136544894

119/02

Synergy Operating, LLC

PO Box 5513 Farmington, NM 87499 (505) 325-5449 Fax (505) 325-6585

New Mexico Oil Conservation Division Attn: Lori Wrotenbery 1220 South St. Francis Drive Santa Fe, NM 87505

490, **1 8** 2001

December 17, 2001

RE: Bois d' Arc Offshore, Ltd. Bois d' Arc Encino 15 # 1 Unit A, Section 15, T20N, R05W McKinley County, NM Dakota and Mesaverde Amended NSL-4648 Approval Request

Dear Ms. Wrotenbery

Synergy Operating, LLC, as agent for Bois d' Arc Offshore, Ltd., is requesting Administrative Approval of the Non-Standard Location as drilled for the subject well. During drilling operations, significant hole deviation was encountered. Synergy surveyed the hole with a MWD tool and submits the attached survey information for an amended bottom-hole location approval.

The surface location is located at 250' FNL, 920' FEL, Section 15, T20N, R05W, McKinley County, NM. The bottom-hole location at 5298' MD, 5288' TVD, is 151' FNL, 736' FEL, Section 15, T20N, R05W, McKinley County, NM.

As mentioned in our original NSL application, Bois d' Arc Offshore, Ltd., et al, is the holder of all the adjacent mineral leases to the subject NE/4 (160 Acres) of Section 15. Please reference the attached lease map.

The reason for this amended NSL application is the unanticipated deviation encountered during drilling operations. We appreciate the Division's timely approval of our request so that we can begin completion operations.

I can be reached at (505) 566-3725 or by facsimile at (505) 325-6585.

Warm regards,

Thomas E. Mullins Engineering Manager

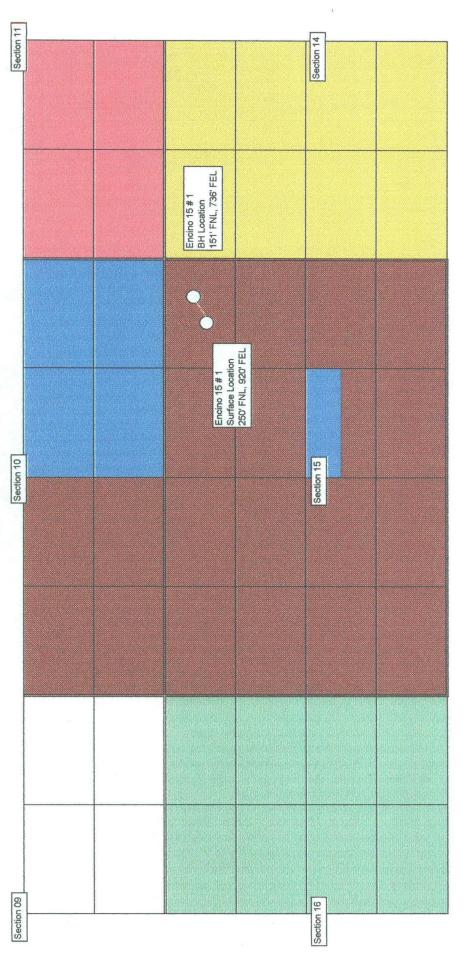
cc: NMOCD – Aztec US BLM - Farmington Bois d' Arc Offshore

250' FNL, 920' FEL, Sec 15 151' FNL, 736' FEL, Sec 15 New Bottomhole Location: Surface Location:

McKinley County, New Mexico Unit A, Section 15, T20NR05W **Bois d Arc Offshore Limited** Bois d Arc Encino 15 # 1 Synergy Operating, LLC

н Т

Ammended NSL filing request



Lease NMNM-99720 Held by SJJV

Prepared by Thomas E. Mullins December 17, 2001

Lease NMNM-100277 Held by SJJV



Lease VA-1682 Held by SJJV

Lease NMNM-99719 Held by SJJV

Lease NMNM-100803 Held by SJJV

| Form 3160-5 DEPARTMENT (  | OSTATES<br>DF THE INTERIOR<br>ND MANAGEMENT  | FORM APPROVED<br>Budget Bureau No. 1004-0135<br>Express March. 31, 1393                                |
|---|--|--|
|   | D REPORTS ON WELLS<br>r to deepen or reentry to a different reservoir                              | 5; Lease Designation and Senal No.   |
|   | PERMIT -" for such proposals   | 6. If Indian, Aliottee or Tribe Name   |
| SUBMIT IN   | TRIPLICATE   |  |
| 1 Type of Well  |  | 7. If Unit or CA, Agreement Designation  |
| Oil Well Gas Well   | Other  | 5. Well Name and No.   |
| 2. Name of Operator<br>Synergy Operating, LLC (agent  | for Bois d' Arc Offshore, Ltd.)  | Bois d' Arc Encino 15 # 1  |
|   |  | 9. API Well No.  |
| 3. Address and Telephone No.<br>PO Box 5513 (50   | 5) 325-5449 OGRID # 163458   | 30-031-21008   |
| Farmington, NM 87499  |  | 1C. Field and Pool, or Exploratory   |
| 4. Location of Well (Footage, Sec, T. R., M, or Surve   | ey Description)  | WC20N05W15A  |
|   |  | Undesignated Dakota  |
| Unit Letter A, 250' FNL, 920' FE  | L, Sec 15, 120N-R05W   | 11. County or Parish, State  |
| 12 CHECK ADDODDIATE BOYISTO   | INDICATE NATURE OF NOTICE, REPORT, OR C  | McKinley, New Mexico   |
| TYPE OF SUBMISSION  | TYPE OF ACTION   |  |
| Para  |  | 1  |
| Notice of Intent  | Abandoment   | Change of Plans  |
| Subsequent Report   | Recompletion X<br>Plugging Back  | New Construction<br>Non-Routine Fracturing   |
|   | Casing Repair  | Water Shut-Off   |
| Final Abandonment Notice  | Altering Casing  | Converion to Injection   |
|   | Other  | Dispose Water  |
|   |  | Note: Report results of multiple completion on View<br>Completion of recompletion Report and Lop Form? |
| 13. Describe Proposed or Completed Operations (Clearly  | r state all pertinent dotails, and give pertinent dates, including, es                             |  |
|   | and measured and true vertical depths for all markers and zones                                    |  |
| Please see the attached perfir<br>Direction and Deviation Sur   | nent information regarding the Bois d' Arc i<br>veys are attacned.                                 | Encino 15 # 1  |
| 11/30/2001 TD of 5298' KB, was reached on   | nole began with Aztec Rig # 507 on Sunday, Nove<br>Sunday, November 30, 2001 at 14:30 hrs.         |  |
| Openhole logs requested to be   |  |  |
|   | ST&C Production Casing. Casing Shoe at 5289',<br>zers, 2 Turbolizers, & 1 Cement Basket on the cas |  |
| Cemented in 2 Stages. Details of  |  | வடு வாழு.  |
| Rig released at 22:45 hrs - 12/02   |  |  |
|   | DN 99 feet to the North and 184 feet to the East   | of the surface Location.   |
| or<br>151' FNL, 736' FEL, Unit A, Sec   | tion 15, T20N, R05W - McKinley County, New M   | exico  |
| 14 I hereby certify that the foregoing is true and  |  |  |
| Signed: In  | Title: Engineering Manager   | Datej 12-05-2001   |
| This space for federal or state office use  |  |  |
|   |  |  |
| Approved by:<br>Conditions of approval if any   | Title:   | Date: /////  |
| evitations of approval in ony   |  |  |
| Title 18 U.S.C. Section 1001 make it a crime for any person knowingly a<br>or representations as to any matter within its junction. | and willfusy to make to any department or agency of the United States an                           | ny false fictorous or iraudulent statements  |

#### Synergy Operating, LLC Bois D' Arc Encino 15 # 1 (API # 30-031021008) WC20N05W15A Dakota Drilling Phase

- 11/18/01 MIRU Aztec # 507. Test 8-5/8" Casing to 1000 psi. GIH w/ 7-7/8" Hughes GT-09C Bit. Tag Shoe. Survey @ 235' 7 degs Resurvey @ 235' - Same 7 degs. Drill Shoe. Drill new hole from 241' to 410', in 10' intervals circulating cuttings to Catch Fruitland Coal. One Can Taken, very little coal. Continue drilling ahead 85 RPM 10K WOB, trying to straighten hole. Drilling at 836' at report time.
- 11/19/01 Continue Drilling ahead with 10K WOB & 85 RPM. Survey hole at 992' 6 degrees, 1244' 3.75 degrees Begin TOOH to PU Directional Tools. SD for Rig Repairs.
- 11/20/01 Finish Rig Repairs. COOH. Laying down remaining Drill Collars. PU and MU Directional Tools. GIH with tools and survey existing hole with MWD equipment. Trouble getting initial readings near surface casing. Take survey readings. Current Hole direction is on an azimuth of approximately 70 degrees. The Surface Casing appears to be set at a 11 degree deviation. Consult with Geological and Geophysical expertise on current hole location. Current hole position is acceptable. Drilling ahead with directional tools rotating at 45 RPM surface, with 10K WOB, Surface Pump pressure 1200#. Drilling ahead at 1887'. fp
- 11/21/01 Finish Drilling New Hole with Baker INTEQ Directional Tools to 2013'. COOH laying down pipe (Rig is not able to standback pipe). Attempt to take survey 107' below surface casing. No good readings.
  COOH laying down Baker Directional Tools. PU New Bit # 2, 7-7/8'' Hughes Christensen GT-09C. Strap Drillstring GIH to 2013'. No fill or drag. Drilling ahead with Conventional BHA to 2486' at report time. (599' today).
- 11/22/01 Drilling ahead at 3190'.
- 11/23/01 Drilling ahead at 3480'.
- 11/24/01 Drilling ahead at 4075'. Lost circulation at 3975'. 100 bbls.
- 11/25/01 Drilling anead at 4287' Lost circulation at 4155', 120 bbls. Rig Repairs.
- 11/26/01 Drilling ahead at 4631', Bit Trip at 4631'.
- 11/27/01 Drilling ahead at 4750.
- 11/28/01 Drilling anead at 4974.
- 11/29/01 Rig Repairs Drilling anead at 5166
- 11/30/01 Drill to TD at 5298', Circulate, Final Survey, COOH RU Schlumberger, Run Logs
- 12/1/01
   Attempt to Run Cement Bond Log without success.

   Run 5-1/2" Production Casing to TD 5298". Attempt to circulate hole with Mud. Lose 800 bols mud with > 15% LCM. No indication of circulation.
- 12/2/01 BJ Services Cement First Stage of 5-1/2" Production Casing. Test Lines 3000# Mix & Pump 20 bbls Mud Clean 2, 10 bbls Water, 70 bbls Cement, SD Drop Pluc, 60 bbls H20 & 67 bbls Mud Displacement. Bump Plug to 1350#. Bleed Back 2.5 bbls not holding. Pump 2 bbls Bump Plug to 1500#. Hold Pressure 5 mins. Bleed back to 500#. Leave pressure Casing. Cement Detail (194 sxs, 70 bbls, 394 ft^3, 12.5 ppg, 2.03 ft^3/sx yield) Premium Lite High Strength FM Additives +3% KCi+0.25#/sx CelloFiake+5 lbs/sx LCM-1+0.7%pwoc FL-52+0.3% bwoc CD-32 No Circulation throughout Job. Final Lift Pressure of 370 psi. Expect Coverage of Dakota to the Base of Gallup. Check Omt performance, WOC. Check Pressure, raised to 800#. Bleed to Zero. Plug holding. Drop Opening Tool Bomb. Wait 35 mins. Open tool with 400# pressure. SD Swap to rig pump Start pumping at 3 BPM, 250#. Catch pressure after 35 bbls mud, Circulatiaon at 40 bbls Circulate and condition Mud from 3024' to surface. Monitor returns. Mud has 3 % LCM 60 cp, 8.8 ppg. Good mud returns. Safety Meeting w/ all personel, review Stage # 2 job. Test lines. Mix & Pump 20 bbls Mud Clean 2, 10 bbls water, 110 bbls Lead, 15 bbls Tail, SD. Drop Plug, 72 bbls Water Displacement. Good Circ until 85 bbls pumped then partial returns to zero returns, Rate between 1 to 3 bpm. Bump Plug to 1600#. Bleed Off. Plug holding. Cement appeared to be on a vaccum. Suspect Cement placement downhole from Pt. Lookout to Gallup Interval. Attempted to hesitate cement, but unsuccessful. Out Cement Volume Short due to LC Lead Cement Detail (295 sxs, 110 bbls, 617 ft^3, 12.1 ppg 2.09 ft^3/sx yield) Premium Lite FM Additives +1%CaCl+0.25#/sx CelioFlake+5 lbs/sx LCM-1+8%bwoc bentonite. PD @ 17:05 hrs

