

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division

Sundry Notices and Reports on Wells

<p>1. Type of Well GAS</p> <hr/> <p>2. Name of Operator <b>BURLINGTON RESOURCES</b> OIL &amp; GAS COMPANY</p> <hr/> <p>3. Address &amp; Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> <hr/> <p>4. Location of Well, Footage, Sec., T, R, M 1650' FSL, 1650' FWL, Sec. 24, T-32-N, R-7-W, NMPM, San Juan County DHC-1577</p>	<p>API # (assigned by OCD) 30-045-11294</p> <p>5. Lease Number Fee</p> <p>6. State Oil&amp;Gas Lease #</p> <p>7. Lease Name/Unit Name Allison Unit</p> <p>8. Well No. 17</p> <p>9. Pool Name or Wildcat Blanco MV/Basin DK</p> <p>10. Elevation:</p>
--	--


Type of Submission	Type of Action
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment <input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion <input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back <input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair <input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing <input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Pay add and commingle

13. Describe Proposed or Completed Operations

It is intended to add pay to the Mesaverde formation of the subject well according to the attached procedure and wellbore diagram. After the pay add the well will be down hole commingled under DHC-1577.

**RECEIVED**  
JUL 22 1997

OIL CON. DIV.  
DIST. 3

SIGNATURE  (JME6) Regulatory Administrator July 18, 1997

(This space for State Use)

Approved by John Robinson Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date JUL 22 1997

**Allison Unit #17**  
**Burlington Resources Oil & Gas**  
**Blanco Mesaverde/Basin Dakota Workover**  
**UnitK-Sec24-T32N-R07W**  
**Lat: 36° 57.77'**  
**Long: 107° 31.25'**

- 
- Comply with all BLM, NMOCD, & BR rules & regulations.
  - **Always Hold Safety Meetings.** Place fire and safety equipment in strategic locations.
  - 3-1/2" 9.3# N-80 Frac String (5900' +/-) required.
  - Spot and fill 7 frac tanks with 2% KCl water.
  - Use drill gas for all operations.
  - (1) 5-1/2" CIBP, (1) 5-1/2" RBP, and (1) 5-1/2" PKR required for 5-1/2" 17#/15.5# N-80/J-55 pipe.
  - Be prepared to flow back Lewis frac immediately.
- 

*This well is part of the 1997 Allison Mesaverde optimization program. The well is currently dual completed in the Dakota (19 MCFD) and the Mesaverde Point Lookout (73 MCFD). Cumulative production is 1957 MMCF from the Dakota and 1598 MMCF from the Mesaverde. Menefee & Cliffhouse pay will be added and stimulated with a 25# Xlink frac. Lewis pay will also be added and foam frac'd. The Mesaverde and Dakota will be commingled immediately upon completion of the workover.*

**NOTE: Dakota perms open 7968' - 8103'**  
**Baker Model D PKR @ 6471'**  
**Point Lookout perms open 5704' - 5780'**

1. MIRU. Record and report SI pressures on tubing, casing, & bradenhead. Blow down casing & tubing. Kill well w/ 2% KCl. ND WH, NU BOP.
2. Attempt to TOOH w/ 2-3/8" tubing (from 8015'). Rabbit and strap tubing. Visually inspect tubing, note any scale in tubing. Lay down any bad tubing.
3. PU washover pipe, mill shoe and PKR plucker on 2-3/8" 4.7# J-55 EUE workstring. Burn over Model D PKR @ 6471', engage w/ plucker, TOOH w/ PKR. LD PKR & fishing assembly.
4. PU 4-3/4" bit w/ 5-1/2" casing scraper on 2-3/8" tbg, clean out w/ gas to PBTD @ 8109'. TOOH.
5. PU 5-1/2" CIBP and 5-1/2" PKR on 2-3/8". TIH & set CIBP @ 5650' to T&A Dakota and Point Lookout. Load hole from bottom w/ 2% KCl water.
6. Set PKR above CIBP & test to 6200 psi. Hold for 10 minutes. Release PKR & pressure test entire casing string to 1000 psi for 10 minutes. If PT does not hold, locate hole(s). Engineering will provide squeeze design if required.
7. Complete all squeeze cementing operations. WOC recommended time. Drill out cement. Pressure test to 1000 psi.

***Menefee/Cliffhouse Completion:***

8. If already in hole, spot 500 gallons 15% HCL acid (w/ 2 gal/1000 corrosion inhibitor) across MN/CH @ 5610'. TOOH, standing 2-3/8" back. Change rams to 3-1/2". (If separate trip is required, skip spotting acid.)

