Form 3160-5 (June 1990)

14. I hereby certify that the

Approved by: Conditions of approval if any

Thomas E. Mullins This space for federal or state office use

Signed:

## **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

Use "APPLICATION FOR PERMIT -" for such proposals

FORW AF	PROVED
Budget Bureau	No. 1804 012
Duuget Duleau	190. 2004-013

Budget Bureau No. 14	oo4-01:
Evelena Manta 21	

nd Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS	2005	SE
Do not use this form for proposals to drill or to deepen or reentry to a differ	ent rese	rvoir

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SÜBMIT IN TI	RIPLICATE U I	O FARMINGTON NEM
1. Type of Well		7. If Unit or CA, Agreement Designation
Oil Well 🔀 Gas Well	Other	
O. Name of Occasion		8. Well Name and No.
<ol> <li>Name of Operator</li> <li>Synergy Operating, LLC</li> </ol>	OGRID # 163458	29-4 Carson 24 # 1
		9. API Well No.
Address and Telephone No. PO Box 5513  (5)	05) 325-5449	30-039-2482100
Farmington, NM 87499		10. Field and Pool, or Exploratory
4. Location of Well (Footage, Sec, T. R., M, or Surve	y Description)	
		Basin Fruitland Coal
Unit M, 840' FSL & 1065' FWL	. Sec 24, T29N, R04W	11. County or Parish, State
		Rio Arriba County 4567
		New Mexico
12. CHECK APPROPRIATE BOX(S) TO I		
TYPE OF SUBMISSION	TYPE OF	ACTION S OCT 2005
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandoment Recompletion Plugging Back Casing Repair Altering Casing	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Converion to Injection
	Other	Dispose Water (Note: Report results of multiple completion on Well
		Completion or recompletion Report and Log Form)
Describe Proposed or Completed Operations (Clear If well is directionally drilled give subsurface locations  Synergy proposes to isolate the existing Fruitland C	s and measured and true vertical depths for all r	markers and zones of pertinent to this work.
A retreivable whipstock will be installed at 3585', are The Fruitland Interval will be drilled from 3585' and Following the openhole cavity completion, the whip wellbore.  CONDITIONS OF APPROVAL is a least a signal at installed at 3585', are the installe	completed with a Cavity completion to	o a depth of 3684'+/  Id the 2-7/8" tubing relanded in the original cased
Adhere to previously issued stipulations.		SEE ATTACHED FOR
Attached is a current wellbore diagram. A workove		CONDITIONS OF ADDRAWAR
Attached is a current wellbore diagram. A workove locations, so that no new surface disturbance occur	r pit will be necessary along with a bur	n pit. These will be placed in the ordinal pit?

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, ficticious, or fraudulent statements or representations as to any matter within its jurisdiction

Title:



Date:

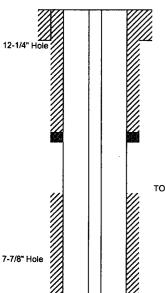
09-22-2005

**Engineering Manager** 

Carson 29-4 24 # 1 Unit M, Section 24-T29N-R04W 840' FSL, 1065' FWL 7010' GL, 13' KB

Araphoe #7 Bayless Rig # 6 Spud: 07/31/90 Completed: 11/7/90

## API # 030-039-2482100



8-5/8" 24# K-55 Casing @ 244' w/ 180 sxs Circulated 5 bbls cement to surface

2-7/8" 6.5# J-55 Tubing @ 3880', SN one jt up (127 jts) ROD STRING AND DH PUMP IN THE WELL

1500 1-1/4 2060' 1-1/2 2230'

759 1/2

DV Tool @ 1600' (See Cmt Detail Below), Circulated to Surface

2740' 1-1/4 3245' 2 3453' 4 3711' 2-3/4 4000' 1-1/4

Dev Surveys 247 1/4

TOC @ 2000

Capillary Suction Tube Tests Run on Samples for Fluid Testing Result showed lower pH 3.9, Fluid 3% KCI water best

**Fruitland Coal Perforations** 3619' to 3681' (25 holes) Frac w/ 10K 40/70 & 47K# 20/40 in a X-Linked 70Q Nitrogen Foam at 33 BPM 3100 MTP, ISIP 4417 (Screened Out)

5-1/2" 17# N-80 Casing @ 3999', w/ 1st Stage w/ 200 sxs 50/50 Poz 2% gel 0.6% Halad 322 tail 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% KCI and 1/4# Flocel, tail with 50 sxs B neat. Circulate 7 bbls cement to surface.