# **Survey Report**

MIN. CURVATURE CALCULATIONS (SPE-3362)

| OPERAT<br>WELL:<br>LOCATIC | Bois D' Arc Encino 15 #1 FINISH: 1<br>DN: Mckinley Co. N.M. |      |           |        |      |              |            |      |
|----------------------------|---|------|-----------|--------|------|--------------|------------|------|
|                            |   |      |           |        |      | PROPO        | SED DIRE(  | 0.00 |
|                            |   |      |           |        |      | Magneti      | c to True: | 10.8 |
| STATION                    | SURVEY  |      |           |        |      |              | VERT.      | DLS/ |
| NUMBER                     | DEPTH   | INC  | AZMTH     | TVD    | N-S  | E-W          | SECTION    | 100  |
| TIE IN                     | 0   | 0.00 | 0.00      | 0.00   | 0.00 | 0.00         | 0.0        | 0.0  |
| 1                          | 499   | 11.1 | 67.4      | 495.9  | 18.5 | <b>4</b> 4.5 | 18.5       | 2.2  |
| 2                          | 655   | 9.8  | 65.6      | 649.3  | 29.8 | 70.4         | 29.8       | 0.9  |
| 3                          | 811   | 8.0  | 67.7      | 803.4  | 39.4 | 92.6         | 39.4       | 1.2  |
| 4                          | 968   | 5.6  | 69.0      | 959.3  | 46.3 | 109.8        | 46.3       | 1.5  |
| 5                          | 1125  | 4.1  | 65.3      | 1115.7 | 51.4 | 122.1        | 51.4       | 1.0  |
| 6                          | 1283  | 2.7  | 70.8      | 1273.4 | 54.9 | 130.7        | 54.9       | 0.9  |
| 7                          | 1352  | 2.1  | 70.3      | 1342.4 | 55.9 | 133.5        | 55.9       | 0.9  |
| 8                          | 1406  | 2.0  | 69.4      | 1396.4 | 56.6 | 135.3        | 56.6       | 0.2  |
| 9                          | 1500  | 2.4  | 67.7      | 1490.3 | 57.9 | 138.6        | 57.9       | 0.4  |
| 10                         | 1532  | 2.0  | 74.0      | 1522.3 | 58.3 | 139.8        | 58.3       | 1.5  |
| 11                         | 1594  | 2.4  | 69.6      | 1584.2 | 59.1 | 142.0        | 59.1       | 0.7  |
| 12                         | 1686  | 0.9  | 50.0      | 1676.2 | 60.2 | 144.4        | 60.2       | 1.7  |
| 13                         | 1778  | 1.0  | 57.0      | 1768.2 | 61.1 | 145.6        | 61.1       | 0.2  |
| 14                         | 1872  | 0.9  | 49.0      | 1862.1 | 62.0 | 146.9        | 62.0       | 0.2  |
| 15                         | 1967  | 0.8  | 45.4      | 1957.1 | 63.0 | 147.9        | 63.0       | 0.1  |
| 16                         | 2467  | 0.5  | 45.0      | 2457.1 | 67.0 | 151.9        | 67.0       | 0.1  |
| 17                         | 2983  | 0.8  | 45.0      | 2973.1 | 71.0 | 155.9        | 71.0       | 0.0  |
| 18                         | 3480  | 0.8  | 45.0      | 3470.0 | 75.6 | 160.5        | 75.6       | 0.0  |
| 19                         | 3977  | 0.8  | 45.0      | 3967.0 | 80.2 | 165.1        | 80.2       | 0.0  |
| 20                         | 4475  | 1.5  | 45.0      | 4464.9 | 87.1 | 172.0        | 87.1       | 0.2  |
| 21                         | 4975  | 1.0  | 45.0      | 4964.8 | 94.8 | 179.7        | 94.8       | 0.1  |
| 22                         | 5298  | 1.0  | 45.0      | 5287.7 | 98.8 | 183.7        | 98.8       | 0.0  |
|                            |   |      | se d'anna |        | 17h  | 17           | 5-201      |      |

| Item         |          | Footage        | Cumulative Footage | Top Depth | Btm Depth        |                |                  |
|--------------|----------|----------------|--------------------|-----------|------------------|----------------|------------------|
| Shoe         |          | 0.75           | 0.75               | 5,288.46  | 5,289.21         |                |                  |
|              | 1        | 44.40          | 45.15              | 5,244.06  | 5,244.81         |                |                  |
| Float Collar |          | 0.60           | 45.75              | 5,243.45  | 5,244.20         |                |                  |
|              | 2        | 44.38          | 90.13              | 5,199.07  |                  | Centralizer    | 1                |
|              | 3        | 44,48          | 134.61             | 5,154.59  | 5,155.34         |                |                  |
|              | 4        | 44.38          | 178.99             | 5,110.21  | 5,110.96         | Centralizer    | 2                |
|              | 5        | 44.32          | 223.31             | 5,065.89  | 5,066.64         |                |                  |
|              | 6        | 44.42          | 267.73             | 5,021.47  |                  | Centralizer    | 3                |
|              | 7        | 44.40          | 312.13             | 4,977.07  | 4,977.82         |                |                  |
|              | 8        | 44.32          | 356.45             | 4,932.75  |                  | Centralizer    | 4                |
|              | 9        | 44.40          | 400.85             | 4,888.35  | 4,889.10         |                |                  |
|              | 10       | 44.32          | 445.17             | 4,844.03  | 4,844.78         |                |                  |
|              | 11       | 44.34          | 489.51             | 4,799.69  | 4,800.44         |                |                  |
|              | 12       | 44.32          | 533.83             | 4,755.37  | -                | Centralizer    | 5                |
|              | 13       | 44.33          | 578.16             | 4,711.04  | 4.711.79         |                | -                |
|              | 14       | 44.36          | 622.52             | 4,666.68  | 4,667.43         |                |                  |
|              | 15       | 44.32          | 666.84             | 4,622.36  | 4.623.11         |                |                  |
|              | 16       | 44.28          | 711.12             | 4,578.08  |                  | Centralizer    | 6                |
|              | 17       | 43.32          | 754.44             | 4,534.76  | 4,535.51         | Gernald        | •                |
|              | 18       | 44.38          | 798.82             | 4.490.38  | 4,491.13         |                |                  |
|              | 19       | 44.38          | 843.20             | 4,446.00  | 4,446.75         |                |                  |
|              | 20       | 44.40          | 887.60             | 4,401.60  |                  | Centralizer    | 7                |
|              | 21       | 44.00          | 931.60             | 4.357.60  | 4,358.35         | 001111011201   | ·                |
|              | 22       | 44.37          | 975.97             | 4.313.23  | 4.313.98         |                |                  |
|              | 23       | 44.39          | 1,020.36           | 4,268.84  | 4.269.59         |                |                  |
|              | 24       | 44,35          | 1,064.71           | 4.224.49  |                  | Centralizer    | 8                |
|              | 25       | 44.39          | 1.109.10           | 4.180.10  | 4.180.85         | o cristion 201 | Ų                |
|              | 26       | 44.35          | 1.153.45           | 4,135.75  | 4,136.50         |                |                  |
|              | 27       | 44.38          | 1.197.83           | 4.091.37  | 4.092.12         |                |                  |
|              | 28       | 44.32          | 1.242.15           | 4,047.05  |                  | Centralizer    | 9                |
|              | 29       | 44.35          | 1.286.50           | 4,002.70  | 4,003.45         | ooraraneor     | U                |
|              | 30       | 44.39          | 1,330.89           | 3.958.31  | 3,959.06         |                |                  |
|              | 31       | 44.37          | 1,375.26           | 3.913.94  | 3,914.69         |                |                  |
|              | 32       | 44.36          | 1,419.62           | 3,869.58  |                  | Centralizer    | 10               |
|              | 33       | 44.32          | 1,463.94           | 3,825.26  | 3,826.01         | OGHTURIZO      | 10               |
|              | 34       | 44.40          | 1,508.34           | 3,780.86  | 3,781.61         |                |                  |
|              | 35 .     |                | 1,552.72           | 3.736.48  | 3,737.23         |                |                  |
|              | 36<br>36 | 44.37          | 1,597.09           | 3,692.11  |                  | Centralizer    | 11               |
|              | 30<br>37 | 44.37          | 1,641.46           | 3,647.74  | 3,648.49         | Ochi anzo,     | 11               |
|              | 37<br>38 | 44.39          | 1,685.85           | 3,603.35  | 3,604.10         |                |                  |
|              | 39       | 44.38          | 1,730.23           | 3,558.97  | 3,559.72         |                |                  |
|              | 40       | 44.36          | 1,774.59           | 3,514.61  |                  | Centralizer    | 12               |
|              | 41       | 44.40          | 1.818.99           | 3,470.21  | 3,470.96         | OGHICALEOI     | 12               |
|              | 42       | 44.35          | 1,863.34           | 3.425.86  | <b>3</b> ,426.61 |                |                  |
|              | 42<br>43 | 44.35          | 1,907.70           | 3,381.50  | 3,382.25         |                |                  |
|              | 43<br>44 | 44.35<br>44.35 | 1,952.05           | 3,337.15  |                  | Centralizer    | 13               |
|              | 44<br>45 | 44.30<br>44.36 | 1,996.41           | 3,292.79  | 3,293.54         |                |                  |
|              | 40<br>46 | 44.30<br>44.36 | 2.040.77           | 3,248.43  | 3,249.18         |                |                  |
|              | 40<br>47 | 44.30<br>44.37 | 2.040.17           | 3,240.45  | 3,204.81         |                |                  |
|              | 47<br>48 | 44.37<br>44.36 | 2,129.50           | 3,204.00  |                  | Centralizer    | 14               |
|              | 40<br>49 | 44.36<br>44,35 | 2,123.30           | 3,115.35  | 3,116.10         | John anzor     | · <del>· ·</del> |
| ,            | - J      | ,QQ            |                    | 9,119,99  | 9,49.10          |                |                  |

