

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

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Synergy Operating, LLC (agent for Bois d' Arc Offshore, Ltd.)

3. Address and Telephone No.

PO Box 5513 (505) 325-5449 OGRID # 163458  
Farmington, NM 87499

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

Unit Letter N, 750' FSL, 1650' FWL, Sec 22, T21N-R05W

5. Lease Designation and Serial No.

NMNM-105533

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Bois d' Arc Divide 22 # 1

9. API Well No.

30-043-20952

10. Field and Pool, or Exploratory

WC 21N5W22N Mesaverde (Gas)  
Undesignated Mesaverde

11. County or Parish, State

Sandoval, New Mexico

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

TYPE OF SUBMISSION

☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Recompletion	<input checked="" type="checkbox"/> New Construction
<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
<input type="checkbox"/> Other	<input type="checkbox"/> 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.

03-01-2002 to 04-04-2002

The following Drilling and Coring was performed on the subject well.

Core Recovery total 468 feet of 489 feet on the 22 # 1 well @ 95.7 % Recovery

5-1/2" Production Casing was run and cemented to surface per the attached information.

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

Signed:

Thomas E. Mullins

Title: Engineering Manager

Date: 06-10-2002

This space for federal or state office use

Approved by:

/s/ Patricia M. Hester

Lands and Mineral Resources

Title:

Date:

JUN 19 2002

Conditions of approval if any

Detailed Information  
Eois d' Arc Divide 22 # 1

- 3/1/02 Beginning on Monday, February 25th. Trucks delivering items each day.  
MIRU & Spot Equipment, and parts trailers. Unload Drill Pipe, Drill Collars, etc.  
Unload Generators and Light Plants, Pumps, & Mud Pits. Spot Equipment on location.  
Meet with Drilling Supervisor and go over details of planned operations.  
Drilling Rig (Unit) arrived late Friday Evening, approximately 8:00 pm  
Wait to Spot Rig until daylight. Park Forklift in front of location overnight, to prevent vandalism
- 3/2/02 MIRU Mudlogging Trailer & Additional Auxillary Equipment. Delivery Mud. Forklift starter failed. Forklift blocking location entrance. Wait on new Forklift and new starter. Move forklift out of the way. Spot rig on ramp.  
ND WH. NU 7-1/16" BOPE & rotating head rubber. Adjust and line up derrick with WH. Mix Mud and  
Problems with AuxillaryGenerator Equipment, poor voltage.  
Thaw Lines, Try to keep equipment from freezing. GIH w/ 6-3/4" Bit # 1, Subs, & 4 DCs. SD due to Winch Problems Thawing Equipment.
- 3/3/02 Thaw Equipment, Mix Mud. Test 8-5/8" surface casing & stack to 1000 psi. Test 5" pipe rams & casing to 1000 psi. Continue Rig-Up.  
PU BHA. Hoist (Winch) problems. Call Salt Lake City. Try and diagnose problem.  