FRAC GRADIET FRUITLAND COAL (0.75)

PBTD: 3955 TD: 4000'

Fill @ 3904'

Formation Tops San Jose Nacimiento Ojo Alamo 3250 Kirtland 3404 Fruitland 3530 Pict Cliffs 3685

nde

Lewis

Formation Name: Fruitland Coal

10-02-90- MIRU Bayless Rig # 6, Unload, Tally & PU DCs & 2-7/8" Tbg w/ bit. Drill out DV Tool, & Test Csg 1000 OK GIH and Cleanout to 3955' with tubing. COOH, GIH w/ Csg Scraper to PBTD. COOH. Circulate hole w/ 3% KCl water RU Petro Wireline. Run GR-CCL-CBL from PBTD to 1450'. Good bond from PBTD to 2000'. No Bond 2000' to DV Tool shown top of DV at 1590'. 200 gals 7-1/2% HCl acid spotted through perfs. Perforate top down (19 Holes) as follows. 3619', 3621', 3635', 3643', 3644', 3645', 3646', 3647', 3657', 3658', 3660', 3664', 3665', 3667', 3673', 3675', 3678', 3679', & 3681' Attempt to Breakdown Perforations, No chart available on individual BDs as indicated in file. BD perf at 3678', pump 1.1 BPM at 1440 psi. Perfs referenced to GR-CCL-CBL. Daily report indicates that only 4 good breaks, 8 perfs not be pumped into. Set SPIT tool above all perfs and Swab well dry in 7 runs, recover 28 bbls water. The next day attempt to BD perfs again at 3664', 3657', 3643', 3635', 3621', & 3619' (6 holes). Unable to BD at 6000 psi. Pull tubing & tool. RU Petro Wireline Perforate (2nd Time) 1 SPF @ 3664', 3657', 3643', 3635', 3621', & 3619' (6 additional holes, 25 total now). Prior times used 7.5 % HCl, this time use 15% HCl acid and SPIT tool. Successfully BD each perf, no specific data available. RU to swab. Swabbed dry in 7 runs, recover 23 bbls water, indications of gas. Pull SPIT Tool RU Halliburtion to Nitrogen Foam Fracture Stimulate (3619' to 3681'). Pump 70 Quality foam treatment, pump 10K lbs 40/70

sand, then 47,500 lbs 20/40 sd. Boragel Frac Fluid, Pad, Initial treating pressure at 3100 psi, original design at 45 BPM Pad at 33 BPM, drop to 10 BPM, screened out at 2 ppg sand. ISIP 4417, 15 min 3814 psi. Hardly any flush pumped. Max treating pressure 4600 psi. Flowback well for 2 days. GIH w/ tubing, tag sand fill at 3915' (40' fill). Used N2 to CO. X-O 5K head for 3K head. Land 2-7/8" tubing at 3738' on 10-10-90. SICP 1500 psi on 10-16-90.

Construct surface facilities. Install base for Pump Jack and set separator. Lay lines, Install meter. NOTE THAT RODS HAVE NOT BEEN RUN FOR THIS WELL.

10-14-90 SICP = 1480 psi

11-15-90 First Deliver well, 1425 psi casing, 610 psi tubing. Note that Carson Forest Restrictions in place during winter

04-30-91 Install Plunger Lift System on the well. Problems with tight spot in the tubing at 670'

05-02-91 MIRU R&S well service. Pull tubing, replace it at tight spot. LD 3 its of tubing. Land. RD & Release

Utilize Plunger Lift System to Produce well.