9. RU wireline under packoff. Perforate MN/CH (top-down if in acid) @ the following depths with 3-1/8" HSC gun w/ Owen 306T 12g charges (0.28" hole, 11" penetration), 1 SPF @ 120 degree phasing.

**5200' - 5210'**

**5400' - 5410'**

**5600' - 5610'**

**(30 total holes, 410' gross interval)**

10. PU 5-1/2" FB PKR on 3-1/2" frac string. Set PKR 150' above top MN/CH perforation. Hold 500 psi on annulus during acid job.

11. RU stimulation company. Pressure test surface lines to 9100 psi. **Max pressure = 8100 psi.** Keep pressure under 6000 psi to avoid higher HHP charges. Prepare to break down MN/CH w/1000 gallons 15% HCL acid (w/ 2 gal/1000 corrosion inhibitor). Establish rate into formation. Record breakdown pressure and rate and ISIP. **Note: Calculate the number of perforations open at beginning of the job. If 90% (or more) of the holes calculate to be open, pump acid but do not drop balls. Be prepared to continue right into frac job.** If less than 90% of holes are open proceed to next step. If an injection rate of > 5 BPM can be established, prepare to balloff.

12. Begin balloff. Drop a total of 60 7/8" 1.3 SG RCN ball sealers spaced evenly throughout job. RD stimulation company. Release pressure, RD stimulation company. Release PKR & TIH knocking balls below bottom perforation. Pull up and reset PKR.

13. RU stimulation company. Pressure test surface lines to 9100 psi. **Maximum STP = 8100 psi.** Expected STP is about 4300 psi. Keep pressure under 6000 psi to avoid higher HHP charges. Hold 500 psi on annulus. Fracture stimulate the MN/CH w/ 100,000# 20/40 Arizona sand in 25# Xlink gel. See attached frac schedule for details. Frac will be traced with Protechnics' multi-isotope system. **(4 frac tanks needed)**

14. Release PKR, TOOH. RU wireline under packoff. Make 5-1/2" gauge ring run to 4920'. Set 5-1/2" RBP @ 4900'.

***Lewis Completion:***

15. Perforate Lewis @ the following depths w/ 3-1/8" HSC gun w/ Owen 305 16g charges (0.34" hole, 9" penetration), 2 SPF @ 120 degree phasing.

**4410' - 4425'**

**4720' - 4730'**

**4820' - 4835'**

**(80 total holes, 410' gross interval)**

Allison Unit #17  
Burlington Resources Oil & Gas.  
7/16/97

16. PU 5-1/2" FB PKR on 3-1/2" frac string. Set PKR below Lewis perforations. Test RBP @ 4900' to 3850 psi. Release PKR, come up hole and reset PKR 150' above top Lewis perf. Hold 500 psi on annulus during frac job.
17. RU immediate flowback equipment (frac nipple, valve, tee, etc.).
18. RU stimulation company. Pressure test surface lines to 9100 psi. **Max pressure = 8100 psi.** Keep pressure under 6000 psi to avoid higher HHP charges. Prepare to break down Lewis w/1000 gallons 15% HCL acid (w/ 2 gal/1000 corrosion inhibitor). Establish rate into formation. Record breakdown pressure and rate and ISIP. **Note: Calculate the number of perforations open at beginning of the job. If 90% (or more) of the holes calculate to be open, pump acid but do not drop balls. Be prepared to continue right into frac job.** If less than 90% of holes are open proceed to next step. If an injection rate of > 5 BPM can be established, prepare to balloff.
19. Begin balloff. Drop a total of 160 7/8" 1.3 SG RCN ball sealers spaced evenly throughout job. RD stimulation company. Release pressure, RD stimulation company. Release PKR & TIH knocking balls below bottom perforation. Pull up and reset PKR.
20. RU stimulation company. Pressure test surface lines to 9100 psi. **Maximum STP = 8100 psi.** Expected STP is about 5150 psi. Keep pressure under 6000 psi to avoid higher HHP charges. Fracture stimulate the Lewis w/ 200,000# 20/40 Arizona sand in 70Q N2 foam. See attached frac schedule for details. Frac will be traced with Protechnics' multi-isotope system. *(3 frac tanks needed)*
21. Flow back well immediately after shutdown -- **NOTE: Time from frac shut-down until flow tee is opened for flow back should be around 30 seconds. Time is critical to achieve reverse gravel packing. Begin flowback on 1/4" choke, increase as needed.** Flowback should continue for at least 15 minutes before shutting in to RD surface stim lines/connections. Flowback should be resumed immediately after RD.
22. Release PKR & TOOH laying down 3-1/2" tubing. Change out rams to 2-3/8".
23. TIH w/ 4-3/4" bit on 2-3/8" tubing and clean out to RBP @ 4900'. TOOH, PU retrieving head, TIH to RBP @ 4900'. Pull up above Lewis perms, obtain pitot gauge. Latch onto RBP, TOOH & LD RBP and retrieving head.
24. TIH w/ 4-3/4" bit on 2-3/8" tubing and clean out to CIBP @ 5650'. Drill out CIBP. Clean out to PBTD @ 8109'. Clean up to +/- 5 BPH and trace to no sand. Obtain final pitot gauge. TOOH.
25. RU wireline under packoff. Run Protechnics' after-frac log across traced stimulated zone. RD wireline.
26. Prepare to run production tubing string as follows: expendable check, one joint 2-3/8" tubing, 1.78" seating nipple, and remaining tubing. Land tubing @ 8070' +/-.
27. ND BOP, NU WH. Pump off expendable check and flow well up tubing to ensure check pumped off. RD & release rig to next location.

