RECEIVED

APR 08 2009

Bureau of Land Management
Farmington Field Office

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No 1004-0135
Expires March 31, 1993

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

5 Lease Designation and Serial No
SF-077056

6 If Indian, Allottee or Tribe Name

1 Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

7 If Unit or CA, Agreement Designation

2 Name of Operator
Synergy Operating, LLC (163458) OGRID # 163458

8. Well Name and No
White 29-11-19 # 106

3 Address and Telephone No
PO Box 5513 (505) 325-5549
Farmington, NM 87499

9 API Well No
30-045-33378

4 Location of Well (Footage, Sec, T R, M, or Survey Description)
Unit K, 1670' FSL, 1855' FWL, Sec 19, T29N - R11W

10 Field and Pool, or Exploratory
Basin Fruitland Coal FK
AZ. Fruitland Sand & Pictured Cliffs

11 County or Parish, State
San Juan 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	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☒ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other	☐ 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 HAS EVALUATED THE WELLBORE AND PROPOSES TO ADD **BOTH** THE PICTURED CLIFFS AND THE FRUITLAND SAND INTERVALS PER THE ATTACHED PROCEDURE. A WELLBORE DIAGRAM OF THE CURRENT WELL STATUS IS ENCLOSED

SYNERGY MUST ACQUIRE THE APPROPRIATE NMOCD APPROVAL FOR COMMINGLE OF THE 160 ACRE SPACING FRUITLAND SAND AND THE PICTURED CLIFFS INTERVAL. THE FRUITLAND COAL FORMATION IS DEEMED NON-PRODUCTIVE AND WILL HAVE A ZERO ALLOCATION PERCENTAGE.

THE FRUITLAND COAL (320 ACRE) OWNERS DIFFER SLIGHTLY FROM THE FRUITLAND SAND/PICTURED CLIFFS (160 ACRE) OWNERS IN THIS WELLBORE.

REQUISITE APPROVALS SHOULD BE OBTAINED WITHIN SIXTY (60) DAYS.

RCVD APR 9 '09
OIL CONS. DIV.
DIST. 3

HOLD C104 FOR C-102 forms for Fulchen Kutz P.C. and Aztec F.S.

14 I hereby certify that the foregoing is true and correct

Signed _____ Title Engineering Manager Date 03-31-2009

Thomas E. Mullins tom.mullins@synergyoperating.com Telephone (505) 599-4905

This space for federal or state office use

Approved by. ~~Original Signed: Stephen Mason~~ Title _____ Date: APR 06 2009

Conditions of approval if any

Title 18 U S C Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction

NMOCD

White 29-11-19 # 106
Fruitland Sand & Pictured Cliffs Procedure

Well History: This well is located in the SW/4 of Section 19. This well is located behind Mesa Manzano Subdivision and Noise related to operational work should be minimized. The PBTD should be 1731' (Float Collar) upon completion. The offset Fruitland Coal wells are also operated by Synergy Operating, the Crawford and Federal Wells. The Crawford # 102(3 Stg – XL Gel) and Federal # 101 (3 Stg- XL Gel), Federal # 1 (1 Stg – Foam) and Crawford # 103(2 Stg – XL Gel). This well was completed with a single stage XL gel frac and 117,000 lbs 20/40 proppant. Following initial completion the well has not performed as anticipated. A remedial stimulation treatment was performed on the Fruitland Coal in May 2007, without positive results.

We plan to allocate zero production to the Fruitland Coal zone and allocate 50 percent of the production to the Fruitland Sand interval and 50 percent of the production to the Pictured Cliffs interval.

NOTE: All depths are referenced to a KB elevation of 5571' (5' above graded ground elevation of 5566').

Two (2) – 400 bbl Frac Tanks.
1750' (56 Jts+/-) of 2-7/8" 6.5# J-55 Tubing/Workstring
1709' of 2-3/8" 4.7# J-55 (52 Jts) in the well
Rod String: Pump, 4 -1.25" Sinker Bars, 63 – ¾" rods, 8' pony, 1-1/4" polish rod.

1. Coordinate with San Juan County Sheriff's Office for drive by checks during the evening to prevent vandalism.

2. Ensure NMOCD – C-144 Closed Loop EZ form is completed & approved. 160 Acre – Non-standard Pictured Cliffs & Fruitland Sand.

3. Verify Anchor Testing if necessary. MIRU Well Service Rig & equipment.

4. COOH laying down rod string and downhole pump on float.

5. ND WH. Install 8-5/8" x 7-1/16" drilling flange, double gate BOP, & stripping head. Function Test BOP.

6. Remove Hanger. COOH w/ 2-3/8" 4.7# J-55 production tubing from 1709'.

7. MU Hydrostatic bailer & GIH on 2-3/8" tubing. Bail out fill and old ball sealers in the bottom of the wellbore to PBTD of 1731'. COOH.

