UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Well	.S	
	5.	Lease Number SF-078716A
1. Type of Well GAS	6.	If Indian, All. or Tribe Name
	7.	Unit Agreement Name
2. Name of Operator		
BURLINGTON		
OIL & GAS COMPANY	٥	Well Name & Number
3. Address & Phone No. of Operator	8.	Hubbell #3E
PO Box 4289, Farmington, NM 87499 (505) 326-9700	9.	API Well No. 30-045-23881
4. Location of Well, Footage, Sec., T, R, M	10.	Field and Pool
1540'FNL, 1020'FEL, Sec. 18, T-29-N, R-10-W, NMPM	11.	Blanco MV/Basin DK County and State
		San Juan Co, NM
Subsequent Report Plugging Back	tion Change of Pla New Construct Non-Routine I Water Shut of	ans tion Fracturing Ef
13. Describe Froposed or Completed Operations		
	agram. The well	wild them be le commingle order
14. I hereby certify that the foregoing is true and Signed Machine (PMPOpps) Title Regul (This space for Federal or State Office use) APPROVED BY Title (Litry Tlan CONDITION OF APPROVAL if any)	atory Administr	
CONDITION OF APPROVAL, if any:	<u> </u>	



District I PO Box 1980. Hobbs. NM 88241-1980

District II PO Drawer DD. Aniesia. NM 88211-0719

District III 1000 Rio Brazos Ad., Aztec, NM 87410

District IV PO Box 2088, Santa Fe. NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe. NM 87504-2088

Form C Revised February 21. Instructions on Submit to Appropriate District Of State Lease - 4 Co. Fee Lease - 3 Cc

AMENDED REPO

	WELL LOCATION	AND ACREAGE DED	ICATION PLAT	
'API Number	²Pool Code		'Pool Name	
30-045-23881	72319/71599		erde/Basin Da	akota
*Property Code		*Property Name HUBBELL		Well Number
7133 '0GRID No.				*Elevation
14538	BURLINGTON RES	*Operator Name DURCES OIL & GAS	COMPANY	5619
	10 SL	rface Location		
H 18 29		from the North/South line 540 North		East SAN JL
		ion If Different		
UL or lot no. Saction Towns	that Range Lot Idn Fet	from the North/South line	Feet from the Ea	ast/West line County
MV-E/320.35 DK-E/320.35	or Infill M Consolidation Code 5	Order No.	C : }	
NO ALLOWAELE WILL F	BE ASSIGNED TO THIS C	OMPLETION UNTIL ALL HAS BEEN APPROVED	INTERESTS HAVE BY THE DIVISION	BEEN CONSOLIDATE
*Not re-surveyed Prepared from p. By: Fred B. Kerr Dated: 12 September 13 September 13 September 14 September 15 September	lat (1979) (197	102	gignature O' Peggy Br Printed Name Regulate Title 1-16-98 Date BSURVEYO	cadfield e cry Administra OR CERTIFICATI Let the well location shown on this let in not show of actual surveys made les ion and that the same is true a con my belief.

HUBBELL #3E MV-DK Recompletion Procedure H 18 29 10 San Juan County, N.M.

Lat-Long: 36-43.73" - 107-55.18"

PROJECT SUMMARY: Open the Mesaverde in this existing 1981 vintage 4-1/2" cased Dakota well and commingle.

- 1. Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. NU 7-1/16" 3000 psi BOP w/flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.
- 2. Set blanking plug in S.N. @ 6493' in 2-3/8" tbg and pressure test tbg to 2000 psi. TOH w/2-3/8" tbg. Run 4-1/2" csg scraper on 2-3/8" tbg to 4800". TOH. Run 4-1/2" retrievable BP on 2-3/8" tbg and set @ 4800" and top w/1 sx sand.
- 3. W/2-3/8" tbg @ 4780', load hole w/1% KCL water. TOH.
- 4. Run CBL from 4780' to find TOC above DV tool @ 4982' and above DV tool @ 2166' and an advanced integrated data processed GSL neutron log 4780'-3500' and correlate to attached open hole log. If necessary, pressure csg to 800 psi for CBL log. **Hot-shot** logs to Mike Pippin (326-9848) to determine location of MV perfs. Pressure test 4-1/2" csg to 800 psi.