۰ ر

•

| Item       |          | Footage        | Cumulative Footage   | Top Depth        | Btm Depth        | ì             |     |
|------------|----------|----------------|----------------------|------------------|------------------|---------------|-----|
|            | 50       | 44.32          | 2,218.17             | 3,071.03         | 3,071.78         |               |     |
|            | 51       | 44.35          | 2,262.52             | 3.026.68         | 3,027.43         | Cement Basket |     |
| Stage Tool |          | 2.08           | 2,264.61             | 3,024.60         | 3,025.35         |               |     |
|            | 52       | 44.36          | 2,308.97             | 2,980.24         | <b>2,98</b> 0.99 | Centralizer   | 15  |
|            | 53       | 44.36          | 2,353.33             | 2,935.88         | 2,936.63         |               |     |
|            | 54       | 44.40          | 2,397.73             | 2,891.48         | 2,892.23         |               |     |
|            | 55       | 44.38          | 2,442.11             | 2,847.10         | 2,847.85         | Centralizer   | 16  |
|            | 56       | 44.39          | 2,486.50             | 2,802.71         | 2,803.46         |               |     |
|            | 57       | 44.37          | 2,530.87             | 2,758.34         | 2,759.09         | Centralizer   | 17  |
|            | 58       | 44.38          | 2,575.25             | 2,713.96         | 2.714.71         |               |     |
|            | 59       | 44.38          | 2,619.63             | 2,669.58         | 2,670.33         |               |     |
|            | 60       | 44.38          | 2,664.01             | 2,625.20         | 2,625.95         |               |     |
|            | 61       | 44.42          | 2.708.43             | 2,580.78         |                  | Centralizer   | 18  |
|            | 62       | 44.41          | 2,752.84             | 2,536.37         | 2,537.12         |               |     |
|            | 63       | 44.32          | 2,797.16             | 2,492.05         |                  | Centralizer   | 19  |
|            | 64       | 44.34          | 2,841.50             | 2,447.71         | 2.448.46         |               |     |
|            | 65       | 44.35          | 2,885.85             | 2,403.36         |                  | Centralizer   | 20  |
|            | 66       | 44,34          | 2,930.19             | 2,359.02         | 2,359.77         |               |     |
|            | 67       | 44.32          | 2,974.51             | 2,314.70         |                  | Centralizer   | 21  |
|            | 68       | 44.40          | 3,018.91             | 2,270.30         | 2.271.05         |               |     |
|            | 69       | 44.36          | 3,063.27             | 2,225.94         |                  | Centralizer   | 22  |
|            | 70       | 44.32          | 3,107.59             | 2,181.62         | 2,182.37         |               |     |
|            | 71       | 44.42          | 3,152.01             | 2,137.20         | 2,137.95         |               |     |
|            | 72       | 44.41          | 3,196.42             | 2.092.79         | 2.093.54         |               |     |
|            | 73       | 44.38          | 3.240.80             | 2.048.41         |                  | Centralizer   | 23  |
|            | 74       | 44.35          | 3.285.15             | 2.004.06         | 2.004.81         | 0 on a daeor  | 20  |
|            | 75       | 44.37          | 3.329.52             | 1.959.69         | 1.960.44         |               |     |
|            | 76       | 44.31          | 3,373.83             | 1.915.38         | 1.916.13         |               |     |
|            | 77       | 44.32          | 3,418,15             | 1,871.06         |                  | Centralizer   | 24  |
|            | 78       | 44.27          | 3,462.42             | 1.826.79         | 1.827.54         | o shiranzor   | ~ ' |
|            | 79       | 44.36          | 3,506.78             | 1,782.43         | 1,783.18         |               |     |
|            | 75<br>80 | 44.34          | 3,551.12             | 1,738.09         | 1,738.84         |               |     |
|            | 80<br>81 | 44.34<br>44.37 | 3,595.49             | 1,693.72         |                  | Centralizer   | 25  |
|            | 82       | 44.32          | 3,639.81             | 1,649.40         | 1,650.15         |               | 20  |
|            | 83       | 44.32<br>44.31 | 3,684.12             | 1,605.09         | 1,605.84         |               |     |
|            | 84       | 44.38          | 3,728.50             | 1,560.71         | 1,561.46         |               |     |
|            | 85       | 44.33          | 3,772.83             | 1,516.38         |                  | Centralizer   | 26  |
|            | 86       | 44.35<br>44.35 | 3,817.18             | 1,472.03         | 1,472.78         | Osmianzoi     | 20  |
|            |          | 44.35<br>44.35 | 3,861.53             | 1,427.68         | 1.428.43         |               |     |
|            | 87<br>00 | 44.33<br>44.37 | 3,905.90             | 1,383.31         | 1,384.06         |               |     |
|            | 88<br>89 |                | 3,950.27             | 1.338.94         |                  | Centralizer   | 27  |
|            | 89<br>90 | 44.37<br>44.40 | 3,994.67             | 1,294.54         | 1,295.29         | Centralizer   | 21  |
|            |          | 44.40          | 4.038.97             | 1,250.24         | 1,250.99         |               |     |
|            | 91<br>02 |                | 4,083.33             | 1,205.88         | 1,206.63         |               |     |
|            | 92<br>02 | 44.36          | 4,083.33             | 1,205.66         |                  | Centralizer   | 28  |
|            | 93<br>04 | 44.31          | 4,127.64<br>4,171.97 | 1,101.57         | 1.117.99         | Gentralizer   | 20  |
|            | 94<br>05 | 44.33          |                      | 1,117.24         | 1.073.51         |               |     |
|            | 95<br>06 | 44.48          | 4.216.45             |                  |                  |               |     |
|            | 96<br>07 | 44.36          | 4.260.81             | 1,028.40         | 1,029.15         | Controlizor   | 20  |
|            | 97<br>69 | 44.35          | 4,305.16             | 984.05<br>939.70 |                  | Centralizer   | 29  |
|            | 98<br>98 | 44.35          | 4,349.51             | 939.70           | 940.45           |               |     |
|            | 99       | 44.37          | 4,393.88             | 895.33           | 896.08           |               |     |

``

| ltem  | Footage   | e Cumulative Footage   | Top Depth    | Btm Depth    |             |    |
|---|---|--|--------------|--------------|-------------|----|
| 1   | 0 44.3  | 2 4,438.20   | 851.01       | 851.76       |             |    |
| 11  | 01 44.3   | 6 4,482.56   | 806.65       | 807.40       | Centralizer | 30 |
| 1(  | 02 44.3   | 4,526.87   | 762.34       | 763.09       |             |    |
| 10  | 3 44.3  | 5 4,571.22   | 717,99       | 718.74       |             |    |
| 1(  | 04 44.3   | 2 4,615.54   | 673.67       | 674.42       |             |    |
| 1(  | )5 44.3   |  | 629.35       |              | Turbolizer  | 1  |
| 1(  | 6 44.0  |  | 585.35       | 586.10       |             |    |
| 1(  | )7 44.3   |  | 540.99       | 541.74       |             |    |
| 1(  | )8 44.3   |  | 496.67       | 497.42       |             |    |
|   | 9 44.3  |  | 452.31       |              | Centralizer | 31 |
|   | 0 44.3  |  | 407.92       | 408.67       |             |    |
| 11  |   |  | 363.65       |              | Centralizer | 32 |
| 11  |   |  | 319.29       |              | Turbolizer  | 2  |
| 11  |   |  | 275.20       |              | Centralizer | 33 |
| 11  |   |  | 230.84       | 231.59       |             |    |
| 11  |   |  | 186.45       |              | Centralizer | 34 |
| 11  |   |  | 142.12       | 142.87       |             |    |
| 11  |   |  | 97.79        |              | Centralizer | 35 |
| 11  |   |  | 53.44        | 54.19        |             |    |
| 11  |   |  | 9.16         | 9.91         |             |    |
| Landing Sub   | 15.15   |  | (5.99)       | (5.24)       |             |    |
| Stick-up above KB   | -5.9  |  |              |              |             |    |
| Screw On Wellhead, 1  | 8" above 8-   | 5/8" Casing Head, reaso                                      | n for distan | ce off of TD |             |    |
|   |   |  |              |              |             |    |
|   |   | 5000   |              |              |             |    |
| Total Depth of the Hole   |   | 5298   | 0.70         | 5 I          |             |    |
| Shoe Distance off of he   |   | n landed   | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run   |   | landed<br>35   | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run  |   | n landed<br>35<br>2  | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run   |   | 1 landed<br>35<br>2<br>1                                     | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth   |   | t landed<br>35<br>2<br>1<br>5,289.21                         | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth   |   | t landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45             | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth   |   | t landed<br>35<br>2<br>1<br>5,289.21                         | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth   | ble TD wher   | t landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45             | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth   | ole TD wher   | t landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | ole TD wher<br><<br>1 44.30   | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | k<br>1 44.30<br>2 44.30   | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | A text for the second secon | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | k<br>1 44.30<br>2 44.30<br>3 44.33<br>4 44.36   | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | k<br>1 44.30<br>2 44.30<br>3 44.33<br>4 44.36<br>5 44.35  | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | k<br>1 44.30<br>2 44.30<br>3 44.36<br>5 44.36<br>5 44.35<br>5 20  | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | k<br>1 44.30<br>2 44.30<br>3 44.33<br>4 44.36<br>5 44.35  | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc<br>Short Jt. (6)<br>Landing Jt. (7)                         | k<br>1 44.30<br>2 44.30<br>3 44.36<br>5 44.36<br>5 44.35<br>5 20  | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 | 8.79         | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc   | k<br>1 44.30<br>2 44.30<br>3 44.33<br>4 44.36<br>5 44.35<br>5 44.35<br>5 20<br>15.1   | n landed<br>35<br>2<br>1<br>5.289.21<br>5.243.45<br>3,024.60 |              | feet         |             |    |
| Shoe Distance off of he<br>Centralizers Run<br>Turbolizers Run<br>Cement Bakets Run<br>Shoe Depth<br>Float Collar Depth<br>Stage Tool Depth<br>Joints to return to Stoc<br>Short Jt. (6)<br>Landing Jt. (7)<br>By Thomas E. Mullins | k<br>1 44.30<br>2 44.30<br>3 44.33<br>4 44.36<br>5 44.35<br>5 44.35<br>5 20<br>15.1   | Aztec Rig # 507  |              | feet         |             |    |

` `

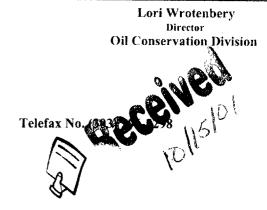


## NEW MEXICO ENERGY, MIMERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON** Governor Jennifer A. Salisbury Cabinet Secretary

September 28, 2001

Bois d'Arc Offshore, Inc. c/o Discovery Exploration, Inc. 621 17th Street - Suite 1535 Denver, Colorado 80293 Attention: William Price Berryman Agent, Synergy Operating, LLC



Administrative Order NSL-4648

#### Dear Mr. Berryman:

Reference is made to the following: (i) your application on behalf of the operator, Bois d'Arc Offshore, Inc., submitted to the New Mexico Oil Conservation Division ("Division") on September 6, 2001 (application reference No. pKRV0-12533/8/7; (ii) the Division's initial response by letter dated September 14, 2001 from Mr. Michael E. Stogner, Chief Hearing Officer/Engineer in Santa Fe; (iii) your telefaxed response of September 23, 2001 with supplemental data; and (iv) the Division's records in Aztec and Santa Fe: all concerning Bois d'Arc Offshore, Inc.'s request for a nonstandard gas well location within both the Dakota and Mesaverde (Menefee) formations for its proposed Encino "15" Well No. 1 to be drilled 250 feet from the North line and 920 feet from the East line (Unit A) of Section 15, Township 20 North, Range 5 West, NMPM, McKinley County, New Mexico. The NE/4 of Section 15 is to be dedicated to the well in order to form a standard 160-acre gas spacing and proration unit for both intervals.

This application has been duly filed under the provisions of Division Rule 104.F, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999.

It is our understanding that Bois d'Arc Offshore, Inc. is seeking this location exception based on a 3-D seismic survey of the immediate area, which indicates that a well drilled at the proposed unorthodox gas well location will be at a more favorable geologic position within the deeper Dakota formation then a well drilled at a location considered to be standard within the NE/4 of Section 15.

By the authority granted me under the provisions of Division Rule 104.F (2), the above-described unorthodox wildcat gas well location to both the Dakota and Mesaverde (Menefee) formations within this 160-acre unit comprising the NE/4 of Section 15 is hereby approved.

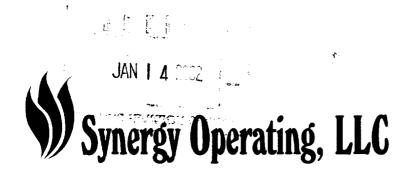
Sincerely,

Lori Wrotenbery

Director

LW/MES/kv

New Mexico Oil Conservation Division - Aztec cc: U. S. Bureau of Land Management - Farmington



PO Box 5513 Farmington, NM 87499 (505) 325-5449 Fax (505) 325-6585

January 11, 2002

New Mexico Oil Conservation Division Attn: Michael Stogner 1220 South St. Francis Drive Santa Fe, NM 87505

> RE: Bois d' Arc Offshore, Ltd. Bois d' Arc Encino 15 # 1 Unit A, Section 15, T20N, R05W McKinley County, NM Dakota, Mancos, and Mesaverde Amended NSL-4648

Dear Mr. Stogner,

Synergy Operating, LLC, as agent for Bois d' Arc Offshore, Ltd., is requesting Administrative Approval of the Non-Standard Location as drilled for the subject well. This application is requesting approval for an NSL for the following pools: -WC 20N5W15-Dakota; WC 20N5W15 - Mancos, and WC 20N5W15 Mesaverde.

Prior applications did not include the Mancos (Gallup) Intervals. The nearest Mancos Pool to the subject well is the Rio Puerco Mancos Pool, 3 miles to the East of the subject well.

As mentioned in our original NSL application, Bois d' Arc Offshore, Ltd., et al, is the holder of all the adjacent mineral leases to the subject NE/4 (160 Acres) of Section 15. Please reference the attached lease map.

During drilling operations, significant hole deviation was encountered. Synergy surveyed the hole with a MWD tool and submits the attached survey information for an amended bottom-hole location approval.

The surface location is located at 250' FNL, 920' FEL, Section 15, T20N, R05W, McKinley County, NM. The bottom-hole location at 5298' MD, 5288' TVD, is 151' FNL, 736' FEL, Section 15, T20N, R05W, McKinley County, NM.