8. RU Perforators: Perforate Pictured Cliffs formation and Fruitland Sand Intervals as follows (correlate with Jet West GR-CCL-Merge Log dated 03-28-06)- Marker Jt from 1295' to 1310', phased 120 deg:

   Pictured Cliffs Zone: 1652' to 1660' (10') – 2 SPF = 20 holes
   Fruitland Sand Zone: 1572' to 1588' (16') – 2 SPF = 26 holes

9. PU 5-1/2" PKR & GIH on 2-3/8" tubing. Set below all perforations.

10. RU Acid Pump Truck. Test 2-3/8" Tubing & PKR to 2500 psi. Bleed Off Pressure.

11. Move PKR & set at 1625'+/-. Breakdown Pictured Cliffs perforations w/ 250 gals 10% HCl acid, displace w/ 2% KCl water. Record ISIP, 5 min, 10 min. COOH w/ PKR.

12. GIH w/ 5-1/2" RBP on 2-3/8" tubing. Set RBP at 1594'. COOH w/ setting tool.

13. GIH w/ 5-1/2" PKR. Set PKR at 1530'. Breakdown Fruitland Sand perforations with 500 gals 10% HCl acid, displace w/ 2% KCl water. Record ISIP, 5 min, 10 min. COOH w/ PKR.

14. GIH w/ retrieving head. Recover 5-1/2" RBP at 1594'. COOH w/ RBP, laying down 2-3/8" tubing on float. Remove rods & tubing from location.

15. Strap & Pick Up – 2-7/8" 6.5# J-55 Work Tubing string. Make-up 5-1/2" PKR, SN, X-O to 2-7/8" tubing and GIH with PKR. Double check all depths.

16. Set PKR at 1530'.

17. Strip over BOP. Unseat PKR. Screw on Flange. Reset PKR and flange down assembly to wellhead. Load annular area with 2% KCl water.

18. Install Frac Valve and Frac Y.

19. Rig Down & Move Out rig, ready for rigless Frac down 2-7/8" tubing below PKR at 1530'.

20. MIRU Stimulation Company. Fracture Stimulate Pictured Cliffs (1652'-1660') and Fruitland Sand intervals (1572'-1588') down 2-7/8" 6.5# Tubing with 20# XL Gel 70 Quality Nitrogen Foam at 30 BPM, 46 new perforations with 50,000 lbs of 20/40 Brady & 10,000 lbs 20/40 Super LC. See attached detailed procedure. Clean Flush w/ foam & 5 bbls water. SI Well, Monitor Pressure 10 minutes. RD Stimulation Company.

21. RU flowback line and flow well back to flowback tank on ½" positive choke.

22. Empty Frac Tanks and Release Tanks from location. <u>Do this immediately.</u>

23. MIRU Workover Rig.

24. Blow down well. Kill Well if necessary w/40 bbls 2% KCl water. Unflange and release PKR. ND assembly. Strip on BOP over 2-7/8" tubing.

25. BOPE function Test.

26. COOH w/ 2-7/8" 6.5# J-55 Workstring and PKR from 1530'. Remove 2-7/8" tubing from location.

27. Spot 2-3/8" tubing & original rod string trailer.

28. GIH w/ hydraulic bailer on 2-3/8" tubing. Tally in the hole. Clean out Sand fill to PBTD of 1731'.

29. Check fill in the morning. COOH w/ Bailer.

30. Run 2-3/8" Production Tubing. GIH w/ 2-3/8" Mud Anchor (16' OE, w/ pin on btm & ¾" hole @ top of jt), SN, and remaining 2-3/8" tubing. Space out to land tubing at 1680'+/-, (2 Jts off btm). Ensure Pump Intake Below Bottom Perf, to Reduce Gas Locking of Pump.

31. ND BOPE, NU WH.

32. Run DH rod pump and rod string to be determined from Energy Pump. Estimated to be: (2"x1-1/2"x12') RHAC Insert Pump w/ 3' spray metal plunger, tolerances between plunger and barrel opened from 0.004" to 0.006", double valved on five (5)-1-1/4"-25' sinkerbars, ¾" Grade D Rods. Space out pump. NU Flow Tee (2-3/8") & stuffing box on new 1-1/4" x 1-1/2" x 8' polish rod w/ liner.

33. Pump 2% KCl water to load pump. Test pump valves to 500#. Stroke test pump.

34. RD & Release rig.

35. Install Rod Pump Jack.

36. Obtain C-104 approval for commingled Fruitland Sand and Pictured Cliffs production. Zero allocation to Fruitland Coal.