Suspect hoist brake release system. Hoist will go up, but not down.  
Wait on parts and equipment.
- 3/4/02 Consult Salt Lake City. Adjust Pilot Pressure Controller. Thaw Out Mud System with Hot Oiler. Wait on Mud Loggers to return. Install Screen Board on Shaker. Begin Drilling at 17:00 hrs. Drill ahead from 172' to 420' (256') in 14 hrs. Bit appears to be balling up in shale, and drilling at 50 FPH in Sandstones  
Rig Mud Pump System is not designed for High Pressure > 1000 psi drilling. Discuss running Jets in next bit, and or using a mill tooth bit in Shale intervals.
- 3/5/02 Service Equipment. Drill from 421' to 491', Survey @ 491', Misrun. Drill Ahead from 491' to 510', Survey hole at 510' (No longer to be done on btm !). Deviation 2.75 deg at 510'. Drill Ahead from 510' to 765', Survey at 746' 3.75 degs. Drill Ahead from 765' to 802'. Total Footage today is 381'. Should break free of shale at 890'
- 3/6/02 Continue to Drill Ahead in Clay, causing bit balling and slow drilling. COOH with 5" Drill Pipe, 5" Drill Collars, Shock Sub, Float Sub, and Bit # 1. Rig Repairs. GIH with Bit # 2 (Jetted for low volume pumps). Ream hole from 400' to 700'. Continue going in hole at the report time.
- 3/7/02 Ream back in the hole. Drill New hole from 897' to 1002' (110 FPH). Run Survey. Wireline part in strong wind gust believe that it caught on the top sheave. Fish Survey line. Survey no good. Drill ahead from 1002' to 1235'. Survey @ 1210' - 3.0 Degrees. COOH w/ DP & BHA (Bit # 2). Dump Mud Pit, Mix and Condition New Mud Ideally 8.7 ppg, 32-35 visc, 6 WL. PU Coring Bit and assembly. Begin TIH on 5" DP. Incomplete at report time.
- 3/8/02 Finish TIH. Wash to btm. Recover & Clean core tube fill material. Begin coring operations. Wireline Core PQ 3.27" Diameter. Core from 1235' to 1298' (63'). Good recovery 62.5' recovered. Take 1st Desorption can on small coal bed. Continue coring at report time. Evaluate future core bit selection  
Penetration rate is less than anticipated.
- 3/9/02 Continue to core with Core Bit # 1 from 1298' to 1343' (45'), Progress very slow. Take 2nd desorption can from 1322.2' to 1323.2'. Slow progress, decide to change  
Core bit. COOH with Core Bit # 1, Bit was in very good shape. MU new Core Bit # 2, diamond impregnated core bit. Begin TIH.  
Total footage on Core Bit # 1 (1235' to 1343') is 108 ft. Total Coring time is 38.5 hrs. Ave 2.8 FPH.
- 3/10/02 Core with Core Bit # 2 from 1343' to 1353' (10' - 1.7 FPH). COOH w/ Core Bit # 2. GIH w/ Core Bit # 3  
Mix Mud. Ream to Btm. Core with Core Bit # 3 from 1353' to 1363' (10'-1.6 FPH). Contacting Office to discuss Plans going forward.
- 3/11/02 Core new hole from 1363' to 1430' (67') during day. Take 3 Desorption Cans.  
in interval from 1394' to 1401'.  
Continue Coring operations through Fruitland Interval.

