UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RECEIVED

Sundry Not	ices and Reports	on Wells	55	
Type of Well GAS		FARMACION, N	5.	Lease Number NM-04209 If Indian, All. Tribe Name
Name of Operator			7. n 52 (3)	Unit Agreement
BURLINGTON	& GAS COMPANY	DECEN	1993	w.11 w a w
Address & Phone No. of Opera PO Box 4289, Farmington, NM		- FORM (CO) NAME	, DIŅ.	Well Name & Num Hancock #4A API Well No.
Location of Well, Footage, S 810'FNL 1560'FWL, Sec.23, T-	ec., T, R, M	DIST.	3 10.	30-045-26384 Field and Pool Blanco Mesaverd County and Stat San Juan Co, NM
. CHECK APPROPRIATE BOX TO IN			, OTHER	DATA
Type of Submission _X_ Notice of Intent	Abandonment Recompletion			
Subsequent Report	Plugging Bad	ck Non-R	outine I	Fracturing
	Casing Repai	ir Water	Shut of	Ef
Final Abandonment . Describe Proposed or Comp	Other -	ir Water sing Conve		
	Altering Case Other - leted Operations to the Mesaverde	sing Conve	the sub	iect well
. Describe Proposed or Comp	Altering Case Other - leted Operations to the Mesaverde attached procedure foregoing is true (JLD) Title Regression	formation on and wellbore	the subdiagram	ject well

Hancock #4A

Menefee Pay Add Procedure Unit C, Section 23, T28N, R09W

Lat: 36°-39.14886'/Long: 107°-45.66282'

The well is currently completed in the Point Lookout only. It is intended to add the Menefee to this existing Mesaverde producer. The pay add will be sand fracture stimulated in a single stage using a total of 1,711 bbls slickwater and 60,000 lbs 20/40 sand.

- 1. Inspect location and test rig anchors. Comply with all NMOCD, BLM, Forestry & BR rules and regulations. Dig flowback pit or set flowback tank. Haul to location 2 joints 2-7/8" N-80 tubing and 6-400 bbl frac tanks.
- 2. MIRU. Fill 400 bbl tanks with 2% KCL water. Run fluid tests on water. Filter water based upon stimulation company water analysis. Record and report SI pressures on tubing, casing and bradenhead. Lay blowdown line. Blow well down and kill with 2% KCL water as necessary. ND WH and NU BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
- 3. TOOH with 2-3/8" Mesaverde production string set at 5044'. Visually inspect tubing, note and report any scale in/on tubing. Replace bad joints as needed.
- 4. PU and RIH with a 3-7/8" bit, 4-1/2" (10.5 lb/ft) casing scraper on the 2-3/8" tubing string. Clean out to PBTD (~5149') with air/mist. TOOH.
- 5. RU wireline. RIH and set CIBP at 4680'. RD wireline.
- 6. TIH with 4-1/2" packer on the 2-3/8" tubing string. Set packer just above CIBP. PT CIBP to 3600 psi. Bleed off pressure. Release packer. Load hole with 2% KCL bbls water. PUH to 4570' and spot 4 bbls 15% HCL across Menefee perforation interval from 4380-4564'.

All acid on this well to contain the following additives per 1000 gals.

aoia oii ii		
2 gal	HAI-81M	Corrosion inhibitor
5 gal	FE-1A	Iron Control
5 gal	FE-2A	Iron Control
1 gal	SSO-21	Surfactant
1 gal	ClaSta XP	Clay control

- 7. RU logging company. Run GR-CBL-CCL from PBTD to surface casing under 1000 psi. Evaluate CBL. Good cement bond must exist across the Menefee perforation interval (4380-4564') and across the liner top at 2668' to continue with procedure.
- 8. TIH with 7" packer on 2 joints 2-7/8" N-80 tubing. Set packer at ~60' for wellhead isolation. Pressure test casing to 3000 psi (80% 7" burst). Bleed off pressure. Release packer and TOOH.
- 9. RU wireline. Perforate Menefee as follows using select fire HSC guns loaded with Owens HSC-3125 302T 10 gram charges set at 2 SPF (Av. perf diameter 0.29", Av. pen. 16.64" in concrete). **Be sure to perforate from top down**.

4380', 4382', 4466', 4474', 4476', 4502', 4516', 4539', 4541', 4543', 4558', 4560', 4563', 4564' at 2 SPF (28 new holes, 2 old holes)

RDMO wireline company.