The reason for this amended NSL application is the unanticipated deviation encountered during drilling operations. We are also requesting approval to allow completion in the Mancos (Gallup) at this time. We appreciate the Division's timely approval of our request. We will not begin our completion operations, until the Division approves this amended NSL filing.

The attached data sheet lists the current formation tops and the requested depths to be associated with each respective pool designation.

I can be reached at (505) 566-3725 or by facsimile at (505) 325-6585.

Best regards,

The E. W.L.

Thomas E. Mullins Engineering Manager

attachments

cc: NMOCD – Aztec US BLM – Farmington Bois d' Arc Offshore, LTD.

### Synergy Operating, LLC Bois d' Arc Encino 15 # 1 Unit A, Section 15, T20N, R05W McKinley County, NM

|        | All Depths referenced to Schlumberger GR-  | CET log run on 12-12-2001 |
|--------|--|---------------------------|
|        | Formation                                  | Depth                     |
|        | Nacimiento                                 | Surface                   |
|        | Ojo Alamo                                  | 135'                      |
|        | Kirtland                                   | 245'                      |
|        | Fruitland                                  | 485'                      |
|        | Pictured Cliffs                            | 590'                      |
|        | Lewis Shale                                | 924'                      |
|        | Chacra                                     | 969'                      |
| (      | Cliffhouse (La Ventana)                    | (1271)                    |
| $\sim$ | Menefee                                    | 1977'                     |
|        | Pt. Lookout                                | 2851'                     |
| ź      | Mancos                                     | 3005'                     |
| •      | Gallup, El Vado SS, Mancos                 | 3671'                     |
|        | Semilla SS, Mancos                         | 3814'-3881'               |
|        | Gallup Sand Interval Juana Lopez SS, Mance | os 3889'                  |
|        | Gallup Formation                           | 4028'-4119'               |
|        | Greenhorn                                  | <b>47</b> 94'             |
|        | Graneros                                   | 4836'                     |
|        | Dakota                                     | 4881'                     |
|        | Burro Canyon/Lower DK                      | 5124'                     |
|        | PBTD                                       | 5245'                     |
|        | Morrison                                   | 5294'                     |
|        | TD   | 5298'                     |
|        | Pool Definition Request                    | Depths                    |
|        | WC 20N5W15 Mesaverde                       | 1271' to 3005'            |

WC 20N5W15 Mancos3005' to 4794'The Mancos from 3005' to 4028' is the Niobrara (upper) Mancos. From the Base of the<br/>Juana Lopez to the Bridge Creek LS Member of the GreenHorn is the Carlile Mancos<br/>Formation.WC 20N5W15 Dakota4794' to 5296'

Surface location:

250' FNL, 920' FEL, Section 15, T20N, R05W, McKinley County, NM.

Bottom-hole location: 5298' MD, 5288' TVD 151' FNL, 736' FEL, Section 15, T20N, R05W, McKinley County, NM.

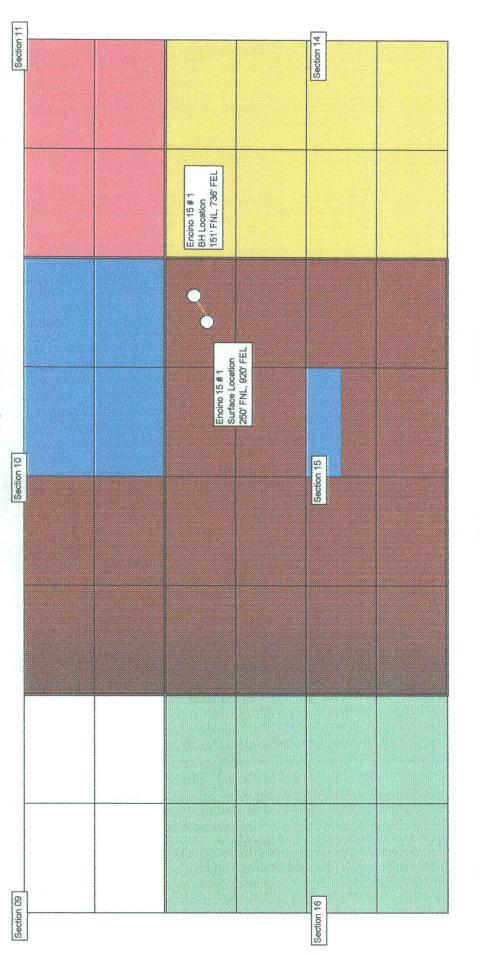
Tops reviewed by Chip Harridan, Steve Hayden, & Tom Mullins 1-10-2002

250' FNL, 920' FEL, Sec 15 151' FNL, 736' FEL, Sec 15 New Bottomhole Location: Surface Location:

Bois d Arc Encino 15 # 1 Unit A, Section 15, T20NR05W McKinley County, New Mexico **Bois d Arc Offshore Limited** Synergy Operating, LLC

£

Ammended NSL filing request



Lease NMNM-99720 Held by SJJV

Prepared by Thomas E. Mullins December 17, 2001

Lease NMNM-99719 Held by SJJV

Lease VA-1682 Held by SJJV

Lease NMNM-100277 Held by SJJV

Lease NMNM-100803 Held by SJJV



PO Box 5513 Farmington, NM 87499 (505) 325-5449 Fax (505) 325-6585

New Mexico Oil Conservation Division Attn: Lori Wrotenbery 1220 South St. Francis Drive Santa Fe, NM 87505 December 17, 2001

RE: Bois d' Arc Offshore, Ltd. Bois d' Arc Encino 15 # 1 Unit A, Section 15, T20N, R05W McKinley County, NM Dakota and Mesaverde Amended NSL-4648 Approval Request

Dear Ms. Wrotenbery

Synergy Operating, LLC, as agent for Bois d' Arc Offshore, Ltd., is requesting Administrative Approval of the Non-Standard Location as drilled for the subject well. During drilling operations, significant hole deviation was encountered. Synergy surveyed the hole with a MWD tool and submits the attached survey information for an amended bottom-hole location approval.

The surface location is located at 250' FNL, 920' FEL, Section 15, T20N, R05W, McKinley County, NM. The bottom-hole location at 5298' MD, 5288' TVD, is 151' FNL, 736' FEL, Section 15, T20N, R05W, McKinley County, NM.

As mentioned in our original NSL application, Bois d' Arc Offshore, Ltd., et al, is the holder of all the adjacent mineral leases to the subject NE/4 (160 Acres) of Section 15. Please reference the attached lease map.

The reason for this amended NSL application is the unanticipated deviation encountered during drilling operations. We appreciate the Division's timely approval of our request so that we can begin completion operations.

I can be reached at (505) 566-3725 or by facsimile at (505) 325-6585.

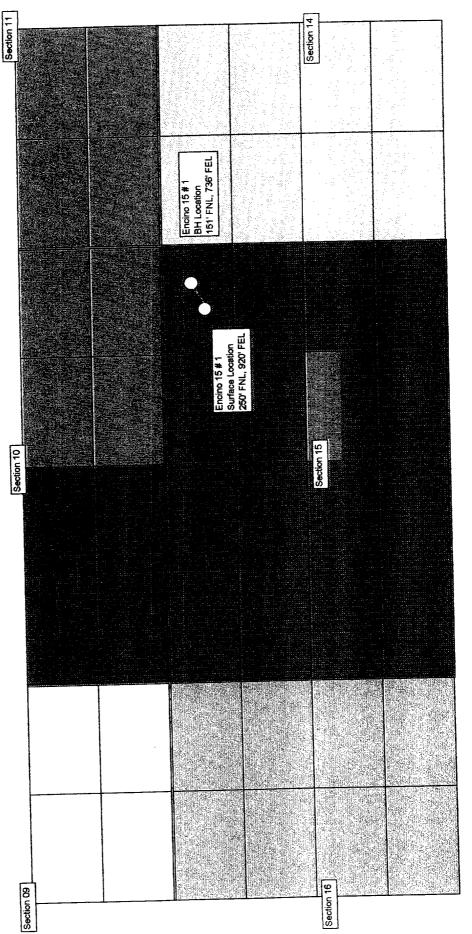
Warm regards,

Thomas E. Mullins Engineering Manager

cc: NMOCD – Aztec US BLM - Farmington Bois d' Arc Offshore

Surface Location: 250' FNL, 920' FEL, Sec 15 New Bottornhole Location: 151' FNL, 736' FEL, Sec 15

Synergy Operating, LLC Bois d Arc Offshore Limited Bois d Arc Encino 15 # 1 Unit A, Section 15, T20NR05W McKinley County, New Mexico Ammended NSL filing request



Lease NMNM-100803 Held by SJJV Lease NMNM-100277 Held by SJJV Lease VA-1682 Held by SJJV Lease NMNM-99719 Held by SJJV Lease NMNM-99720 Held by SJJV