- 3/12/02 Continue Wireline Coring Operation. Continuously core from 1430' to 1490' (60'). Core 7.2' of cleated basal coal. Take eight (8) desorption cans across the basal coal interval. Core into Pictured Cliffs Sand. Circulate on bottom. COOH with Coring Assembly. PU used bit # 2 20 - 5" Drill Collars and GIH on 5" Drill Rods. Begin Reaming core hole from 1235' to 1400'. Incomplete at report time. Total Core Footage of 255' from 1235' to 1490'.
- 3/13/02 Finish reaming hole from 1400' to 1490'. Drill new hole from 1490' to 1514' (24'). Survey at 2494' - 3 degrees. Drill new hole from 1514' to 1750' (236'), Survey hole at 1730', misrun. Drill new hole from 1750' to 1809' (59'), Safety Meeting, Change Shaker Screen. Drill from 1809' to 2026'. Survey hole at 2006' - 2.5 degrees. Drill new hole from 2026' to 2173' (147'). Total footage today from 1490' to 2173' (683')
- 3/14/02 Drill Ahead, New 6-3/4" hole from 2173' to 2913' (740'). Hole surveyed at 2500' at 4.0 degrees. Drilling ahead to final core point. Will catch coal desorption cans for 5' seam at 2955'+/-.
- 3/15/02 Service Rig. Condition Mud. Drill new hole from 2913' to 2973'. Circulate good coal cuttings from 4' thick coal seam from 2955' to 2959'. Survey hole at 2952' - 4.5 degrees. Drill ahead from 2973' to 3434'. Mixed new mud at 3180', with fresh water. Reserve pit water too heavy. Total footage for the day is 521 feet, rotating time for day is 19.25 hrs, Ave of 27 FPH.
- 3/16/02 Drill ahead from 3434' to 3475'. Penetration slowed. Concern for bit & cones. COOH with drilling assembly. Find that Two (2) Cones are missing from Bit # 2. Third cone damaged significantly. Review Fishing options, Wait on magnets from Farmington. Begin TIH with Magnet to fish cones out of the hole.
- 3/17/02 Complete TIH with Magnet, total time GIH of 13 hrs. Circulate past bridges. Raise Mud Viscosity. Work Magnet on bottom. COOH with 5" DP and magnet. Time out of 6.5 hrs. MU new Rotary Core Bit # 4. GIH on 5" DP assembly. Incomplete at report time.
- 3/18/02 Complete Trip in the hole with Core Bit # 4. Wash to bottom. Total time 13.25 hrs. Recover core tube with fill. No carbide pieces. Wash to bottom of hole. Pull up 1". Run 3.25" magnet inside 5" core tube to bottom of the well. Work magnet on bottom. POOH. No carbide. Condition mud, believe mud to viscous to allow for coring tubes to seat properly. Lower viscosity to 40 CP. Core 5' of hole from 3475' to 3480' (5') Ave 1.0 FPH. No penetration, poor recovery. Begin to COOH with Core Bit # 4 and 5" DP.
- 3/19/02 COOH w/ Core Bit # 4. Bit worn out. MU new Rotary Bit # 3, & new BHA. GIH on 5" DP. Ream hole to 3480'. Work Bit & Junk Basket to recover carbide debris. Rotary drill new hole from 3480' to 3505'. (25') New hole for the day. Repairs to pump line. Repairs to Hydraulic Line. Incomplete at report time.
- 3/20/02 Rig repairs. Circulate. Drill new hole from 3505' to 3585' (80'), Ave 12.5 FPH. Pull 160' off of bottom and circulate hole. Down for rig repairs to top drive system. Pin hole leak and visible crack in the top drive kelly. Waiting on part to arrive from the manufacturer. Circulate hole until part is replaced.
- 3/21/02 Rig Repairs. Waiting on Top Drive piece. Should arrive in Albuquerque at 15:00 hrs on Friday. Circulate hole waiting on repairs.
- 3/22/02 SM. Wait on parts for rig. Install rig top drive parts. Ream hole to bottom & circulate. Drill 2' of new hole from 3585' to 3587', call this core point due to poor penetration & lack of higher pressure pump capability. Trip out of the hole with 5" DP, 5" DCs, & Rotary Bit # 3. Some wear on bit. PU used Core Bit # 3 used in Fruitland Interval. Ready to trip in the hole with crew change.
- 3/23/02 SM. Trip in hole with used PDC Core Bit # 3. Circulate past bridges. Begin Coring operation in Meneffe at 19:40 hrs with fill tube run. Core new hole from 3587' to 3609' (22') in several core runs. Take three (3) desorption cans in Meneffe Coal. Work to recover core. Core slipping downhole.
- 3/24/02 SM. Remove jammed core and recover core. Core new hole from 3609' to 3634' (25'). Recovering core. See Mud Log for detail.
- 3/25/02 Core Meneffe Interval from 3634' to 3682' (48'). Take Ten (10) desorption Cans on Meneffe Coals and Shales

