-039-2483700

10. Field and Pool, or Exploratory

Wildcat Nacimiento

11. County or Parish, State

Rio Arriba County
New Mexico

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

- ☒ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well
Completion or recompletion Report and Log Form)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including, estimated date of starting work.
If well is directionally drilled give subsurface locations and measured and true vertical depths for all markers and zones of pertinent to this work.

SYNERGY REQUESTS APPROVAL TO PLUG AND ABANDON THE SUBJECT WELLBORE PER THE ATTACHED PROCEDURE AND WELLBORE DIAGRAM.

PLEASE NOTE THE FRUITLAND COAL IS ABANDONED UNDER A CIBP @ 3120' AND
A PORTION OF THE NACIMIENTO PERFORATIONS ARE ABANDONED UNDER A CIBP @ 2500'

A SMALL LINED EARTHEN CEMENT RETURN PIT WILL BE PLACED NEAR THE WELLHEAD AND CLOSED FOLLOWING THE COMPLETED RIG ACTIVITY.

14. I hereby certify that the foregoing is true and correct

Signed:

Thomas E. Mullins

Title: Engineering Manager
(505) 566-3725

11-04-2005

This space for federal or state office use

Approved by: Original Signed: Stephen Mason
Conditions of approval if any

Title:

Date:

NOV 15 2005

PLUG AND ABANDONMENT PROCEDURE

Carson 29-4 20 # 1

Unit E, Section 20-T29N-R04W

1640' FNL, 880' FWL

6564' GL, 13' KB

Secure all approvals before commencing plugging operations. NMOCD, BLM, & Partner Approvals.

8-5/8" 24# K-55 Casing at 263'. 7-7/8" hole drilled out.

5-1/2" 17# N-80 Casing to 3602', DV tool at 31646' (4.892" ID, 0.023246 bbls/ft)

2-7/8" 6.5# J-55 Tubing at 2410' (82 Jts) (2.441" ID, 0.002371 bbls/ft)

DH Pump & Rod String (2' - 1", 94 - 7/8" rods, 2' & 8' 7/8" pony & Polish Rod)

5-1/2" CIBP @ 3120' (Abandon Fruitland)

5-1/2" CIBP @ 2500' (Abandon portion of Nacimiento)

Cement on 5-1/2" Casing to Surface per CBL

Open Perfs from 1721' to 2142' (Nacimiento)

PBTD currently at 2465'.

- 1) Perform NM One Call. Test Anchors. Dig and Line Small Pit for Cement Returns during plugging operation, near the wellhead.
- 2) Contact both the BLM and the NMOCD 24 hrs prior to commencing plugging operations. Verify that Existing CIBPs at 3120' and ~~2500'~~, can be left in the well.
- 3) MIRU Workover Rig with Auxiliary Equipment. Need Trailer to Lay Down Tubing
- 4) Check & Record Pressures on Bradenhead, 5-1/2" Casing, and Tubing.
- 5) ND Horse's Head.
- 6) Unseat DH Pump. COOH and Lay Down 7/8" rod string and pump on trailer.
- 7) BD all. ND WH. NU BOPE.
- 8) Unseat Hanger and Remove Tbg Hanger.
- 9) COOH w/ 2-7/8" tubing. Remove Mud Anchor and Perf Sub.
- 10) GIH w/ 2-7/8" tubing and 5-1/2" Casing Scraper & Tag PBTD. COOH.
- 11) Make up 5-1/2" Cement Retainer and GIH on 2-7/8" tubing.
- 12) Set Retainer at 1700'.
- 13) Test tubing to 2500#. Close Pipe rams and hold 500# pressure on casing during cement job.
- 14) **PLUG # 1A** (1700' to 2142')- Establish rate below PKR at 1700' and into perforations. Mix and pump (30 bbls cement - 100% excess), below retainer. Displace with an additional 2 bbls cement. Displace as appropriate. Pull above Retainer and reverse clean. **PLUG # 1B** from ~~1625'~~^{1418'} to 1700'. This plug covers the producing formations.
- 15) Lay Down 1350' tubing (45 jts+/-), placing EOT at 350'.

