## UNITED STATES

## DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Type of Well  GAS  OIL & GAS COMPANY  Address & Phone No. of Operator  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  10. Field and Pool 1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Subsequent Report  Plugging Back  Non-Routine Fracturing  Casing Repair  Water Shut off  Final Abandonment  Altering Casing Tours Installation  Conversion to Injection  X Other - Pump Installation	Type of Well  GAS  OIL & GAS COMPANY  Name of Operator  RESCURCES  OIL & GAS COMPANY  Address & Phone No. of Operator  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  10. Field and Pool  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X_ Notice of Intent  Abandonment  Recompletion  New Construction  Other - Pump Installation					
Type of Well  GAS  OIL & GAS COMPANY  Address & Phone No. of Operator  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  10. Field and Pool 1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Subsequent Report  Plugging Back  Non-Routine Fracturing  Casing Repair  Water Shut off  Final Abandonment  Altering Casing Tours Installation  Conversion to Injection  X Other - Pump Installation	Type of Well  GAS  OIL & GAS COMPANY  NAME of Operator  OIL & GAS COMPANY  OIL & GAS COMPANY  OIL & GAS COMPANY  8. Well Name & Num Howell C #3A PO Box 4289, Farmington, NM 87499 (505) 326-9700  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M 10. Field and Pool 1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  11. Check Appropriate Box to Indicate Nature of Notice, Report, Other Data Type of Submission  X. Notice of Intent  Abandonment  Plugging Back Non-Routine Fracturing Recompletion New Construction  New Construction New Construction  New Construction  Plugging Back Non-Routine Fracturing Casing Repair Water Shut off Final Abandonment Altering Casing Conversion to Injection X. Other - Pump Installation  It is intended to install a pump in the subject well according to the attached		Sundry Not:	ices and Reports on Wells		070 E Pil 1:
Address & Phone No. of Operator  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  Location of Well, Footage, Sec., T, R, M  10. Field and Pool  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Recompletion  Subsequent Report  Plugging Back Non-Routine Fracturing  Casing Repair  Water Shut off  Final Abandonment  Altering Casing Conversion to Injection  X Other - Pump Installation  3. Describe Proposed or Completed Operations	Address & Phone No. of Operator  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  Location of Well, Footage, Sec., T, R, M  10. Field and Pool Blanco Mesaverd 11. County and Stat San Juan Co, NM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA Type of Submission  X Notice of Intent Abandonment Recompletion New Construction New Construction New Construction New Construction Non-Routine Fracturing Casing Repair Water Shut off Final Abandonment Altering Casing Conversion to Injection X Other - Pump Installation  3. Describe Proposed or Completed Operations  It is intended to install a pump in the subject well according to the attached			DIE VOV 16	1999 05.	Lease Number SF-078580 If Indian, All.
Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 PO Bo	Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 Po Bo		f Operator	em coal	o DIVA	Unit Agreement N
Address & Phone No. of Operator  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Subsequent Report  Plugging Back  Casing Repair  Casing Repair  Water Shut off  Final Abandonment  Altering Casing  Conversion to Injection  X Other - Pump Installation  8. Well Name & Num  Howell C #3A  Howell C #3A  Howell No.  30-045-22834  10. Field and Pool  Blanco Mesaverd  11. County and State  San Juan Co, NM  County and State  San Juan Co, NM  Abandonment  Change of Plans  Recompletion  New Construction  Non-Routine Fracturing  Casing Repair  Water Shut off  Conversion to Injection  X Other - Pump Installation	Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 PO Bo			Willia Dillia	3	
PO Box 4289, Farmington, NM 87499 (505) 326-9700  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  10. Field and Pool Blanco Mesaverd 11. County and Stat San Juan Co, NM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Recompletion  Recompletion  Subsequent Report  Plugging Back  Non-Routine Fracturing  Casing Repair  Water Shut off  Final Abandonment  Altering Casing  Conversion to Injection  X Other - Pump Installation  3. Describe Proposed or Completed Operations	PO Box 4289, Farmington, NM 87499 (505) 326-9700  PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  10. Field and Pool Blanco Mesaverd 11. County and Stat San Juan Co, NM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Recompletion  New Construction  New Construction  New Construction  New Construction  Casing Repair  Casing Repair  Water Shut off Final Abandonment  Altering Casing  Conversion to Injection  X Other - Pump Installation  3. Describe Proposed or Completed Operations  It is intended to install a pump in the subject well according to the attached	RES	SOURCES OIL	& GAS COMPANY	8.	Well Name & Numb
PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Recompletion  Plugging Back  Casing Repair  Casing Repair  Final Abandonment  Altering Casing  Conversion to Injection  X Other - Pump Installation  Pescribe Proposed or Completed Operations	PO Box 4289, Farmington, NM 87499 (505) 326-9700  Location of Well, Footage, Sec., T, R, M  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  _X_ Notice of Intent  _ Abandonment _ Change of Plans _ Recompletion _ Subsequent Report _ Plugging Back _ Non-Routine Fracturing _ Casing Repair _ Water Shut off _ Final Abandonment _ X_ Other - Pump Installation  B. Describe Proposed or Completed Operations  It is intended to install a pump in the subject well according to the attached	Addres	s & Phone No. of Opera	tor		Howell C #3A