Continue Coring.

3/26/02 SM. Rig Repairs, Cracked Kelly Valve in Top Drive Assembly.

Core Meneff Interval from 3682' to 3757' (75'). Take Ten (10) Desorption Cans.  
Reference Mud Log for Detail

3/27/02 SM. Core Meneff formation from 3757' to 3808' (51'). Problems with Unconsolidated Sand plugging DP.  
Work free. Take Three (3) Desorption Cans. Approaching Pt. Lookout Top.

3/28/02 SM. Complete Meneff Coring from 3808' to 3821' (13'). Trouble recovering final Pt. Lookout Core. Evident vertical fracturing present in the core. Visible offset slippage in core. Run basket core catcher. Pt. Lookout top at 3808'. Trip out with Coring assembly 9 hrs 45 minutes. PU Bit # 3 (ATJ-33C) 6-3/4". GIH on BHA. Circulate past bridges at 700'+/- . Incomplete TIH at 1410' at report time.

3/29/02 SM. Complete TIH w/ Rotary Assembly to 3587'. Ream hole from 3587' to 3821' (234'). Attempt to use Larger Rig pump. Drill new 6-3/4" hole from 3821' to 3858'. TD 6-3/4" hole at 2:40 hrs on 3-30-2002. Circulate and condition hole work bottom 60' of hole. Raise mud viscosity to 100 cp for logging.

3/30/02 SM. Circulate and condition mud at TD. Raise viscosity and short trip pipe. Remove large shale cavings from the upper portion of the hole. Hole Clean. COOH to 1092'. Condition Mud. COOH. Wait on Loggers. Rig up Loggers. Run logs, stop at 426'. POOH. GIH to condition mud, raise viscosity. Circulate past shale bridges.

3/31/02 Circulate and condition hole. Work pipe, to remove shales. No torque or drag. COOH with DP & Bit # 3. RU Schlumberger loggers. RIH with Platform Express Tools. Stop at 426'. Work past bridge and stop at 515'. Attempt to work past. Log hole from 510' to surface with GR. Caliper still retracted.

4/1/02 Waiting on Slimhole Logging Tools

4/2/02 Wait on Logging Tools. GIH with 5" CH134 Drill Pipe, Tag several bridges from 505' to 1280', Circulate past bridges TD of 3858', condition mud to 300 cp, 9.2 ppg, Total Trip Time in of 11.5 hours. Trip out of the hole to 1103'. Wait 30 minutes for loggers to arrive. RU Schlumberger Loggers.

4/3/02 Run Slimhole GR-AIT-DENS-NEU Log in Hi-resolution mode with repeat section across cored Meneff interval. Loggers TD at 3860', Logging tools will not go past 1216'. Work tools. Log GR-NEU inside 5" DP to surface. RD loggers. COOH with 5" DP from 1103'. RU to run 5-1/2" casing. Run 102 jts of 5-1/2" 15.5# J-55 casing with float equipment.

4/4/02 Finish Running 5-1/2" 15.5# J-55 LT&C Production Casing to 3848'. Circulate & Condition Mud. Wait on Cementers. RU BJ Services. Drop Ball to close Auto Fill. Circulate. Cement 5-1/2" Production Casing at 3848', FC @ 3825'. Pump cement job as follows: 20 bbls Mud Clean II, 5 bbls Fresh water, Cemented with 88 bbls (200 sxs / 496 ft3) of Type III Premium Lite HS Cement (3% KCl, 0.25# Celloflake, 5# LCM-1, 8% gel, 0.3% Sodium Metasilicate) @ 12.2 ppg (2.48 yield), Tail with 43 bbls (120 sxs / 242 ft3) of Type III Premium Lite HS Farmington (3% KCl, 0.25# Celloflake, 0.3% CD-32, 0.7% FL-52) 12.5 ppg (2.02 yield). Displace with 91 bbls (50 water, 41 mud). Bump Plug to 2200 psi, 1300 psi of lift. All dye water and 31 bbls of good cement circulated to surface. Pumped at 3 BPM. Plug held. Plug was down at 22:46 hrs on 4-4-2002. RD BJ Services. (BLM Witness Cement Job). Tear Down Mud Pumps & Equipment. Wait on Cement before Setting Slips, since there is no way to pull the BOPE off the well and set the slips. Wait on Cement total of 5.5 hours. Break out Landing Jt. LD mast on rig. ND BOPE and remove. Raise Mast. Screw into casing. Set casing slips with 50K tension. Continue to Rig Down. Trucks to arrive at 9:00 hrs to move rig. That will be the official release time to move to the Cejita Blanca 33 # 1. Install screw-on 5-1/2" wellhead and valving.

5-1/2" 15.5# LT&C Casing: 5-1/2" Casing Shoe at 3848', Float Collar at 3825', Marker at 3442.69' Shoe (1.00), Shoe Jt (22.10), Float Collar (0.73), 17 Jts 5-1/2" (376.28), Marker Jt (4.98), 155 Jts 5-1/2" (3427.71), 2 - 5-1/2" casing subs (10.21), and 5-1/2" landing jt (4.77) = Total of 3847.78' Total of 173 Full Jts and 3 Short Jts in the well. Centralizers on lower section of casing.

Final Report for Drilling Phase of the Divide 22 # 1