Prepared by Thomas E. Mullins December 17, 2001

|  | <b>.</b>   | STATES<br>IF THE INTERIOR  | FORM APPROVED<br>Budget Bureau No. 1004-0135  |
|--|--|--|---|
| Form 3160-5<br>(June 1990)   |  | D MANAGEMENT   | Expires March 31, 1993  |
|  | SUNDRY NOTICES ANI   |  | 5 Lease Designation and Serial No.  |
| Do not   |  | to deepen or reentry to a different reserve  | bir NMNM-99720  |
| 001100   | Use "APPLICATION FOR P   |  | 6. If Indian, Allottee or Tribe Name  |
|  | SUBMIT IN  | RIPLICATE  |   |
| 1. Тур   | be of Well   |  | 7. If Unit or CA, Agreement Designation   |
|  | Oil Well 🛛 Gas Well  | Other  |   |
|  |  |  | 8. Well Name and No.  |
|  | ne of Operator   | or Rais d'Ara Offahara Itd.)   | Daia di Ara Encine 45.44  |
| 5  | ynergy Operating, LLC (agent f   | or Bois & Arc Offshore, Etc.)  | Bois d' Arc Encino 15 # 1   |
| 3. Add   | iress and Telephone No.  |  |   |
|  |  | ) 325-5449 OGRID # 163458  |   |
|  | rmington, NM 87499<br>ation of Well (Footage, Sec. T. R., M. or Surve)   | / Description)   | 10. Field and Pool, or Exploratory<br>WC20NC5W15A   |
| 7. 200   | an allow for the Bull allow of the second second second  | · ·  | Undesignated Dakota   |
| U  | hit Letter A, 250' FNL, 920' FEL   | ., Sec 15, T20N-R05W   | 11. County or Parish, State   |
|  |  |  | McKiploy, Now Movies  |
| 12 C   | HECK APPROPRIATE BOX(S) TO I   | NDICATE NATURE OF NOTICE, REPORT   | <u>McKinley, New Mexico</u>   |
|  | TYPE OF SUBMISSION   | TYPE OF A  |   |
| [ <b>-</b> ]   | Notice of Intent   | Abandoment   | Change of Plans   |
| لہا  | TADIDE OF INCENT   | Recompletion   | New Construction  |
| $\boxtimes$  | Subsequent Report  | Plugging Back  | Non-Routine Fracturing  |
| <b>ل</b> ا   |  | Casing Repair  | Water Shut-Off  |
|  | Final Abandonment Notice   | Altering Casing<br>Other   | Converion to injection Dispose Water  |
|  |  |  |   |
|  |  |  | (Note: Report results of multiple completion on Weil  |
|  |  |  | Completion of recompletion Report and Log Form)   |
|  |  | state all pertinent details, and give pertinent dates, inc<br>nd measured and true vertical depths for all markets a   | Completion or recompletion Report and Log Form)<br>luding, estimated date of starting work.   |
| lf weil is   | s directionally drilled give subsurface locations a  | nd measured and true vertical depths for all markers a   | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work.<br>Ind zones of pertinent to this work.   |
| lf weil is   | s directionally drilled give subsurface locations a  | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois c   | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work.<br>Ind zones of pertinent to this work.   |
| lf well is   | s directionally drilled give subsurface locations a<br>Please see the attached pertin<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" h   | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois o<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday   | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work,<br>ind zones of pertinent to this work.<br>If Arc Encino 15 # 1   |
| lf weil is<br>1/18/2001  | s directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8   | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois o<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.  | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work,<br>ind zones of pertinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th, 2001   |
| lf weil is<br>1/18/2001  | s directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs f   | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois o<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu  | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work,<br>ind zones of pertinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th, 2001   |
| If well is<br>1/18/2001<br>1/30/2001   | s directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs to<br>Openhole logs requested to be   | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois o<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu  | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work.<br>Ind zones of pertinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th, 2001<br>Jude GR-IND, Neu-Density, & Microlog.  |
| If well is<br>1/18/2001<br>1/30/2001   | S directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 9  | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Die began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.  | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work.<br>Ind zones of perfinent to this work.<br>If Arc Encino 15 # 1<br>If Arc Encino 15 # 1<br>If Arc Encino 15 # 2001<br>Jude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',  |
| If well is<br>1/18/2001<br>1/30/2001   | S directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 9  | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on t  | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work.<br>Ind zones of perfinent to this work.<br>If Arc Encino 15 # 1<br>If Arc Encino 15 # 1<br>If Arc Encino 15 # 2001<br>Jude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',  |
| lf wei) is<br>1/18/2001<br>1/30/2001   | S directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 8<br>Stage Tool at 3024', 35 Centralize  | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on th<br>attached Sheet.  | Completion of recompletion Report and Log Form)<br>luding, estimated date of starting work.<br>Ind zones of perfinent to this work.<br>If Arc Encino 15 # 1<br>If November 18th, 2001<br>Jude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',   |
| If well is<br>1/18/2001<br>1/30/2001   | S directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs f<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 8<br>Stage Tool at 3024', 35 Centraliz<br>Cemented in 2 Stages. Details of<br>Rig released at 22:45 hrs - 12/02/   | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on th<br>attached Sheet.  | Luding, estimated date of starting work.<br>Ind zones of perfinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th, 2001<br>ude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.   |
| lf wei) is<br>1/18/2001<br>1/30/2001   | <ul> <li>directionally drilled give subsurface locations a</li> <li>Please see the attached pertinin</li> <li>Direction and Deviation Survey</li> <li>Drilling Operations of the 7-7/8" here</li> <li>TD of 5298' KB, was reached on 8</li> <li>Schlumberger ran opennole logs for 0 penhole logs requested to be</li> <li>Run 119 Jts of 5-1/2" 15.5# J-55 %</li> <li>Stage Tool at 3024'. 35 Centralize</li> <li>Cemented in 2 Stages. Details or</li> <li>Rig released at 22:45 hrs - 12/02/2</li> <li>FINAL BOTTOM HOLE LOCATIO or</li> </ul>  | nd measured and true vartical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Die began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001   | Luding, estimated date of starting work.<br>Indizones of pertinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th, 2001<br>ude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.<br>The East of the surface Location.  |
| lf wei) is<br>1/18/2001<br>1/30/2001   | <ul> <li>directionally drilled give subsurface locations a</li> <li>Please see the attached pertinin</li> <li>Direction and Deviation Survey</li> <li>Drilling Operations of the 7-7/8" here</li> <li>TD of 5298' KB, was reached on 8</li> <li>Schlumberger ran opennole logs for 0 penhole logs requested to be</li> <li>Run 119 Jts of 5-1/2" 15.5# J-55 %</li> <li>Stage Tool at 3024'. 35 Centralize</li> <li>Cemented in 2 Stages. Details or</li> <li>Rig released at 22:45 hrs - 12/02/2</li> <li>FINAL BOTTOM HOLE LOCATIO or</li> </ul>  | nd measured and true vertical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001   | Luding, estimated date of starting work.<br>Indizones of pertinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th, 2001<br>ude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.<br>The East of the surface Location.  |
| If well is<br>1/18/2001<br>1/30/2001<br>2/02/2001  | <ul> <li>directionally drilled give subsurface locations a</li> <li>Please see the attached pertinin</li> <li>Direction and Deviation Survey</li> <li>Drilling Operations of the 7-7/8" here</li> <li>TD of 5298' KB, was reached on 8</li> <li>Schlumberger ran opennole logs for 0 penhole logs requested to be</li> <li>Run 119 Jts of 5-1/2" 15.5# J-55 %</li> <li>Stage Tool at 3024'. 35 Centralize</li> <li>Cemented in 2 Stages. Details or</li> <li>Rig released at 22:45 hrs - 12/02/2</li> <li>FINAL BOTTOM HOLE LOCATIO or</li> </ul>  | nd measured and true vartical depths for all markers a<br>ent information regarding the Bois of<br>yeys are attached.<br>Die began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,             | Luding, estimated date of starting work.<br>Ind zones of pertinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th. 2001<br>ude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.<br>The East of the surface Location.  |
| If well is<br>1/18/2001<br>1/30/2001<br>2/02/2001<br>14. I h                               | <ul> <li>directionally drilled give subsurface locations a</li> <li>Please see the attached pertini-<br/>Direction and Deviation Survice</li> <li>Drilling Operations of the 7-7/8" here</li> <li>TD of 5298' KB, was reached on 8</li> <li>Schlumberger ran opennole logs 1</li> <li>Openhole logs requested to be</li> <li>Run 119 Jts of 5-1/2" 15.5# J-55 8</li> <li>Stage Tool at 3024'. 35 Centralize</li> <li>Cemented in 2 Stages. Details or</li> <li>Rig released at 22:45 hrs - 12/02/2</li> <li>FINAL BOTTOM HOLE LOCATIO or</li> <li>151' FNL, 736' FEL, Unit A, Sect</li> </ul>  | nd measured and true vertical depths for all markets a<br>ent information regarding the Bois of<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu-<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,<br>correct | Indiana, estimated date of starting work.<br>Indiana, estimated date of starting work.<br>Indianas of perfinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th. 2001<br>ude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.<br>The East of the surface Location.<br>New Mexico   |
| If well is<br>1/18/2001<br>1/30/2001<br>2/02/2001  | <ul> <li>directionally drilled give subsurface locations a</li> <li>Please see the attached pertini-<br/>Direction and Deviation Survice</li> <li>Drilling Operations of the 7-7/8" here</li> <li>TD of 5298' KB, was reached on 8</li> <li>Schlumberger ran opennole logs 1</li> <li>Openhole logs requested to be</li> <li>Run 119 Jts of 5-1/2" 15.5# J-55 8</li> <li>Stage Tool at 3024'. 35 Centralize</li> <li>Cemented in 2 Stages. Details or</li> <li>Rig released at 22:45 hrs - 12/02/2</li> <li>FINAL BOTTOM HOLE LOCATIO or</li> <li>151' FNL, 736' FEL, Unit A, Sect</li> </ul>  | nd measured and true vartical depths for all markers a<br>ent information regarding the Bois of<br>yeys are attached.<br>Die began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,             | Log Permi<br>Luding, estimated date of starting work.<br>Ind zones of pertinent to this work.<br>If Arc Encino 15 # 1<br>If Arc Encino 15 # 1<br>If Arc Encino 15 # 1<br>Lude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.<br>The East of the surface Location.<br>New Mexico  |
| If wear is<br>1/18/2001<br>1/30/2001<br>2/02/2001<br>14. Th<br>Signed                      | S directionally drilled give subsurface locations a<br>Please see the attached pertin-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" hi<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 S<br>Stage Tool at 3024'. 35 Centraliz<br>Cemented in 2 Stages. Details or<br>Rig released at 22:45 hrs - 12/02/<br>FINAL BOTTOM HOLE LOCATIO<br>or<br>151' FNL, 736' FEL, Unit A, Sect  | nd measured and true vertical depths for all markets a<br>ent information regarding the Bois of<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu-<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,<br>correct | Indiana, estimated date of starting work.<br>Indiana, estimated date of starting work.<br>Indianas of perfinent to this work.<br>If Arc Encino 15 # 1<br>y, November 18th. 2001<br>ude GR-IND, Neu-Density, & Microlog.<br>5289', Float Collar at 5243',<br>the casing string.<br>The East of the surface Location.<br>New Mexico   |
| If well is<br>1/18/2001<br>1/30/2001<br>2/02/2001<br>14. Th<br>Signed<br>This sp           | S directionally drilled give subsurface locations a<br>Please see the attached pertim-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" hi<br>TD of 5298' KB, was reached on S<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 S<br>Stage Tool at 3024'. 35 Centraliz<br>Cemented in 2 Stages. Details of<br>Rig released at 22:45 hrs - 12/02/2<br>FINAL BOTTOM HOLE LOCATIO<br>or<br>151' FNL, 736' FEL, Unit A, Sect<br>Details of Stage S. Details of Stage S. Details of S. J-202/2<br>FINAL BOTTOM HOLE LOCATIO<br>or<br>151' FNL, 736' FEL, Unit A, Sect<br>Thomas E. Muilins<br>ace for federal or state office use | nd measured and true vertical depths for all markets a<br>ent information regarding the Bois of<br>reys are attached.<br>ble began with Aztec Rig # 507 on Sunday<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu-<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,<br>correct | Completion or recompletion Report and Log Form)         Juding, estimated date of starting work.         Ind zones of pertinent to this work.         If Arc Encino 15 # 1         V, November 18th, 2001         ude GR-IND, Neu-Density, & Microlog.         5289', Float Collar at 5243',         the casing string.         the casing string.         the casing string.         Date:                   |
| If well is<br>1/18/2001<br>1/30/2001<br>2/02/2001<br>14. Th<br>Signed<br>This sp<br>Approv | S directionally drilled give subsurface locations a<br>Please see the attached pertim-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" he<br>TD of 5298' KB, was reached on S<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 S<br>Stage Tool at 3024'. 35 Centraliz<br>Cemented in 2 Stages. Details or<br>Rig released at 22:45 hrs - 12/02/2<br>FINAL BOTTOM HOLE LOCATIO<br>or<br>151' FNL, 736' FEL, Unit A, Sect<br>hereby certify that the foregoing is true and<br>Thomas E. Muillins  | nd measured and true varifical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu-<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,<br>correct<br>Title: Engineering M                    | Completion or recompletion Report and Log Form)         Juding, estimated date of starting work.         Ind zones of pertinent to this work.         I' Arc Encino 15 # 1         V, November 18th, 2001         Jde GR-IND, Neu-Density, & Microlog.         5289', Float Collar at 5243',         the casing string.         ne East of the surface Location.         New Mexico         anager       Date |
| If well is<br>1/18/2001<br>1/30/2001<br>2/02/2001<br>14. Th<br>Signed<br>This sp<br>Approv | A directionally drilled give subsurface locations a<br>Please see the attached pertim-<br>Direction and Deviation Surv<br>Drilling Operations of the 7-7/8" hi<br>TD of 5298' KB, was reached on 8<br>Schlumberger ran opennole logs 1<br>Openhole logs requested to be<br>Run 119 Jts of 5-1/2" 15.5# J-55 S<br>Stage Tool at 3024'. 35 Centraliz<br>Cemented in 2 Stages. Details or<br>Rig released at 22:45 hrs - 12/02/2<br>FINAL BOTTOM HOLE LOCATIO<br>or<br>151' FNL, 736' FEL, Unit A, Sect<br>Pereby certify that the foregoing is true and<br>Thomas E. Muilins<br>ace for federal or state office use  | nd measured and true varifical depths for all markers a<br>ent information regarding the Bois of<br>reys are attached.<br>Sunday, November 30, 2001 at 14:30 hrs.<br>from 5299' (Drillers TD) to 614'. Logs inclu-<br>confidential.<br>ST&C Production Casing. Casing Shoe at<br>ers, 2 Turbolizers, & 1 Cement Basket on the<br>attached Sheet.<br>2001<br>IN 99 feet to the North and 184 feet to the<br>ion 15, T20N, R05W - McKinley County,<br>correct<br>Title: Engineering M                    | Completion or recompletion Report and Log Form)         Juding, estimated date of starting work.         Ind zones of pertinent to this work.         If Arc Encino 15 # 1         V, November 18th, 2001         ude GR-IND, Neu-Density, & Microlog.         5289', Float Collar at 5243',         the casing string.         the casing string.         Date   |

۰.