POINT LOOKOUT:

5. TIH w/2-3/8" tbg open ended and spot 150 gal 15% HCL acid across Point Lookout perfs @ about ~4653'-4432'. TOH.

All acid on this well to contain the following additives per 1000 gal:

2 gal CI-22 corrosion inhibitor 5 gal Ferrotrol-300L iron control 1 gal Flo-back 20 Surfactant

0.5 gal Clay Master-5C clay control

- 6. Using GSL log, perf Point Lookout w/about 20 holes @ 1 spf @ about 4432' to 4653'. Perf w/select fire HSC gun using HSC-3125-302T 10 gr Owen jets which should give a 0.29" hole and 16.64" of penetration in concrete.
- 7. Fill 6 400 bbl. frac tanks with 1% KCL water. If necessary, filter all water to 25 microns. Five tanks are for gel and one tank for breakdown water. Usable gel water required for frac is 1453 bbls.
- 8. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string and set @ 4780' and pressure test ret BP @ 4800' to 3000 psi, then reset pkr @ 4200'. (Run 2 jts 2-3/8" N-80 on top of pkr). W/ 500 psi on annulus, breakdown and attempt to balloff Point Lookout perfs w/1500 gal 15% HCL acid and 150% excess RCN 7/8" 1.3 sp gr perf balls. Use same acid additives as in step #5. Max. pressure is 4700 psi. Lower pkr to 4660' to knock off perf balls. Reset pkr @ 4300'.
- 9. Pressure annulus to 500 psi and monitor during frac job. Frac Point Lookout w/60,000 gals. of 30# gel and 90,000# 20/40 Arizona sand. Pump at 35 BPM. Sand to be tagged w/ 3 RA tracers. Max. pressure is 5500 psi and estimated treating pressure is 4200 psi. Frac string friction @ 30 BPM is 2816 psi. Treat per the following schedule:

	Water	Sand Vol.
Stage	<u>(Gals.)</u>	<u>(lbs.)</u>
Pad	15,000	
1.0 ppg	10,000	10,000
2.0 ppg	25,000	50,000
3.0 ppg	10,000	30,000
Flush	(1,070)	0
Totals	60,000	90,000#

If well is on vaccum near end of frac job, cut flush as necessary to avoid overflushing and slow rate during flush. Frac with the following additives per 1000 gal frac fluid.

* 30# J-48	(Guar Gel mix in full tank - 16,000 gal)
* 1.0 gal. Aqua Flow	(Non-ionic Surfactant mix in full tank)
* 1.0# gvw-3	(Enzyme Breaker mix on fly)
* 1.0# B-5	(Breaker mix on fly)
* 0.38# - Fracide 20	(Bacteriacide in full tank)

10. Shut well in for 4 hrs to let gel break. TOH w/2-7/8" tbg and pkr. TIH w/3-7/8" bit on 2-3/8" tbg and C.O. Point Lookout w/air/mist to insure a ret BP can be set @ 4400'.

MENEFEE:

- 11. Set ret BP @ 4400' on wireline and top w/1 sx sand. TIH w/4-1/2" pkr on 2-3/8" tbg and set @ 4390'. Pressure test BP @ 4400' to 3000 psi. Spot 270 gal 15% HCL acid across Menefee perfs at about ~4384'.~3980'. Use same acid additives as in step #5.
- 12. Using GSL log, perf Menefee w/about 20 holes @ 1 spf @ about 3980'-4384'. Perf w/select fire HSC gun using HSC-3125-302T 10 gr Owen jets which should give a 0.29" hole and 16.64" of penetration in concrete.
- 13. Fill 6 400 bbl. frac tanks with 1% KCL water. If necessary, filter all water to 25 microns. Five tanks are for gel and one tank for breakdown water. Usable gel water required for frac is 1690 bbls.
- 14. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string and set pkr @ 3700'. (Run 2 jts 2-3/8" N-80 on top of pkr). W/ 500 psi on annulus, breakdown and attempt to balloff Menefee perfs w/1500 gal 15% HCL acid and 150% excess RCN 7/8" 1.3 sp gr perf balls. Use same acid additives as in step #5. Max. pressure is 4700 psi. Lower pkr to 4390' to knock off perf balls. Reset pkr @ 3900' and prepare to frac.
- 15. Pressure annulus to 500 psi and monitor during frac job. Frac Menefee w/70,000 gals. of 30# gel and 120,000# 20/40 Arizona sand. Pump at 35 BPM. Sand to be tagged w/ 3 RA tracers. Max. pressure is 5500 psi and estimated treating pressure is 4200 psi. Frac string friction @ 30 BPM is 2816 psi. Treat per the following schedule:

	Water	Sand Vol.
Stage	<u>(Gals.)</u>	<u>(lbs.)</u>
Pad	15,000	
1.0 ppg	10,000	10,000
2.0 ppg	25,000	50,000
3.0 ppg	20,000	60,000
Flush	(948)	0
Totals	70.000	120,000#

If well is on vaccum near end of frac job, cut flush as necessary to avoid overflushing and slow rate during flush. Frac with the following additives per 1000 gal frac fluid.