*plug Fruitland,
Kirtland & Ojo Alamo
from 3120'-2745'*

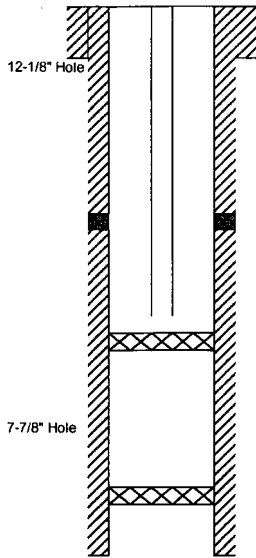
- 16) Mix and pump **PLUG # 2** (Surface to 350') inside 5-1/2" casing. 8.1 bbls cement capacity to fill 5-1/2". POOH and lay down remaining tubing. Clean BOP Stack. This plug covers the surface casing shoe.
- 17) ND BOPE, ND WH. Cut-Off Wellhead.
- 18) **PLUG # 3** - Install Dryhole Marker w/ 5 sxs cement above ground level as required.
- 19) Close out Cement wash-up pit per NMOCD guidelines.
- 20) Remove Surface equipment from wellsite, rip location and reseed location per BLM specifications.
- 21) Submit all documentation. Secure final abandonment approvals.

Prepared by Tom Mullins
11/04/2005

Carson 29-4 20 # 1
Unit E, Section 20-T29N-R04W
1640' FNL, 880' FWL
6564' GL, 13' KB

Araphoe # 7 Spud: 08/11/90
Big A Rig # 5 Completed: 11/7/90

API # 030-039-2483700



8-5/8" 24# K-55 Casing @ 263' w/ 180 sxs
Circulated 5 bbls cement to surface

5-1/2" TOC @ Surface

2-7/8" 6.5# J-55 Tubing @ 2410', SN one jt up (82 jts total), BP btm, 1 jt, perf sub, SN, 81 Jts
Rods: 2' - 1" pony, 94 - 7/8" rods, 2' & 8' pony, PR

DV Tool @ 1646' (See Cmt Detail Below)

Nacimiento Perforations

1721'-1725', 1895'-1899', 2129'-2131', 2136'-2142'

CIBP @ 2500'

Temporarily Abandoned Portion of Nacimiento Perfs
2596'-2606', 2664'-2681', 2725'-2728', 2816'-2832', 2903'-2913'

CIBP @ 3120'

Fruitland Coal Perforations

3211' to 3274' (16 holes) Frac w/ 10K 40/70 & 127,900# 20/40
in a X-Linked Gel at 48 BPM 3950 ATP, ISIP 3636

5-1/2" 17# N-80 Casing @ 3602', w/ 1st Stage w/ 200 sxs 50/50 Poz 2% gel 0.6% Halad 322
tall with 225 sxs B w/ 0.4% Halad 344, 0.4% CFR-3 & 2% Super CBL, Good Circ
Circulate 3 hrs, 2nd Stage w/ 300 sxs Howco Lite 0.6% Halad 322, 2% KCl and 1/4# Flocel,
tall with 50 sxs B neat. Circulate 10 bbls cement to surface.

Formation Tops

| | |
|---------------|-------|
| San Jose surf | |
| Nacimiento | |
| Ojo Alamo | 2645' |
| Kirtland | 2915' |
| Fruitland | 3062' |
| Pict Cliffs | 3280' |
| Lewis | 3567' |