#### Synergy Operating, LLC Bois D' Arc Encino 15 # 1 (API # 30-031021008) WC20N05W15A Dakota Drilling Phase

- 11/18/01 MIRU Aztec # 507. Test 8-5/8" Casing to 1000 psi. GIH w/ 7-7/8" Hughes GT-09C Bit. Tag Shoe. Survey @ 235' 7 degs Resurvey @ 235' - Same 7 degs. Drill Shoe. Drill new nole from 241' to 410', in 10' intervals circulating cuttings to Catch Fruitland Coal. One Can Taken, very little coal. Continue drilling ahead 85 RPM 10K WOB, trying to straighten hole. Drilling at 836' at report time.
- 11/19/01 Continue Drilling ahead with 10K WOB & 85 RPM. Survey hole at 992' 6 degrees, 1244' 3.75 degrees Begin TOOH to PU Directional Tools. SD for Rig Repairs.

11/20/01 Finish Rig Repairs. COOH. Laying down remaining Drill Collars. PU and MU Directional Tools. GIH with tools and survey existing hole with MWD equipment. Trouble getting initial readings near surface casing. Take survey readings. Current Hole direction is on an azimuth of approximately 70 degrees. The Surface Casing appears to be set at a 11 degree deviation. Consult with Geological and Geophysical expertise on current hole location. Current hole position is acceptable. Drilling ahead with directional tools rotating at 45 RPM surface, with 10K WOB, Surface Pump pressure 1200#. Drilling ahead at 1887'. fo

11/21/01 Finish Drilling New Hole with Baker INTEQ Directional Tools to 2013'. COOH laying down pipe (Rig is not able to standback pipe). Attempt to take survey 107' below surface casing. No good readings.
COOH laying down Baker Directional Tools. PU New Bit # 2, 7-7/8" Hughes Christensen GT-09C. Strap Drillstring GIH to 2013'. No fill or drag. Drilling ahead with Conventional BHA to 2486' at report time. (599' today).

- 11/22/01 Drilling ahead at 3190'.
- 11/23/01 Drilling ahead at 3480'.
- 11/24/01 Drilling ahead at 4075'. Lost circulation at 3975', 100 bbls.
- 11/25/01 Drilling ahead at 4287'. Lost circulation at 4155', 120 bbls. Rig Repairs.
- 11/26/01 Drilling ahead at 4631', Bit Trip at 4631'.
- 11/27/01 Drilling ahead at 475C'.
- 11/28/01 Drilling ahead at 4974'.
- 11/29/01 Rig Repairs, Drilling anead at 5186
- 11/30/01 Drill to TD at 5298', Circulate, Final Survey, COOH, RU Schlumberger, Run Logs
- 12/1/01 Attempt to Run Cement Bond Log without success. Run 5-1/2" Production Casing to TD 5298'. Attempt to circulate hole with Mud. Lose 800 bols mud with > 15% LCM. No indication of circulation.

12/2/01 BJ Services Cement First Stage of 5-1/2" Production Casing. Test Lines 3000# Mix & Pump 20 bbls Mud Clean 2, 10 bbls Water, 70 bbls Cement, SD Drop Plug, 60 bbls H20. & 67 bbls Mud Displacement. Bump Plug to 1350#. Bleed Back 2.5 bbls not holding. Pump 2 bbls Bump Plug to 1500#. Hold Pressure 5 mins. Bleed back to 500#. Leave pressure Casing. Cement Detail (194 sxs, 70 bbis, 394 ft^3, 12.5 ppg, 2.03 ft^3/sx yield) Premium Lite High Strength FM Additives +3% KCI+0.25#/sx CelloFlake+5 lbs/sx LCM-1+0.7%bwoc FL-52+0.3% bwoc CD-32 No Circulation throughout Job. Final Lift Pressure of 370 psi. Expect Coverage of Dakota to the Base of Gallup. Check Omt performance. WOC. Check Pressure, raised to 800#. Bleed to Zero. Plug holding. Drop Opening Tool Bomb. Wait 35 mins. Open tool with 400# pressure. SD Swap to rig pump Start pumping at 3 BPM, 250#. Catch pressure after 35 bbls mud, Circulatiaon at 40 bbls Circulate and condition Mud from 3024' to surface. Monitor returns. Mud has 3 % LCM 60 cp. 8,8 ppg. Good mud returns. Safety Meeting w/ all personel, review Stage # 2 job. Test lines. Mix & Pump 20 bbls Mud Clean 2, 10 bbls water, 110 bbls Lead, 15 bbls Tail, SD, Drop Plug, 72 bbls Water Displacement. Good Circ until 85 bbls pumped, then partial returns to zero returns, Rate between 1 to 3 bpm. Bump Plug to 1600#. Bleed Off. Plug holding. Cement appeared to be on a vaccum. Suspect Cement placement downhole from Pt. Lookout to Gallup Interval. Attempted to hesitate cement, but unsuccessful. Cut Cement Volume Short due to LC Lead Cement Detail (295 sxs, 110 bbls, 617 ft^3, 12.1 ppg, 2.09 ft^3/sx yield) Premium Lite FM Additives +1%CaCl+0.25#/sx CelioFlake+5 lbs/sx LCM-1+8%bwoc bentonite. PD @ 17:05 hrs

Will Run Cement Bond Log from PBTD to Surface to check Cement Quality.

|        |                           |              |  | S   | urvey            | Re           | port                       | 1211'<br>125<br>125<br>195 | 8980       | 9             |           |
|--------|---------------------------|--------------|--|---|------------------|--------------|----------------------------|----------------------------|------------|---------------|-----------|
|        |                           |              | a<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |   | MIN. CURVA       |              | C<br>Sh H<br>CULATIONS     | (SPE-3362)                 | 2593       | 6 176<br>14 2 |           |
| h      | OPERAT<br>VELL:<br>OCATIO |              | Bois D'  | / Ope <b>ra</b> tin<br>Arc Encin<br>y Co. N.M | 10 15 #1         |              | START:<br>FI <b>NI</b> SH: | 11/19/01<br>12/1/01        |            |               |           |
|        |                           |              |  |   |                  |              | PROPO                      | SED DIRE(                  | 0.00       |               |           |
|        |                           |              |  |   |                  |              | Magnetic                   | c to True:                 | 10.8       |               |           |
| 6      | TATIONS                   | SURVEY       |  |   |                  |              |                            | VERT.                      | DLS/       |               |           |
| $\sim$ | UMBER                     | DEPTH        | INC  | AZMTH   | TVD              | N-S          | E-W                        | SECTION                    | 100        |               |           |
|        | TIE IN                    | Ó            | 0.00   | 0.00  | 0.00             | 0.00         | 0.00                       | 0.0                        | 0.0        |               |           |
|        | 1                         | 499          | 11.1   | 67.4  | 495.9            | 18.5         | 44.5                       | 18.5                       | 2.2        |               |           |
|        | 2                         | 655          | 9.8  | 65.6  | 649.3            | 29.8         | 70.4                       | 29.8                       | 0.9        | SL            | 16-       |
|        | 3                         | 811          | 8.0  | 67.7  | 803.4            | 39.4         | 92.6                       | 39.4                       | 1.2        | 250'F         | GLOYE     |
|        | 4                         | 968          | 5.6  | 69.0  | 959.3            | 46.3         | 109.8                      | 46.3                       | 1.5        | I.            | <i>,.</i> |
| 1211   | 5                         | 1125         | 4.1  | 65.3<br>70 <i>.</i> 8                         | 1115.7<br>1273.4 | 51.4<br>54.9 | 122.1<br>130.7             | 51.4<br>54.9               | 1.0<br>0.9 | 1 411         |           |
| 12.    | 6<br>7                    | 1283         | 2.7<br>2.1   | 70.8  | 1342.4           | 55.9         | 133.5                      | 54.9<br>55.9               | 0.9<br>0.9 | 2 20          |           |
|        | 8                         | 1352<br>1406 | 2.1  | 69.4  | 1396.4           | 56.6         | 135.3                      | 56.6                       | 0.9        | 151           |           |
|        | 9                         | 1500         | 2.4  | 67 <i>.</i> 7                                 | 1490.3           | 57.9         | 138.6                      | 57.9                       | 0.2        | /5/           |           |
|        | 9<br>10                   | 1532         | 2.4  | 74.0  | 1522.3           | 58.3         | 139.8                      | 58.3                       | 1.5        | 8 exi         | 1         |
|        | 11                        | 1594         | 2.4  | 69.6  | 1584.2           | 59.1         | 142.0                      | 59.1                       | 0.7        | 189           | ,<br>,    |
|        | 12                        | 1686         | 0.9  | 50.0  | 1676.2           | 60.2         | 144.4                      | 60.2                       | 1.7        | 73            | ь         |
|        | 13                        | 1778         | 1.0  | 57.0  | 1768.2           | 61.1         | 145.6                      | 61.1                       | 0.2        |               |           |
|        | 14                        | 1872         | 0.9  | 49.0  | 1862.1           | 62.0         | 146.9                      | 62.0                       | 0.2        |               |           |
|        | 15                        | 1967         | 0.8  | 45.4  | 1957.1           | 63.0         | 147.9                      | 63.0                       | 0.1        |               |           |
|        | 16                        | 2467         | 0.5  | 45.0  | 2457.1           | 67.0         | 151.9                      | 67.0                       | 0.1        |               |           |
|        | 17                        | 2983         | 0.8  | 45.0  | 2973.1           | 71.0         | 155.9                      | 71.0                       | 0.0        |               |           |
| 200°   | 18                        | 3480         | 0.8  | 45.0  | 3470.0           | 75.6         | 160.5                      | 75.6                       | 0.0        |               |           |
|        | 19                        | 3977         | 0.8  | 45.0  | 3967.0           | 80.2         | 165.1                      | 80.2                       | 0.0        |               |           |
|        | 20                        | 4475         | 1.5  | 45.0  | 4464.9           | 87.1         | 172.0                      | 87.1                       | 0.2        |               |           |
| e/651  | 21                        | 4975         | 1.0  | 45.0  | 4964.8           | 94.8         | 179.7                      | 94.8                       | 0.1        |               |           |
| - L    | 22                        | 5298         | 1.0  | 45.0  | 5287.7           | 98.8         | 183.7                      | 98.8                       | 0.0        |               |           |
|        |                           |              |  |   | 11               | 7h           | 12                         | 5-2001                     |            |               |           |