* 30# J-48

(Guar Gel mix in full tank - 16,000 gal)

* 1.0 gal. Aqua Flow

(Non-ionic Surfactant mix in full tank)

* 1.0# gvw-3

(Enzyme Breaker mix on fly)

* 1.0# B-5

(Breaker mix on fly)

* 0.38# - Fracide 20

(Bacteriacide in full tank)

- 16. Shut well in for 4 hrs to let gel break.
- 17. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr. or less, if sand is observed. **Take pitot gauges when possible**. TOH w/pkr.
- 18. TIH w/retrieving tool on 2-3/8" tbg and C.O. to ret BP @ 4400' w/air/mist. Monitor gas and water returns and <u>Take pitot gauges when possible.</u> When well is sufficiently clean, retrieve BP @ 4400'. TOH.
- 19. TIH w/retrieving tool on 2-3/8" tbg and C.O. (w/air/mist) to ret BP @ 4800'. <u>Take pitot</u> gauges when possible. When well is sufficiently clean, retrieve BP @ 4800' and TOH.
- 20. TIH w/3-7/8" bit on 2-3/8" tbg and C.O. to PBTD 6624' w/air/mist. Take pitot gauges when possible.
- 21. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 4800'- 3700 and perf eff log across all perf intervals from 6557'-3900'.
- 22. TIH and rabbit 2-3/8" 4.7# J-55 tbg w/standard seating nipple one joint off bottom and again cleanout to 6450'. When wellbore is sufficiently clean, land tbg @ 6650 KB. <u>Take final water and gas rates.</u>
- 23. ND BOP and NU wellhead and tree. Rig down and release rig.

Recommended:

Production Engineer

Approved:_

Drilling Superintenden

Approved

Team Leader

VENDORS:

Wireline:

Blue Jet

325-5584

Fracturing:

Howco

325-3575

RA Tag:

Pro-Technics

326-7133

PMP

Pertinent Data Sheet - HUBBELL #3E MV-DK

Location: 1540' FNL & 1020' FEL, Unit H, Section 18, T29N, R10W, San Juan County, New Mexico

Field: Blanco Mesaverde

Completed: 4/6/81

Elevation:

Spud Date: 12/10/80

5622' GL

TD: 6641'

Basin Dakota 10' KB

PBTD: 6624'

<u>DP #:</u> MV34326A-DK50553A **LEASE:** Fed: SF 078716A

GWI: 100% NRI: 84%

Prop#: 012568000

Initial Potential: DK: After frac gauge = 166 MCF/D; SICP=1247 PSI

5495' 6440'

Casing Record:

Hole Size 12-1/4" 7-7/8"	<u>Csq Size</u> 8-5/8" 4-1/2"	Wt. & Grade 24# J-55 10.5# J-55 DV Tool @	Depth Set 216' 6641' 4982'	<u>Cement</u> 165 cf 364 cf 549 cf	Cmt Top Circ Cmt 5442'@ 75% Eff. 3174'@ 75% Eff.
		DV Tool @	4982'	549 ct	31/4@ /5% EII.
		DV Tool @	2166'	616 cf	10 00 ' - Survey

Tubing Record:

 Tbg. Size
 Wt. & Grade
 Depth Set

 :2-3/8"
 4.7# J-55
 6525'
 208 Jts

 S.N. @
 6493'

Formation Tops:

Ojo Alarno	513'	Gallup
Kirtland Shale	834'	Dakota
Fruitland:	1700'	
Pictured Cliffs:	1938'	
Mesave de	3510'	
Menefee	3632'	
Point Lcokout	4454'	

Logging Record: Induction, Density.

Stimulation: Perf DK w/1 spf @ 6448', 56', 64', 72', 80', 6513', 34', 56' & fraced w/125,000# sand in water.

Workover History: NONE

<u>Production History:</u> DK 1st delivered 1981. DK capacity is 85 MCF/D & cum is 665 MMCF & 4677 BO. Line pressure is about 40 psi and the DK is on a plunger lift system.

Pipeline: EPNG

HUBBELL #3E MV-DK

UNIT H SECTION 18 T29N R10W SAN JUAN COUNTY, NEW MEXICO