Location of Well, Footage, Sec., T, R, M  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  18. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Recompletion  Subsequent Report  Plugging Back  Casing Repair  Casing Repair  Water Shut off  Final Abandonment  X Other - Pump Installation  30-045-22834  10. Field and Pool  Blanco Mesaverd  11. County and State  San Juan Co, NM  Abandon Mesaverd  12. Check Appropriate Box To Indicate Nature OF Notice, Report, Other DATA  Type of Action  New Construction  Non-Routine Fracturing  Casing Repair  Water Shut off  Conversion to Injection  X Other - Pump Installation	Location of Well, Footage, Sec., T, R, M  1860'FSL, 790'FEL, Sec.7, T-30-N, R-8-W, NMPM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  _X_ Notice of Intent  _ Abandonment _ Change of Plans _ Recompletion _ New Construction _ New Construction _ New Construction _ New Construction _ Non-Routine Fracturing _ Casing Repair _ Water Shut off _ Final Abandonment _ Altering Casing _ Conversion to Injection _ X_ Other - Pump Installation  3. Describe Proposed or Completed Operations  It is intended to install a pump in the subject well according to the attached				9.	API Well No.
Blanco Mesaverd  11. County and Stat  San Juan Co, NM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Recompletion  Subsequent Report  Plugging Back Non-Routine Fracturing  Casing Repair  Vater Shut off  Final Abandonment  Altering Casing Conversion to Injection  X Other - Pump Installation  3. Describe Proposed or Completed Operations	Blanco Mesaverd  11. County and Stat  San Juan Co, NM  2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Recompletion  Plugging Back  Non-Routine Fracturing  Casing Repair  Vater Shut off  Altering Casing  Conversion to Injection  X Other - Pump Installation  Total abandonment  Recompleted Operations  It is intended to install a pump in the subject well according to the attached					
2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  _X_ Notice of Intent  Subsequent Report  Subsequent Report  Final Abandonment  Change of Plans  Recompletion  New Construction  Non-Routine Fracturing  Casing Repair  Water Shut off  Final Abandonment  Altering Casing  Conversion to Injection  X_ Other - Pump Installation  3. Describe Proposed or Completed Operations	2. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  X Notice of Intent  Abandonment  Recompletion  Plugging Back  Non-Routine Fracturing  Casing Repair  Vater Shut off  Final Abandonment  Altering Casing  Conversion to Injection  X Other - Pump Installation  It is intended to install a pump in the subject well according to the attached	Locati	on of Well, Footage, S	Sec., T, R, M	10.	
C. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  _X Notice of Intent  _ Abandonment _ Change of Plans  _ Recompletion _ New Construction  _ Subsequent Report _ Plugging Back _ Non-Routine Fracturing  _ Casing Repair _ Water Shut off  _ Final Abandonment _ Altering Casing _ Conversion to Injection  _ X Other - Pump Installation  3. Describe Proposed or Completed Operations	CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA  Type of Submission  _X_ Notice of Intent Abandonment Change of Plans _ Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing _ Casing Repair Water Shut off _ Final Abandonment Altering Casing Conversion to Injection _ X_ Other - Pump Installation  3. Describe Proposed or Completed Operations  It is intended to install a pump in the subject well according to the attached	1860'F	SL, 790'FEL, Sec.7, T-	30-N, R-8-W, NMPM *>	11	
Type of Submission  X Notice of Intent Subsequent Report Tinal Abandonment Altering Casing Repair Altering Casing Conversion to Injection X Other - Pump Installation  CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA Type of Action Type of Action Change of Plans Recompletion New Construction Non-Routine Fracturing Casing Repair Water Shut off Conversion to Injection X Other - Pump Installation	Type of Submission  X_ Notice of Intent  Subsequent Report  Tiple of Action  Change of Plans  Recompletion  Plugging Back  Conversion to Injection  Casing Repair  Altering Casing  Conversion to Injection  X_ Other - Pump Installation  Type of Action  Type of Action  Change of Plans  Recompletion  New Construction  Non-Routine Fracturing  Casing Repair  Water Shut off  Altering Casing  Conversion to Injection  The Subsequent Report  Conversion to Injection  The Subsequent Report  The Subsequent Report				11.	_
Type of Submission  _X_ Notice of Intent	Type of Submission  _X_ Notice of Intent  _Abandonment Change of Plans  _Recompletion New Construction  Subsequent Report Plugging Back Non-Routine Fracturing  Casing Repair Water Shut off  Final Abandonment Altering Casing Conversion to Injection  X_ Other - Pump Installation  3. Describe Proposed or Completed Operations  It is intended to install a pump in the subject well according to the attached					
			-	Casing Repair Wa		
		It	Final Abandonment scribe Proposed or Comp	Casing Repair Wa Altering Casing Co X Other - Pump Installat	nversion t	o Injection
		It	Final Abandonment scribe Proposed or Comp	Casing Repair Wa Altering Casing Co X Other - Pump Installat	nversion t	o Injection
		It	Final Abandonment scribe Proposed or Comp	Casing Repair Wa Altering Casing Co X Other - Pump Installat	nversion t	o Injection
		It	Final Abandonment scribe Proposed or Comp	Casing Repair Wa Altering Casing Co X Other - Pump Installat	nversion t	o Injection
4. I hereby certify that the foregoing is true and correct.	4. I hereby certify that the foregoing is true and correct.	It pro	Final Abandonment  scribe Proposed or Comp  is intended to install ocedure.	Casing Repair Wa Altering Casing Co _X_ Other - Pump Installat pleted Operations  l a pump in the subject well	nversion t	o Injection
igned lique ale Title Regulatory Administrator_Date 10/28/99	igned Many Ale Title Regulatory Administrator Date 10/28/99	It pro	Final Abandonment  scribe Proposed or Comp  is intended to install ocedure.	Casing Repair Wa Altering Casing Co X_ Other - Pump Installat  pleted Operations  I a pump in the subject well  e foregoing is true and corre	nversion tion  according  ect.  strator_Date	o Injection
	rigned Alay Ale Title Regulatory Administrator Date 10/28/99trc	It pro	Final Abandonment  scribe Proposed or Comp is intended to install ocedure.  hereby certify that the	Casing Repair Wa Altering Casing Co X_ Other - Pump Installat  Pleted Operations  I a pump in the subject well  e foregoing is true and correct  Title Regulatory Adminis	nversion tion  according  ect.  strator_Date	to the attached