37. Nominate Gas to this meter. Produce well to sales.

White 29-11-19 #106

Field: Basin Fruitland Coal

GL: 5506'
KB: 5' AGL

Casing Head: Larkin Fig 92, 2M x 8-5/8" w/ 2 -2" LPO
Tubing Head: Larkin MR, 2M x 5-1/2" 8rd Female x 2-3/8" EUE 8rd mandrel w/ 2 -2" LPO

Companion Flange to RU: 7-1/16 3M x 8-5/8" API Modified

12-1/4" Hole

8-5/8"24# J-55 (5-Jts) @ 207'
Cmt'd w/ 130-sxs Cl 'B' cmt
2% CaCl-2 + 1/4#/sx CF - Circ to surf

Ojo Alamo Top @ 391'

Kirtland Top @ 532'

Hole - 7-7/8"

Deviations 190' - 0.50 deg
690' - 0.75 deg
1190' - 1.00 deg
1750' - 1.25 deg

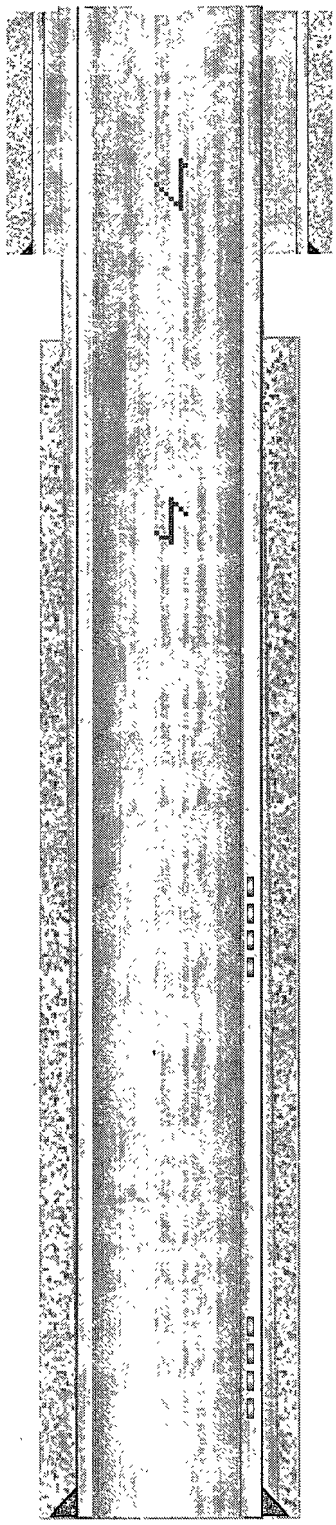
FTC Top @ 1258'

Marker Jt: 1296-1311'

Tubular Capacities (Bbls/Ft)
Tubing (2-3/8" 4.7#): 0.00387
Casing (5-1/2" 15.5#): 0.0238
Csg//Tbg Annulus: 0.0183

PC Top @ 1648'
Tops per OH Log depths

5-1/2" 15.5# J-55 @ 1757'
Lead Slurry=159-sxs Premium-Lite FM cmt w/ 3% CaCl-2, 1/4#/sx CF, 0.4% FL-52, 8% Bentonite, 0.4% Sodium Metasilicate + 3#/sx Pheno-Seal
Tail Slurry=100-sxs Type III cmt w/ 1% CaCl-2, 1/4#/sx CF, 0.2% FL-52 + 2#/sx Pheno-Seal
Circ: 52-sxs cmt to surface



PBTD = 1731' (Float Collar)

TD = 1770' (2-26-06)

WFS Meter # - 36697-3000
API # 30-045-33378
Lease # SF-077056

1670' FSL & 1855' FWL, Unit K
Sec. 19, T29N-R11W
San Juan Co., New Mexico

36 deg, 42 min, 31.7 sec N Latitude
108 deg, 02 min, 07.4 sec W Longitude

Logs: OH - Jet West (2-27-06): GR-Comp Density/Neutron (1730-1300-surf')
Cased: Jet West GR-CCL (3-28-06)
BlueJet: Tracer Log (5-4-06)

Tubing: OE'd MA(16.10') pinned at btm w/ 3/4" hole @ top, SN, 52-Jts 2-3/8" J-55, EOT @ 1709', SN @ 1692'.

Rods & Pump: (Last pump chg: 12/8/06)
2"x1-1/2"x12'x12' RHAC-Z (DV) w/ 1' strainer, 4 - 1-1/4" sinker bars, 63 - 3/4" rods, subs (1 - 8'), 1-1/4" x 16' polish rod.

Depths per Cased Hole MERGE LOG
FTC Perfs:
1464'-1466' (2') - 8 holes
1475'-1477' (2') - 8 holes
1484'-1486' (2') - 8 holes
1497-1504' (7') - 28 holes

1598'-1610' (12') - 24 holes
1643'-1645' (2') - 8 holes (20' Coal - 84 holes)

Frac by HES (04-20-06)
P 1000-Gals 7.5% HCl & 120 - 1.3 SG BS (Had 5 distinct breaks)
Frac'd w/ 53,789-Gals 20# XL w/ Sand Wedge +107,600# 20/40 Brady + 10,500# Santrol Super LC F/1-T/5 PPG (Trace w/ 3-Isotopes)
Avg Q 52.3-BPM, ATP=1881#, ISIP 1095#

Remedial by HES (05-03-07)
21.6 bbls load (dry hole) Treat Dwn Csg w/ 4200 gals Coal Stim @ 3.7 BPM, 100 - 1.3 SG Balls, 1050# ATP, ISIP 989, disp 50 BW

GOP confirmed 12/08/2006
TEM Updated 03-31-09