Allison Unit #17  
Burlington Resources Oil & Gas.  
7/16/97

Concur:

JME for TDS 7/16/97  
Northeast Basin Team Leader

Approved:

Robert C. Hill 7/16/97  
Drilling Superintendent

JME *JME*

Production Engineers: **Joan Easley**  
**599-4026-work**  
**324-2717-pager**  
**327-6843-home**

**Gaye White**  
**326-9875-work**  
**327-8904-pager**  
**326-6534-home**

# Allison Unit #17

Blanco Mesaverde/Basin Dakota

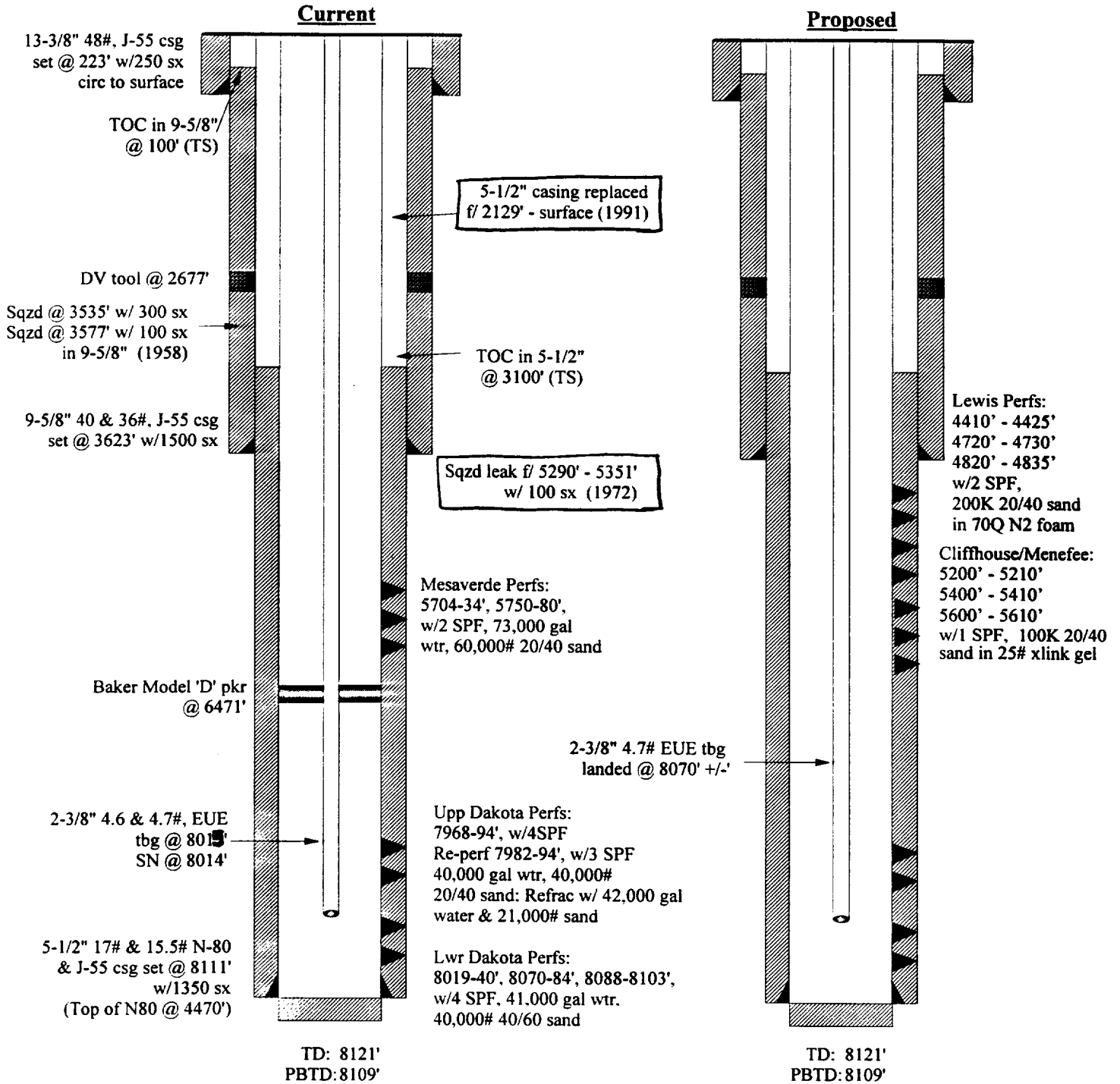
Section 24, T32N, R7W

San Juan County, NM

Elevation: 6499' GL

LAT: 36 57.77' / LONG: 107° 31.25'