| ltem         |    | Footage | Cumulative Footage | Top Depth | Btm Depth | 1           |    |
|--------------|----|---------|--------------------|-----------|-----------|-------------|----|
| Shoe         |    | 0,75    | 0.75               | 5,288.46  | 5,289.21  |             |    |
|              | 1  | 44.40   | 45.15              | 5,244.06  | 5,244.81  |             |    |
| Float Collar |    | 0.60    | 45.75              | 5,243.45  | 5,244.20  |             |    |
|              | 2  | 44.38   | 90.13              | 5,199.07  | 5,199.82  | Centralizer | 1  |
|              | 3  | 44.48   | 134.61             | 5,154.59  | 5,155.34  |             |    |
|              | 4  | 44.38   | 178,99             | 5,110.21  | 5,110.96  | Centralizer | 2  |
|              | 5  | 44.32   | 223.31             | 5,065.89  | 5,066.64  |             |    |
|              | 6  | 44.42   | 267,73             | 5,021.47  | 5,022.22  | Centralizer | 3  |
|              | 7  | 44.40   | 312.13             | 4,977.07  | 4,977.82  |             |    |
|              | 8  | 44.32   | 356.45             | 4,932.75  | 4,933.50  | Centralizer | 4  |
|              | 9  | 44.40   | 400.85             | 4,888.35  | 4,889.10  |             |    |
|              | 10 | 44.32   | 445.17             | 4,844.03  | 4,844.78  |             |    |
|              | 11 | 44.34   | 489.51             | 4,799.69  | 4,800.44  |             |    |
|              | 12 | 44.32   | 533.83             | 4,755.37  | 4,756.12  | Centralizer | 5  |
|              | 13 | 44.33   | 578.16             | 4,711.04  | 4,711.79  |             |    |
|              | 14 | 44.36   | 622.52             | 4,666.68  | 4,667.43  |             |    |
|              | 15 | 44.32   | 666.84             | 4,622.36  | 4,623.11  |             |    |
|              | 16 | 44.28   | 711.12             | 4,578.08  | 4,578.83  | Centralizer | 6  |
|              | 17 | 43.32   | 754.44             | 4,534.76  | 4,535.51  |             |    |
|              | 18 | 44.38   | 798.82             | 4,490.38  | 4,491.13  |             |    |
|              | 19 | 44.38   | 843.20             | 4,446.00  | 4,446.75  |             |    |
|              | 20 | 44,40   | 887.60             | 4,401.60  | 4,402.35  | Centralizer | 7  |
|              | 21 | 44.00   | 931.60             | 4,357.60  | 4,358.35  |             |    |
|              | 22 | 44,37   | 975.97             | 4,313.23  | 4,313.98  |             |    |
|              | 23 | 44.39   | 1,020.36           | 4,268.84  | 4,269.59  |             |    |
|              | 24 | 44.35   | 1,064.71           | 4.224.49  | 4,225.24  | Centralizer | 8  |
|              | 25 | 44.39   | 1,109.10           | 4,180.10  | 4,180.85  |             |    |
|              | 26 | 44.35   | 1,153.45           | 4,135.75  | 4,136.50  |             |    |
|              | 27 | 44.38   | 1,197.83           | 4,091.37  | 4,092.12  |             |    |
|              | 28 | 44.32   | 1.242.15           | 4,047.05  | 4,047,80  | Centralizer | 9  |
|              | 29 | 44.35   | 1,286.50           | 4,002.70  | 4,003.45  |             |    |
|              | 30 | 44.39   | 1,330.89           | 3,958.31  | 3,959.06  |             |    |
|              | 31 | 44.37   | 1,375.26           | 3,913.94  | 3,914.69  |             |    |
|              | 32 | 44.36   | 1,419.62           | 3,869.58  |           | Centralizer | 10 |
|              | 33 | 44.32   | 1,463.94           | 3,825.26  | 3,826.01  |             |    |
|              | 34 | 44.40   | 1,508.34           | 3,780.86  | 3,781.61  |             |    |
|              | 35 | 44.38   | 1,552.72           | 3,736.48  | 3,737.23  |             |    |
|              | 36 | 44.37   | 1,597.09           | 3,692.11  | 3,692.86  | Centralizer | 11 |
|              | 37 | 44.37   | 1,641.46           | 3,647.74  | 3,648.49  |             |    |
|              | 38 | 44.39   | 1,685.85           | 3,603.35  | 3,604.10  |             |    |
|              | 39 | 44,38   | 1,730.23           | 3,558.97  | 3,559.72  |             |    |
|              | 40 | 44.36   | 1,774.59           | 3,514.61  | 3,515.36  | Centralizer | 12 |
|              | 41 | 44.40   | 1,818.99           | 3,470.21  | 3,470.96  |             |    |
|              | 42 | 44.35   | 1,863.34           | 3,425.86  | 3,426.61  |             |    |
|              | 43 | 44.36   | 1,907.70           | 3,381.50  | 3,382.25  |             |    |
|              | 44 | 44.35   | 1,952.05           | 3,337.15  |           | Centralizer | 13 |
|              | 45 | 44.36   | 1,996.41           | 3,292.79  | 3,293.54  |             |    |
|              | 46 | 44.35   | 2,040.77           | 3,248.43  | 3,249.18  |             |    |
|              | 47 | 44.37   | 2,085.14           | 3,204.06  | 3,204.81  |             |    |
|              | 48 | 44.36   | 2,129.50           | 3,159.70  | 3,160.45  | Centralizer | 14 |
|              | 49 | 44.35   | 2,173.85           | 3,115.35  | 3,116.10  |             |    |
|              |    |         |                    |           |           |             |    |

ر ر

|            |          | <b>F</b> | Cumulative Feators | Ton Donth        | Dim Donih         |                      |    |
|------------|----------|----------|--------------------|------------------|-------------------|----------------------|----|
| ltem       |          | Footage  | Cumulative Footage | •                |                   |                      | ۵. |
|            | 50       | 44.32    | 2,218.17           | 3,071.03         | 3,071.78          | Convert Deal of      |    |
|            | 51       | 44.35    | 2,262.52           | 3,026.68         |                   | Cement Basket        |    |
| Stage Tool |          | 2.08     | 2,264.61           |                  |                   | 0 /                  |    |
|            | 52       | 44.36    | 2,308.97           |                  |                   | Centralizer          | 15 |
|            | 53       | 44.36    | 2,353.33           |                  |                   |                      |    |
|            | 54       | 44.40    | 2,397.73           |                  |                   | <b>A</b>             |    |
|            | 55       | 44.38    | 2,442.11           |                  | •                 | Centralizer          | 16 |
|            | 56       | 44.39    | 2,486.50           |                  |                   | · ·                  |    |
|            | 57       | 44.37    | 2,530.87           |                  |                   | Centralizer          | 17 |
|            | ្មទ      | 44.38    | 2,575.25           | 2,713,96         | 2,714.71          |                      |    |
|            | 59       | 44 00    | 2,619.63           | 2,669,58         | 2,670.33          |                      |    |
|            | 60       | 44.3     | 2,664.01           | 2,625.20         | 2, <b>6</b> 25.95 |                      |    |
|            | 61       | 44.42    | 2,708.43           | 2,580.78         |                   | Centralizer          | 18 |
|            | 62       | 44.41    | 2,752.84           | 2,536.37         | 2,537.12          |                      |    |
|            | 63       | 44.32    | 2,797.16           |                  |                   | Centralizer          | 19 |
|            | 64       | 44.34    | 2,841.50           | 2,447.71         | 2,448.46          |                      |    |
|            | 65       | 44.35    | 2,885.85           |                  |                   | Centralizer          | 20 |
|            | 66       | 44.34    | 2,930.19           | 2,359.02         | 2,359.77          | _                    |    |
|            | 67       | 44.32    | 2,974.51           | •                |                   | Centralizer          | 21 |
|            | 68       | 44.40    | 3,018.91           | 2,270.30         | 2.271.05          |                      |    |
|            | 69       | 44.36    | 3,063.27           | 2,225.94         |                   | Centralizer          | 22 |
|            | 70       | 44.32    | 3,107.59           | 2,181.62         | 2,182.37          |                      |    |
| × .        | 71       | 44.42    | 3,152.01           | 2,137.20         | 2,137.95          |                      |    |
|            | 72       | 44.41    | 3,196.42           | 2,092.79         | 2,093.54          |                      |    |
|            | 73       | 44.38    | 3,240.80           | 2,048.41         |                   | Centralizer          | 23 |
|            | 74       | 44.35    | 3.285.15           | 2,004.06         | 2,004.81          |                      |    |
|            | 75       | 44.37    | 3.329.52           | 1,959.69         | 1,960.44          |                      |    |
|            | 76       | 44.31    | 3,373.83           |                  | 1,916.13          |                      |    |
|            | 77       | 44.32    | 3,418.15           | 1,871.06         |                   | Centralizer          | 24 |
|            | 78       | 44.27    | 3,462.42           | 1.826.79         | 1,827.54          |                      |    |
|            | 79       | 44.36    | 3,506.78           | 1,782.43         | 1,783.18          |                      |    |
|            | 80       | 44.34    | 3,551.12           | 1,738.09         | 1,738.84          | <b>a</b>             |    |
|            | 81       | 44.37    | 3,595.49           | 1,693.72         |                   | Centralizer          | 25 |
|            | 82       | 44.32    | 3,639.81           | 1,649.40         | 1,650.15          |                      |    |
|            | 83       | 44.31    | 3,684.12           |                  | 1,605.84          |                      |    |
|            | 84       | 44.38    | 3,728.50           |                  | 1,561.46          |                      | ~~ |
|            | 85       | 44.33    | 3,772.83           |                  |                   | Centralizer          | 26 |
|            | 86       | 44.35    | 3,817.18           |                  | 1,472.78          |                      |    |
|            | 87       | 44.35    | 3,861.53           |                  | 1,428.43          |                      |    |
|            | 88       | 44.37    | 3,905.90           |                  | 1,384.06          | O a set a a l'an a a | 07 |
|            | 89       | 44.37    | 3,950.27           |                  |                   | Centralizer          | 27 |
|            | 90       | 44.40    | 3,994.67           |                  | 1,295.29          |                      |    |
|            | 91       | 44.30    | 4,038.97           |                  | 1,250.99          |                      |    |
|            | 92       | 44.36    | 4,083.33           |                  | 1,206.63          | Controlizor          | 20 |
|            | 93       | 44.31    | 4,127.64           |                  |                   | Centralizer          | 28 |
|            | 94       | 44.33    | 4,171.97           |                  | 1,117.99          |                      |    |
|            | 95<br>00 | 44.48    | 4,216.45           |                  | 1,073.51          |                      |    |
|            | 96       | 44.36    | 4,260.81           |                  | 1,029.15          | Controlizor          | 20 |
|            | 97       | 44.35    | 4,305.16           | 984.05<br>020.70 |                   | Centralizer          | 29 |
|            | 98       | 44.35    | 4,349.51           |                  | 940.45<br>896.08  |                      |    |
|            | 99       | 44.37    | 4,393.88           | 895.33           | 896.08            |                      |    |

ι.

,

۰.

Bois d' Arc Encino 15 # 1 5-1/2" 15.5# J-55 ST&C Production Casing Tally

| ltem<br>10   | Footage<br>0 44.32  | Cumulative Footage<br>4,438.20 | Top Depth<br>851.01 |              |             |    |
|--|---|--------------------------------|---------------------|--------------|-------------|----|
| 10   |   | 4,482.56                       | 806.65              |              | Centralizer | 30 |
| 10   |   | 4,526.87                       |                     | 763.09       |             |    |
| 10   |   | 4,571.22                       | 717.99              | 718.74       |             |    |
| 10   |   | 4,615.54                       | 673.67              | 674.42       |             |    |
| 10   | 5 44.32   | 4,659.86                       | 629.35              | 630.10       | Turbolizer  | 1  |
| 10   | 6 44.00   | 4,703.86                       | 585.35              | 586.10       |             |    |
| 10   | 7 44.36   | 4,748.22                       | 540.99              | 541.74       |             |    |
| 10   | B 44.32   | 4,792.54                       | 496.67              | 497.42       |             |    |
| 10   |   | 4,836.90                       | 452.31              |              | Centralizer | 31 |
| 11   | n 44.39   | 4,881 29                       | 407.92              | 408,67       |             |    |
| 11   |   | 4,8                            | 363.65              |              | Centralizer | 32 |
| . 11:  |   | 4,9692                         | 319.29              |              | Turbolizer  | 2  |
| 11:  |   | <b>5,014</b> .01               | 275.20              |              | Centralizer | 33 |
| 11.  |   | 5,058.37                       | 230.84              | 231.59       | <b>_</b>    |    |
| 11:  |   | 5,102.76                       | 186.45              |              | Centralizer | 34 |
| 11(  |   | 5,147.09                       | 142.12              | 142.87       | <b>A</b>    |    |
| 11   |   | 5,191.42                       | 97.79               |              | Centralizer | 35 |
| 118  |   | 5,235.77                       | 53.44               | 54.19        |             |    |
| 119  |   | 5,280.05                       | 9.16                | 9.91         |             |    |
| Landing Sub  | 15.15   | 5,295.20                       | (5.99)              | (5.24)       |             |    |
| Stick-up above KB  | -5.99   |                                | n far diatan        | no off of TD |             |    |
| Screw On Wellhead, 18  | mapove 8-5/   | 8" Casing Head, reaso          | n for distant       |              |             |    |
| Total Depth of the Hole  |   | 5298                           |                     |              |             |    |
| Shoe Distance off of ho  | le TD when  | landed                         | 8.79                | feet         |             |    |
| Centralizers Run   |   | 35                             |                     |              |             |    |
| Turbolizers Run  |   | 2                              |                     |              |             |    |
| Cement Bakets Run  |   | 1                              |                     |              |             |    |
| Shoe Depth   |   | 5,289.21                       |                     |              |             |    |
| Float Collar Depth   |   | 5.243.45                       |                     |              |             |    |
| Stage Tool Depth   |   | 3,024.60                       |                     |              |             |    |
| Joints to return to Stock  |   |                                |                     |              |             |    |
|  |   |                                |                     |              |             |    |
|  | _   |                                |                     |              |             |    |
|  | 44.30   |                                |                     |              |             |    |
| 2  | 44.30<br>44.30  |                                |                     |              |             |    |
|  | 44.30<br>44.30<br>44.33   |                                |                     |              |             |    |
|  | 44.30<br>44.30  |                                |                     |              |             |    |
|  | 44.30<br>44.30<br>44.33<br>44.33<br>44.36   |                                |                     |              |             |    |
|  | 44.30         44.30         44.30         3       44.33         4       436         5       44.35 |                                |                     |              |             |    |
| Short Jt. (6)  | 44.30<br>44.30<br>44.33<br>44.33<br>44.36<br>544.35<br>5.20                                       |                                |                     |              |             |    |
| Short Jt. (6)<br>Landing Jt. (7)<br>By Thomas E. Mullins                           | 44.30<br>44.30<br>44.33<br>444.36<br>544.35<br>5.20<br>15.15                                      | Aztec Rig # 507                |                     |              |             |    |
| Short Jt. (6)<br>Landing Jt. (7)<br>By Thomas E. Mullins<br>Synergy Operating, LLC | 44.30<br>44.30<br>44.33<br>444.36<br>544.35<br>5.20<br>15.15                                      |                                | v                   |              |             |    |
| Short Jt. (6)<br>Landing Jt. (7)<br>By Thomas E. Mullins                           | 44.30<br>44.30<br>44.33<br>444.36<br>544.35<br>5.20<br>15.15                                      | Aztec Rig # 507                | v                   |              |             |    |

× .