- 10. TIH with 4-1/2" packer on the 2-3/8" tubing string. Set packer at 4180'.
- 11. RU stimulation company. Pressure test surface lines to 4600 psi. Apply 500 psi to annulus. Monitor annulus for communication. Breakdown Menefee perforations with 25 bbls 15% HCL. Drop 60 RCN 7/8" 1.3 specific gravity perf balls evenly spaced throughout job. Attempt to balloff to 3600 psi. Use same additives as in Step #6. Bleed off pressure and release packer. Lower packer to 4600' to knock off perf balls. TOOH.
- 12. TIH with 7" packer on 2 joints 2-7/8" N-80 tubing. Set packer at ~60' for wellhead isolation.
- 13. Maximum surface treating pressure is 3000 psi. Fracture stimulate Menefee with 60,000 lbs 20/40 Arizona sand in 1,711 bbls slickwater at 45 BPM. If pressures allow, increase injection rate accordingly. Average surface treating pressure will be 2570 psi. Total estimated casing and perforation friction will be 2718 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)		
Pad	12,500			
0.5 ppg	22,000	11,000 7,000		
1.0 ppg	7,000			
1.5 ppg	15,333	23,000		
2.0 ppg	9,500	19,000		
Flush (slickwater)	5,529			
Totals	71,862	60,000		

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing.

Frac with the following additives per 1000 gals 2% KCL water:

- * 0.18 lb
- BE-6
- Biocide

0.5 gals

Friction Reducer

Record ISIP, 5 min SIP, 10 min SIP and 15 min SIP.

RDMO stimulation company.

- Open well through choke manifold and monitor flow. Flow at 20 BPH or less, if sand is observed. When pressures allow, release 7" packer and TOOH. LD 2-7/8" N-80 tubing and packer.
- 15. RIH with 3-7/8" bit on 2-3/8" tubing and clean out to CIBP at 4680'. Monitor gas and water returns when applicable. **Take Menefee pitot gauge before drilling up CIBP.** Drill up CIBP. CO to PBTD with air. Blow well at PBTD to check water rates. If needed, continue to blow well for clean up. TOOH.
- 16. TIH with an expendable check, one 2-3/8" joint, standard SN and remaining 2-3/8" tubing. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. **Obtain**

Hancock #4A 1999 Discretionary Menefee Pay Add

final Menefee/Point Lookout pitot gauge. Land tubing at 5078'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

Recommended: 4. n. obication Engineer

Approved:

Contact:

Jennifer Dobson

599-4026 (work)

564-3244 (home)

324-2461 (pager)

PERTINENT DATA SHEET 10/13/98

WELLNAME:	Hancock #4A				DP NUMBER: PROP. NUMBER:		39A - MV 254500 - MV	
WELL TYPE:	Blanco Mesaverde				ELEVATION:	DF GL	6182° 6170°	
LOCATION:	810' FNL, 1560' FWL Unit C, Sec. 23, T28N				INITIAL POTENTIAL:		MY 3,205	MCFD
	San Juan County, NM	l			INITIAL SITP:		758	psi
OWNERSHIP:	GWI: NRI: SJBT:	MY 87.5000% 72.1875% 0.0000%			DRILLING:	С	SPUD DATE: OMPLETED: TAL DEPTH: PBTD:	7/12/85 9/10/85 5159' 5149'
CASING RECORD: HOLE SIZE	SIZE	WEIGHT	GRADE	DEPTH	EQUIP.	CI	EMENT	тос
12-1/4"	9-5/8*	32.2#	H-40	299'	CASING	130) sx	Surface (circ.)
8-3/4"	7"	20#	K-55	2818'	CASING	160) sx	1000' (TS)
6-1/4"	4-1/2"	10.5#	K-55	2668-5159'	LINER	32	5 sx	2668' (circ.)
* 4-1/2" Marker Jt @ 4061								
TUBING RECORD:	2-3/8" SN @ 5011'	4.7#	J-5 5	5044'				
FORMATION TOPS:	Ojo Alamo Pictured Cliffs Lewis		1420' 2440' 2620'	i	Cliffhouse Menefee Point Lookout	4145' 4172' 4730'		
LOGGING:	Dresser Atlas (7/17/85	5): GR-IEL-CDI	т					
PERFORATIONS	Lwr Point Lookout	4930', 4936', 49	52', 4965', 49	70', 5006', 502	4', 5051', 5070', 5078' (1 SPF	-)		
		4476°, 4560°, 47 4846°, 48639°, 4			i1', 4755', 4765', 4768', 4770'	, 4776', 4790', 480'	1', 4804', 4807', 4	1829', 4839',
STIMULATION:	Lwr Point Lookout	Broke down w/	500 gals 15%	HCL and 20 b	alls. Frac'd w/ 48,000 lbs 20/	40 sand in 60,100	gais water at 25	BPM and 1000 psi.
	Point Lookout	Broke down w/	115C gals 15	% HCL and 46	balls. Frac'd w/ 90,000 lbs 20	0/40 sand in 102,1	06 gals water at	52 BPM and 1300 psi.
WORKOVER HISTORY:	N/A							
PRODUCTION HISTORY:		MY			RESERVE INFORMA	TION:	DK	
Cumulative Curren		745 103	MMCF MCFD		Gross EUR Gross Remaining Re	eserves	1,380 635	MMCF MMCF
								···.

Hancock #4A

Unit C, Section 23, T28N, R9W San Juan County, NM

Lat: 36° - 39.14886'/Long: 107° - 45.66282'

Current Schematic

Proposed Schematic