date spud: 06-27-58



*ms 4/1/17*

## Allison Unit #17

<b>LOCATION:</b> 1650' FSL, 1650' FWL Sec. 24, T32N, R07W San Juan County, NM		<b>DP NUMBER:</b> 52928A-MV, 52928B-DK <b>LAT / LONG:</b> 36-57.77' / 107-31.25'																																																		
<b>WELL TYPE:</b> Blanco Mesverde Basin Dakota		<b>ELEVATION:</b> DF 6059' GL 6499'																																																		
<b>TOTAL DEPTH:</b> 8121' <b>PBTD:</b> 8109'		<b>INITIAL POTENTIAL:</b> MV 4,925 DK 1,335 <b>INITIAL SITP:</b> 1,049 2,737																																																		
<b>OWNERSHIP:</b> GWI: 54.6568% NRI: 45.8959%		<b>SPUD DATE:</b> 06/27/58 <b>COMPLETED:</b> 09/04/58 <b>CATHODIC:</b> 9/83																																																		
<b>CASING RECORD:</b> <table border="1"> <thead> <tr> <th>HOLE SIZE</th> <th>SIZE</th> <th>WEIGHT</th> <th>GRADE</th> <th>DEPTH</th> <th>CEMENT</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>17-1/2"</td> <td>13-3/8"</td> <td>48#</td> <td>J55</td> <td>223'</td> <td>250 sxs</td> <td>Circ to Surface</td> </tr> <tr> <td>12-1/4"</td> <td>9-5/8"</td> <td>40#/36#</td> <td>J55</td> <td>3623'</td> <td>1500 sxs</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1st Stage: 400 sxs</td> <td>2677' Calc.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2nd Stage: 1100 sxs</td> <td>100' (TS)</td> </tr> <tr> <td>8-3/4"</td> <td>5-1/2"</td> <td>17#/15.5#</td> <td>N80/J55</td> <td>8111'</td> <td>1350 sxs</td> <td>3100'(TS)</td> </tr> <tr> <td></td> <td>2-3/8"</td> <td>4.6#/4.7#</td> <td>EUE</td> <td>8015'</td> <td></td> <td></td> </tr> </tbody> </table> <p>DV tool @ 2677', Mdl D Pkr set @ 6471', TB @ 8019', SN @ 8014', Perf sub, SN 50 jts., 2-3/8" tbg., 4.6# w/slim hole collars, seal assy., 205 jts tbg</p>				HOLE SIZE	SIZE	WEIGHT	GRADE	DEPTH	CEMENT	TOC	17-1/2"	13-3/8"	48#	J55	223'	250 sxs	Circ to Surface	12-1/4"	9-5/8"	40#/36#	J55	3623'	1500 sxs							1st Stage: 400 sxs	2677' Calc.						2nd Stage: 1100 sxs	100' (TS)	8-3/4"	5-1/2"	17#/15.5#	N80/J55	8111'	1350 sxs	3100'(TS)		2-3/8"	4.6#/4.7#	EUE	8015'		
HOLE SIZE	SIZE	WEIGHT	GRADE	DEPTH	CEMENT	TOC																																														
17-1/2"	13-3/8"	48#	J55	223'	250 sxs	Circ to Surface																																														
12-1/4"	9-5/8"	40#/36#	J55	3623'	1500 sxs																																															
					1st Stage: 400 sxs	2677' Calc.																																														
					2nd Stage: 1100 sxs	100' (TS)																																														
8-3/4"	5-1/2"	17#/15.5#	N80/J55	8111'	1350 sxs	3100'(TS)																																														
	2-3/8"	4.6#/4.7#	EUE	8015'																																																