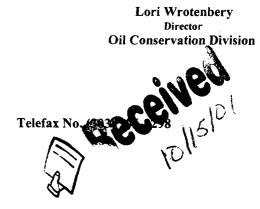


## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON** Governor Jennifer A. Salisbury **Cabinet Secretary** 

September 28, 2001

Bois d'Arc Offshore, Inc. c/o Discovery Exploration, Inc. 621 17<sup>th</sup> Street - Suite 1535 Denver, Colorado 80293 Attention: William Price Berryman Agent, Synergy Operating, LLC



Administrative Order NSL-4648

Dear Mr. Berryman:

Reference is made to the following: (i) your application on behalf of the operator, Bois d'Arc Offshore, Inc., submitted to the New Mexico Oil Conservation Division ("Division") on September 6, 2001 (application reference No. pKRV0-125331817); (ii) the Division's initial response by letter dated September 14, 2001 from Mr. Michael E. Stogner, Chief Hearing Officer/Engineer in Santa Fe; (iii) your telefaxed response of September 23, 2001 with supplemental data; and (iv) the Division's records in Aztec and Santa Fe: all concerning Bois d'Arc Offshore, Inc.'s request for a nonstandard gas well location within both the Dakota and Mesaverde (Menefee) formations for its proposed Encino "15" Well No. 1 to be drilled 250 feet from the North line and 920 feet from the East line (Unit A) of Section 15, Township 20 North, Range 5 West, NMPM, McKinley County, New Mexico. The NE/4 of Section 15 is to be dedicated to the well in order to form a standard 160-acre gas spacing and proration unit for both intervals.

This application has been duly filed under the provisions of Division Rule 104.F, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999.

It is our understanding that Bois d'Arc Offshore, Inc. is seeking this location exception based on a 3-D seismic survey of the immediate area, which indicates that a well drilled at the proposed unorthodox gas well location will be at a more favorable geologic position within the deeper Dakota formation then a well drilled at a location considered to be standard within the NE/4 of Section 15.

By the authority granted me under the provisions of Division Rule 104.F (2), the above-described unorthodox wildcat gas well location to both the Dakota and Mesaverde (Menefee) formations within this 160-acre unit comprising the NE/4 of Section 15 is hereby approved.

Sincerely,

Lori Wrotenbery

Director

LW/MES/kv

New Mexico Oil Conservation Division - Aztec cc: U. S. Bureau of Land Management - Farmington

#### Stogner, Michael

| From:    | Thomas E. Mullins [mullinst@cyberport.com] |
|----------|--|
| Sent:    | Friday, January 04, 2002 5:19 PM           |
| То:      | mstogner@state.nm.us                       |
| Cc:      | shayden@state.nm.us; gmartin@lauferaa.com  |
| Subject: | NSL Question Bois d' Arc Encino 15 # 1     |

Dear Mr. Stogner,

After speaking with Steve Hayden from the Aztec office regarding this well; Steve suggested that I call you to discuss what should be the appropriate way for us to request/obtain approval to complete the Gallup formation in our subject well.

Bois d' Arc Encino 15 # 1 (30 - 031 - 21008)Unit A, Sec 15, T20N-R05W Mckinley County, NM

An original NSL-4648 was approved for this well on September 28, 2001, for the Dakota and Mesaverde formations.

I subsequently filed for an ammended NSL approval on December 17, 2001, for these same formations because of the significant change in the bottom-hole location of the well. This was necessary because of deviation problems encountered during the drilling operation.

We have not filed a request to attempt a Gallup completion on the well. Based upon encouraging Mud Log shows and Lost Circulation encountered in the Gallup interval, Synergy Operating, as agent for Bois d' Arc Offshore, Ltd, would like to attempt a Gallup completion on this well. We first plan to test the Dakota, then the Gallup, and finally the Menefee formation of the Mesaverde.

I plan to call you next week at your office (476-3465) to discuss what would be the most appropriate method for our application to complete in the Gallup.

Thank you in advance for your time. I can be reached at (505) 566-3725.

- Tom Mullins Synergy Operating, LLC PO Box 5513 Farmington, NM 87499 (505) 566-3725

- Halked w/ Tom Mullins

- the Dec. 18th apple will be animuted to include this

Galley interval



## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Betty Rivera Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

## MEMORANDUM

| то:      | Richard Ezeanyim, Chief Engineer   |
|----------|--|
| FROM:    | Michael E. Stogner, Chief Hearing Officer/Engineer   |
| SUBJECT: | AMENDED Administrative Application NSL-4648 issued on February 19, 2002 (see copy attached). |
| cc:      | Lori Wrotenbery, Director  |
| DATE:    | April 2, 2002  |
|          | FROM:<br>SUBJECT:<br>cc:   |

Mr. Ezeanyim,

Per your request at this mornings Engineering Bureau meeting concerning the timing of this administrative application. Synergy Operating, LLC ("Synergy") filed its initial application on December 19, 2002. 16 days later on January 4, 2002 I received an e-mail from them asking to amend the application to include an additional zone. On January 11, 2002, Synergy filed its complete application thereby changing its suspense date from January 8, 2002 to February 4, 2002. I issued this order on February 19, 2002 (15 days past the suspense date and 9 days past the mandatory 30-day limit). Due to other demands of my time I failed to get this application out the required 30-day time period. Please note that this is a somewhat complicated issue that also involved our Aztec geologist's time.

I have also attached a print out of this information from the RBDMS database that refers to these dates and corresponding events.



## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Governor Governor Vetty Rivera Cabinet Secretary

February 19, 2002

Lori Wrotenbery Director Oil Conservation Division

Synergy Operating, LLC (Agent for Bois d'Arc Offshore, Ltd.) P. O. Box 5513 Farmington, New Mexico 87499 Attention: Thomas E. Mullins Engineering Manager mullinst@cyberport.com

14 . . .

Telefax No. (505) 325-6585

AMENDED Administrative Order NSL-4648

Dear Mr. Mullins:

Reference is made to the following: (i) your initial application for amendment to Division Administrative Order NSL-4648, dated September 28, 2001, on behalf of the operator, Bois d'Arc Offshore, Ltd., submitted to the New Mexico Oil Conservation Division ("Division") on December 18, 2001 (*application reference No. pKRV0-136544894*); (ii) your e-mail correspondence of January 4, 2002 to Mr. Michael E. Stogner, Division Engineer/Chief Hearing Officer in Santa Fe concerning this December 18, 2001 application; (iii) your second request for additional amendments to this order by letter dated January 11, 2002; (iv) your telephone conversation with Mr. Stogner on Thursday, February 7, 2002, and (v) the Division's records in Aztec and Santa Fe, including the file on Division Administrative Order NSL-4648.

Division Administrative Order NSL-4648, authorized Bois d'Arc Offshore, Ltd. to drill its Bois d'Arc Encino "15" Well No. 1 (API No. 30-031-21008), in a conventional manner at an unorthodox gas well location 250 feet from the North line and 920 feet from the East line (Unit A) of Section 15, Township 20 North, Range 5 West, NMPM, McKinley County, New Mexico, in order to test both the wildcat Dakota and Mesaverde (Menefee) formations within a standard 160-acre gas spacing and proration unit comprising the NE/4 of Section 15.

It is our understanding that during drilling operations, significant deviation was encountered and the resulting wellbore survey showed the bottomhole location of this well at a depth of 5,298 feet (MD) to be approximately 151 feet from the North line and 736 feet from the East line (Unit A) of Section 15. At this time Bois d'Arc Offshore, Ltd., through its agent, Synergy Operating, LLC, seeks to amend Division Administrative Order NSL-4648 to: (i) accept the wellbore directional survey for this well; (ii) reflect the subsurface locations of the wellbore within both the wildcat Dakota and Mesaverde (Menefee) intervals; and (iii) include the wildcat Mancos formation within the provisions of this order.

Amended Administrative Order NSL-4648 Synergy Operating, LLC February 19, 2002 Page 2

This request been duly filed under the provisions of Division Rules 104.F, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, and Division Rule 111.C (2).

From the submitted information it is understood that the maximum deviation of this wellbore occurred at the aforementioned bottomhole location found at 5,298 feet (MD) and that the wellbore intersected: (i) the top of the Mesaverde interval at an approximate depth of 1,271 feet at a point approximately 195 feet from the North line and 789 feet from the East line of Section 15; (ii) the top of the Mancos interval at an approximate depth of 3,005 feet at a point approximately 175 feet from the North line and 764 feet from the East line of Section 15; and (ii) the top of the Dakota formation at an approximate depth of 4,881 feet at a point approximately 157 feet from the North line and 742 feet from the East line of Section 15.

By the authority granted me under the provisions of Division Rule 104.F (2), Division Administrative Order NSL-4648, dated September 28, 2001, is hereby amended to properly reflect the actual subsurface path of the Bois d'Arc Encino "15" Well No. 1, as described above, with respect to the: (i) Mesaverde formation; (ii) Dakota formation; and (iii) bottomhole location at 5,298 feet (MD). All other provisions of Order NSL-4648 not in conflict with this change shall remain in full force and effect until further notice

Furthermore, the above-described unorthodox subsurface location in the Mancos formation within the NE/4 of Section 15, being a standard 160-acre gas spacing and proration unit for this interval, is hereby approved.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Lori Wrotenbery

Director

LW/MES/kv

New Mexico Oil Conservation Division - Aztec cc: U. S. Bureau of Land Management - Farmington File: NSL-4648

|  |   |                |              | an The Association<br>A sub-   |            |   |  |            |
|--|---|----------------|--------------|--------------------------------|------------|---|--|------------|
| Basic Application and Log-In Data  | Log-In Data   |                |              |                                |            |   |  |            |
| Application No.  | ſ,  | Order No. Amd  | - pur        | R-Order No.                    |            | County McKinley   |  | Approvads  |
| pKRV0136544894   | pkRV0136544894 Non-Standard Location  | 4648           | 1            |                                | 02/19/2002 |   |  | BIMP 🗸     |
| Applicant SYNERGY OPERATING LLC  | / OPERATING LLC   |                |              | 01/14/2002                     |            | District Aztec  |  | Farmington |
| Contact Thomas E. Mullins  | Mullins   |                |              | 02/04/2002                     |            | IssumgOff Santa Fe  |  | SLO?       |
| Notes  |   |                | 7.0 IPPV     |                                |            |   |  |            |
| Permit Level Actions and/or Data   | and/or Data   |                |              |                                |            |   |  |            |
|  |   |                |              |                                |            |   |  |            |
| Evenior  | A STATE OF A STATE OF A STATE OF A STATE OF   |                |              |                                |            |   |  |            |
| 2/19/2002 8:31:11 AM Permit  | 1 AM Permit Issued  |                |              |                                |            |   |  |            |
| 1/14/  |   | Comple         | ete applica  | Complete application received. |            | and a feature of the second | ******   |            |
| 12/18/2001 12:28:15 PM Other   | 5 PM Other Event or Action - See Commen Initial partial application filed.                                      | nmen Initial p | artial appli | cation filed.                  |            |   | and and a second se |            |
| en anderen ander anderen andere<br>Anderen anderen | and the second secon |                |              |                                |            |   |  |            |
|  |   |                |              |                                |            |   |  |            |
| . Well Specific and Technical Data   | hnical Data   |                |              |                                |            |   |  |            |
|  |   |                |              |                                |            |   |  |            |
|  |   |                |              |                                |            |   |  |            |
|  |   |                |              |                                |            |   |  |            |
|  |   |                |              |                                |            |   |  | is.        |
|  |   |                | ĺ.           |                                |            |   |  |            |