10-10-92 Removed 2-400 bbl tanks & Production Facilities

03-20-95 Returned well to production directly into pipeline, no separator, or facilities.

10-09-98 RU B&R Slickline. Csg 425 psi, Tbg zero. RIH w/ fishing tool, recover brush plunger in stop at 3618'. FL @ 1900' 11-19-99 Nitrogen Blow Around to remove water.

12-30-99 RU B&R Slickline. RIH w/ fishing tool, recover stuck plunger at 670', same spot. Ran 2.343" gauge ring, and tagged up at the same 670' spot

08-22-2000 MIRU Key Rig # 30, Csg 400, Tbg 200. BD Tubing. RU BOPE. COOH Tallying out tubing 120 its 3635.62', recover two piston stops and a 2-7/8" pistion from the SN landed up one jt. RIH with 2-7/8" tubing, standing valve in the SN up 1 jt. All Tubing drifted okay. Test tubing to 500 psi. Good. Try and recover standing valve. No recovery due to tight spot located at 760 feet. Pull Tubing string again. Remove its listed as being tight. Replace 3 its. Jt that will not drift is on brm.

Tubing landed at 3,648' KB, SN up one jt. 08-08-2001 MIRU Key Rig # 28 from Escrito Store. Very Long Move. Rode unit to location. Discuss Rig-Up of Unit. Raise Demick, NU Rig and Equipment. Blow Down casing and Tubing. Casing to Tank. ND WH, NU BOPE, Change Rams and Elevators to 2-7/8". Test Operation of BOPE. PU 1 Jt of 2-7/8" Tubing. Unseat Tubing Hanger (Dounut), Pull up. Install

TIW Valve. Close tubing in.. Casing left open to tank overnight. SDFN. 08-09-2001 Crew arrive at 8:00 hrs. Blow down tubing. Start Unit. Pull 1 full stand of 2-7/8" tubing. Install Baker 5-1/2" 17# Lockset Packer with x-o for 2-3/8" to 2-7/8" and a 2-3/8" TIW valve. Close TIW, Run tubing and packer in the hole and set PKR at 35', in compression, string wt of tubing below. Back off of Packer, leaving valve and PKR in the hole. Pull 2 jts of tubing.. RD floor and ND BOPE. ND 11" x 7-1/16" 3000# tubing head with bad valves and 2" outlets. NU 11" x 7-1/16" 3000# Tubinghead with 3-1/16" 3000# outlet and 3000# ball valve. Test tubing seal 500# would not test to 1000#. Need to plastic energize and test at a later date. NU BOPE. GIH and screw into PKR. Release PKR and COOH tallying 2-7/8" 6.5# J-55 Tubing, total of 3,639.37'. SN was up one jt. GIH with production tubing, rabbit and tally 10 additional its to land pump deeper, as follows: 1 it Mud Anchor OE (31.20'), Perf Sub

(6.00'), New SN (1.10), and 126 Jts 2-7/8" (Total of 127 Jts in hole). Tag Fill at 3904.68'. Lay down 2 jts of tubing, Tubing Landed at 3,870.77' + 10' KB = 3,880.77', SN @ 3849.55'. Top Perf @ 3619', Btm Perf @ 3681' (intake 168' below btm perf). Land Tubing, ND BOPE, NU Wellhead, Rattigan, and pumping Tee (Threads bad in pumping tee), RD Floor, RU to run rods.

Specialty Logs, Misc Sidewall Cores (23 cut) Mud Log 3000' to TD Coal Desorption Tests SEM Analysis Capillary Suction Tube Tests

Open Hole Logs (Halliburtion) GR-IES (Surf-4000') Dens-Neu (2000'-4000') Microlog (2000'-4000')

Cased Hole Logs GR-CCL-CBL (10-03-90)

High Res Density

Thomas E. Mullins Updated 09-23-05