<b>FORMATION TOPS:</b> <table border="1"> <tbody> <tr> <td>Kirtland</td> <td>2656'</td> <td>Navajo City</td> <td>4305'</td> <td>Mancos</td> <td>5866'</td> </tr> <tr> <td>Fruitland Coal</td> <td>3038'</td> <td>Cliffhouse</td> <td>5445'</td> <td>Gallup</td> <td>7202'</td> </tr> <tr> <td>Pictured Cliffs</td> <td>3286'</td> <td>Menefee</td> <td>5493'</td> <td>Greenhorn</td> <td>7783'</td> </tr> <tr> <td>Lewis</td> <td>3517'</td> <td>Pt Lookout</td> <td>5705'</td> <td>Graneros</td> <td>7845'</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Dakota</td> <td>7949'</td> </tr> </tbody> </table>				Kirtland	2656'	Navajo City	4305'	Mancos	5866'	Fruitland Coal	3038'	Cliffhouse	5445'	Gallup	7202'	Pictured Cliffs	3286'	Menefee	5493'	Greenhorn	7783'	Lewis	3517'	Pt Lookout	5705'	Graneros	7845'					Dakota	7949'																			
Kirtland	2656'	Navajo City	4305'	Mancos	5866'																																															
Fruitland Coal	3038'	Cliffhouse	5445'	Gallup	7202'																																															
Pictured Cliffs	3286'	Menefee	5493'	Greenhorn	7783'																																															
Lewis	3517'	Pt Lookout	5705'	Graneros	7845'																																															
				Dakota	7949'																																															
<b>LOGGING:</b> 12/94 CET, DSL																																																				
<b>PERFORATIONS</b> Lwr Dakota 8019'-8040', 8070'-8084', 8088'-8103' - 4 SPF Upp Dakota 7968'-7994' - 4 SPF (Re-perf 7982'-7994' w/3 SPF) Mesaverde 5704'-5734', 5750'-5780'- 2 SPF																																																				
<b>STIMULATION:</b> Lwr Dakota Frac w/41,000 gal. water, 40,000# 40/60 sand Upp Dakota Frac w/40,000 gal. water, 40,000# 40/60 sand; Refrac w/ 42,000 gal water, 21,000# sand Mesaverde Frac w/73,000 gal. water, 60,000# 20/40 sand																																																				
<b>WORKOVER HISTORY:</b> 2/72 Located csg. leak between 5290'-5351', squeeze w/100 sxs. 9/91 Csg. parted 2131'-2135'. Pulled 56 jts. 5-1/2" csg. Reconnect 5-1/2" at 2129' w/csg. patch. 12/94 Pulled tbg., ran logs, ran tbg. w/ packer @ 6471'																																																				
<b>PRODUCTION HISTORY:</b> <table border="1"> <thead> <tr> <th></th> <th>MV</th> <th>DK</th> <th></th> <th>RESERVE INFORMATION:</th> <th>MV</th> <th>DK</th> <th></th> </tr> </thead> <tbody> <tr> <td>Cumulative as of 2/97:</td> <td>1598</td> <td>1957</td> <td>MMcf</td> <td>Gross EUR</td> <td>2140</td> <td>2453</td> <td>MMcf</td> </tr> <tr> <td>Current as of 2/97:</td> <td>73</td> <td>19</td> <td>Mcf</td> <td>Gross Remaining Reserves</td> <td>542</td> <td>496</td> <td>MMcf</td> </tr> </tbody> </table>					MV	DK		RESERVE INFORMATION:	MV	DK		Cumulative as of 2/97:	1598	1957	MMcf	Gross EUR	2140	2453	MMcf	Current as of 2/97:	73	19	Mcf	Gross Remaining Reserves	542	496	MMcf																									
	MV	DK		RESERVE INFORMATION:	MV	DK																																														
Cumulative as of 2/97:	1598	1957	MMcf	Gross EUR	2140	2453	MMcf																																													
Current as of 2/97:	73	19	Mcf	Gross Remaining Reserves	542	496	MMcf																																													
<b>PIPELINE:</b> Williams Field Service																																																				

JME 4/1/97