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

## Howell C #3A Mesaverde DPNO: 4794801 1860'FSL, 790' FEL

Unit I, Section 07, T-30-N, R-8-W

Latitude / Longitude: 36° 49.3854' / 107° 42.58758' Rod Pump Installation Procedure

Summary/Recommendation:

The Howell C #3A was drilled and completed in the Mesaverde formation in 2<sup>nd</sup> Quarter of 1978. Due to the inability for this well to produce up the tubing, a tubing repair was performed on this well in 1998. Currently, the well is producing on the casing 185 MCF/D. A pumping unit will be installed, increasing production to 275 MCF/D.

## Pump Installation Procedure:

- Install used C-160 pumping unit.
- Hold safety meeting. Comply with all NMOCD, BLM and Burlington safety and environmental 2. regulations. Prior to moving in rig, make one-call and then verify rig anchors and dig pit.
- MOL and RU workover rig. Obtain and record all wellhead pressures. NU relief line. Blow well 3. down and kill with 2% KCL water if necessary. ND WH and NU BOP with stripping head. Test and record operation of BOP rams. Have wellhead and valves serviced as necessary. Test secondary seal and replace/install as necessary.
- Mesaverde, 2-3/8", 4.7# J-55 tubing is set at 5420'. Release donut; pick up additional joints of 4. tubing and tag bottom. (Record depth). TOOH with tubing. PBTD should be at ±5674'. Visually inspect tubing for corrosion and replace any bad joints. Remove any unnecessary equipment (i.e. Tbg stop, bumper spring, etc.). Check tubing for scale build up and notify Operations Engineer.
- PU and TIH with 3-7/8" bit, bit sub and watermelon mill on 2-3/8" tubing and round trip to below 5. perforations, cleaning out with air/mist. NOTE: When using air/mist, minimum mist rate is 12 bph. If scale is present, contact Operations Engineer to determine methodology for removing scale from casing and perforations.
- Rabbit all tubing prior to TIH. TIH with a bull plug on the bottom of one joint of 2-3/8" 4.7# 6. tubing, 4' perforated sub, in-line check, 1.78" seating nipple, and then remaining 2-3/8" tubing. Replace any bad joints.
- Land tubing at ± 5650'. NOTE: If excessive fill is encountered, discuss this landing depth 7. with Operations Engineer. Pump off check valve. ND BOP and NU WH.
- If fill was encountered, contact Operations Engineer to discuss possibility of running a sand screen 8. on the pump. PU and TIH with 2" x 1.25" x 10' x 14' RHAC-Z insert pump, from Energy Pump & Supply, 3/4" Grade D rods with spray-metal couplings to ±3500', and molded paraffin scrapers to surface. Test pump action and hang rods on pumping unit. RD and MOL. Return well to production.

Recommended: My Hollh
Operations Engineer

Approved:

Bruce D. Bown 10 - 27 - 99
Drilling Superintendent

Mike Haddenham

Pump and Rods:

Energy Pump & Supply

Office - (564-2874)

Leo Noyes

Operations Engineer:

Office - (326-9577)

Home - (326-3102) Pager (327-8427)