Formation Name: Fruitland Coal

Drill out DV Tool, CO to PBTD 3558', RU Basin, Run GR-CCL-CBL 3550' to 250'.
Spot 7-1/2% HCl acid across Coal zone. Perforate 3211', 3212', 3213', 3214', 3215', 3238', 3239', 3240',
3263', 3266', 3268', 3269', 3270', 3272', 3273', 3274', Total (16 Perforations). PU PPI tool on tubing
Set across each perf and breakdown with 300 gals 15% HCl and establish communication on all perfs.
Hang tool @ 3192', RU to swab. Swab well dry with 19 bbls. SDON, Swab well dry 18 bbls. COOH.
RU to frac, pump pre-pad 5000 gals at 28 BPM 2800 ATP, to high to foam frac. SDON. GIH w/ PKR
on tubing set at 3093', pump 2000 gals 15% HCl at 1.5 BPM 2700 psi, when acid hit dropped to 1800 psi
Balled-off to 4000 psi. GIH, knock off balls, Pull up & reset PKR. RU to swab. Recovered 31 bbls.
SDON, Swab well dry 35 bbls. TOOH w/ PKR. RU HOWCO. Frac w/ 10,000 # 40/70 & 127,900 # 20/40
in 81,110 gals X-linked gel at 48BPM, 3950 ATP, 3636 ISIP. SI well for 5 hrs. Flowback 5 hrs, bleed down.
GIH tag sand at 3267'. Cleanout sand with water. SDON, 850 psi csg, flow well, swab well to pit. SI. 1400 psi csg press
Landed 2-7/8" tubing at 3319', w/ SN @ 3287'. RD release rig. RU Bayless # 6, Run 130- 7/8" rods & pump.
Pump 2-1/2"x1-1/4"x8"x14" THD. Sales at 140 mcf/d 30 bwpd 350 psi LP. 11/15/90

Specialty Logs, Misc

Sidewall Cores
Mud Log 2500' to TD
Coal Desorption Tests

Open Hole Logs (Halliburton)

GR-Ind,Dens-Neut, MicroLog

Cased Hole Logs

GR-CCL-CBL (10-17-90)

GR-CCL (09-25-95)

GR-NEU-GSL (10-07-95)

Formation Name: Ojo Alamo & Nacimiento

9/27/95 MIRU R&S # 15. Set 2 400 bbl frac tanks. Pullpump & rods. COOH w/ tubing. Run bit & scraper
RU Basin, run GR-CCL 2200' to 1600', set CIBP @ 2400'. Test to 1000 psi. Perforate Nacimiento Zones 1 SPF
2129' to 2131', 2136' to 2142' & 1895' to 1899'. Total 15 holes. GIH w/ PKR & RBP combo, stopped at 1050'
due to heavy paraffin. POOH. GIH w/ PKR. RU BJ Services. Spot acid at tool. Set PKR 2085' +/-, acidize with 700 gals
15% HCl displaced w/ water, 2.6 BPM @ 1350, ISIP 600 psi., formation broke at 1800. Pull PKR &
reset PPI across 1895'-1899', breakdown with 300 gals 15% HCl 3.3 BPM at 1950, ISIP 1350, broke at 2200
Swab well to pit. Began flowing. SI pressure 770 psi. Flow well for 16 hrs at 105 mcf/d, 630 psi back pressure
LP of 162 psi, next 24 hrs 90 mcf/d, 520 psi backpressure. Good tests. Kill well.
10/3/95 RU Basin wireline. Perforate 1721' to 1725' (1 SPF - 5 holes), GIH & set PPI tool acidize
w/ 500 gals 15%, ruptured tubing string one jt above PPI. Acidized zone 1721' to 1725' w/ 500 gals
15% @ 7 BPM 1800 psi, ISIP 1100. Release tool, set at 2100', RU to swab. 3 runs, well flowing to pit
Unload tubing of 10 bbls spent acid & water, flow test 12 hrs 180 mcf/d, next 6 hrs at 400 mcf/d, 390 psi FTP. Kept
repeating process. Rate 300 mcf/d, 320 FTP. Kill well. RU 4Corners Air. GIH
with drill collars and bit. Drill CIBP at 2400', push to 3490'. Kill well. COOH. RU Blue Jet.
Run GR-CCL-GSL log from 3482' to 1500'. Set CIBP at 3120'. SDFW. RU Basin Perforators. Perforate
1 SPF @ 2913', 2903', 2832', 2816', 2728', 2725', 2681', 2678', 2676', 2664', 2606', 2599', 2596', Total 13 holes
Set PPI tool across 2903' & 2913', BD w/ 100 gals 15% HCl 3 BPM 2500 ATP, broke at 2200. ISIP 1000
Set PPI tool across 2816' & 2832', BD w/ 100 gals 15% HCl 1 BPM 2800 ATP, broke at 2550, ISIP 1100
Move & set across 2725' & 2728', BD w/ 100 gals 15% HCl 3 BPM 1800 ATP, broke at 2800, ISIP 1000
Move again & set across 2664', 2676', 2678', 2681'. Treat w/ 200 gals 15% HCl 5 BPM 2800 ATP, ISIP 1400
Set across 2596', 2599', 2606', and acidize w/ 150 gals 15% HCl 4.5 BPM 2900 ATP, ISIP 800. RU to swab
Zone swabbed dry. Release tool, run to 2900'. Swab well, flowing slowly. Pull tubing. Run production
tubing as follows: aluminum plug, SN, 2-7/8" tubing. Land at 2907'. NU tree. Pump off plug. RU to swab
Swab well in. Flowing after 4 runs. Swab well next day. Run bumper spring, and Piston controller.
10/18/95 run piston making 182 mcf/d & 11.5 BWPD. Dropping to 30 MCFD & 30 BWPD.
10/24/95 RU R&S Rig # 27. TOOH w/ tubing. GIH w/ PKR & BP. Set BP @ 1755' & PKR @ 1694',
zone swabbed dry after 4 runs, 5 bbls fluid. Reset BP @ 2165' and PKR @ 2106', Make 1 run, zone
started flowing, then logging off. Reset PKR @ 1868', Well flowing immediately to pit. SDON. Csg
pressure across perfs 1721'-1725' was 360 psi. Press across tubing from 2129', 2131', 2136', 2142', 1895',
& 1899' was 575 psi. Installed Piston & place on test. Gas at 63 MCFD water at 36 BWPD. Kill tubing
release PKR, Pull RBP. GIH with tubing set CIBP, set at 2500'. COOH. GIH hydrotesting tubing
to 3000 psi. Land tubing at 2158' & 72 jts, with a Standard SN at the end of the bottom jt. NU WH.
Made 14 swab runs, well started flowing. Installed catcher & Piston. RDMO 10/28/95
08-17-99 MIRU Key # 34. Unseat pump. Pull 8' pony, 6' pony, & 84 - 7/8" rods, 2' sub, & DH Pump
ND WH. NU BOPE. Unseat Tubing Hanger & POOH. Tally Out 72 Jts - 2-7/8" tubing, SN, perf sub,
and anchor jt. Jt just above pump had split in tubing. Tally & GIH w/ 12 new Jts 2-7/8" tubing, run
as follows: anchor jt, perf sub, SN, and 82 jts. Tag fill at 2465'. Land tubing EOT at 2440'. ND BOPE
NU WH. Run rods & pump. Pump, 2' - 1" sub, 95 - 7/8" rods, 8', 6', 2' ponys + PR. Space out.
Test pump 500#. Good. Hang well on.
06-02-2004 MIRU Key # 17. Unseat Pump. COOH w/ pump and rod string. Run new pump and same string
Replace Rattigan and Flow Tee and Stuffing Box. Engine Needs to rotor and points to run.
Test tbg to 500#. Pump well, monitor okay. RD & release rig
06-15-2004 - Shot Fluid Level @ 434 feet. Run Dynamometer. Identify Tubing Leak on Pump.
07-12-2004 MIRU Key # 17. COOH w/ pump and rods. Some scale on pump. Looked okay.
07-13-2004 RU Three Rivers Pump Truck. Pump Acid down tubing & displace. Drop standing valve.
Tubing did not hold. Blow down annulus. ND WH. NU BOPE. COOH w/ 37 stands, found hole in
Joint # 73 from surface. GIH w/ tubing testing every 10 stands to 2000#. Retrieve standing valve.
Land tubing in Hanger. ND BOPE, NU WH. Run Pump and rod string as follows: Pump, 2' - 1" pony,
94 - 7/8" rods, 2' & 8' pony, and polish rod. Load tubing and test pump. Hang well on.
Wait on pump. Start pump jack. RD equipment and release.

Thomas E. Mullins

Updated 11-4-2005