

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

5. Lease Serial No.  
**NM-14794**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
**8910180280**

8. Well Name and No.  
**Maduro Fed. Unit #4**

9. API Well No.  
**30-025-30840**

10. Field and Pool, or Exploratory Area  
**Gem Morrow, Gas**

11. County or Parish, State  
**Lea County, NM**

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other
2. Name of Operator  
**Matador Operating Company**
- 3a. Address  
**310 W. Wall, Ste 906 Midland, TX 79703**
- 3b. Phone No. (include area code)  
**915-687-5955**
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**Unit B, Sec. 29, T19S, R33E  
460' FNL, 1980' FEL**

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

See Attached (recomplete to the Morrow)

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

**Russ Mathis**

Title **Production Manager**

Signature

*Russ Mathis*

Date **11/12/02**

**ACCEPTED FOR RECORD**

SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

**NOV 18 2002**

Title

Date

Conditions of approval, if any, are stated on approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# Matador Operating Company

**Maduro Unit Federal #4**

Sec 29, T19S, R33E

**API #30-025-30840**

Lea County, New Mexico

**Date :** 7/15/2002

**Activity:** POOH w/tbg

**Days On Completion:** 1

**Remarks :** MIRU. Key Service unit. Load tubing with 21 bbls fw. Pump 6 bbls fw .3 BPM at 4500#. Release pressure. ND well head. NU 5K hydraulic BOP. Release packer. POH with 2-7/8 tubing and packer. Send packer to Howco for re-dress. SWI, SDON.

**Date :** 7/16/2002

**Activity:** RIH w/ tools & tbg

**Days On Completion:** 2

**Remarks :** Pick up and RIH with 4-3/4 bit, 6 3-1/2 DC, and 2-7/8 tubing. Tag cement at 12953' KB. Rig is leaking transmission fluid. On sight trouble shooting determines torque converter problems. Must pull transmission for repair. Pulled 5 stands tubing. Bit at 12400'. Will resume operations 7/18.

**Date :** 7/17/2002

**Activity:** Shut down

**Days On Completion:** 3

**Remarks :** Shut down for rig repair.

**Date :** 7/18/2002

**Activity:** Drill out CIBP

**Days On Completion:** 4

**Remarks :** CIH with tools and tubing. Tag cement at 12953' KB. Drill cement and CIBP. Circulated with fresh water 45 mins. Lost 3 bbls. Pressured casing to 2500 psi. Pressure dropped 400 psi in 10 mins. CIH to tag at 13238'. Drilled cement to 13246'. Drill rate stops. Assume to be on CIBP. Circulate with 280 bbls 10# brine. Begin POH with tubing. SWI, SDON.

**Date :** 7/19/2002

**Activity:** RIH with mill shoe and junk

**Days On Completion:** 5

**Remarks :** COH with tools and tubing. Pick up and RIH with 4-3/4 mill shoe and junk basket, DC, and tubing. Drill 4' with cement in returns. Very little fluid loss. Recover small amount of metal and rubber. Work mill up and down with different weight/torque combinations. No solids in returns for 90 mins. POH with tubing and tools. Mill shoe shows no wear. Wires in junk basket appeared untouched. SWI, SDOWE.

**Date :** 7/20/2002 – 7/21/2002

**Activity:** SDFWE

**Days On Completion:** 6 & 7

**Remarks :**

**Date :** 7/22/2002

**Activity:** RIH with bit, tools and tbg

**Days On Completion:** 8

**Remarks :** Pick up and RIH with 4-3/4 bit, DC, and tubing. Drill 1' with cast iron in returns. Very little fluid loss. Stop drilling to circulate hole clean. Gas in returns, no rubber. Pump 1.5 times tubing capacity. SD to check flow. Tubing static. POH with tubing and tools. SWI, SDON.

**Date :** 7/23/2002

**Activity:** RIH w/ mill shoe, tools and tbg

**Days On Completion:** 9

**Remarks :** Pick up and RIH with 4-3/4 OD / 3-5/8 ID mill shoe and junk basket, DC, and tubing. Drill 1' with cast iron and rubber in returns. Remainder of CIBP will take weight. Very little fluid loss. Circulate hole clean. POH with tubing and tools. Recover top slip cone in junk basket. SWI, SDON.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

Date : 7/24/2002

Activity: RIH with grapple, tools and tbg

Days On Completion: 10

Remarks : Pick up and RIH with 2.375" grapple, DC, and tubing (2.375" is the OD of mandrel in Howco CIBP). Set down on CIBP, no catch. Work tubing up and down trying 3 times to latch grapple on to mandrel. CIBP releases and drops. Pick up 3 joints tubing and tag at 13350'. Try to catch, with no result. POH with tubing and tools. Inspection of grapple shows marks only on bottom of overshot. No indication of mandrel size. SWI, SDON.

Date : 7/25/2002

Activity: RIH with mill shoe, tools and tbg

Days On Completion: 11

Remarks : Pick up and RIH with 4-3/4 OD / 3-5/8 ID mill shoe, DC, and tubing. Drill 2", plug releases. CIH to tag at 13505'. Continue mill. Make very little progress in 2-1/2 hours. Remainder of plug is assumed to be turning on top of TCP tools. Very little fluid loss. Circulate hole clean. POH with tubing and tools. Recovered metal rings from between packing elements in junk basket. Cut right on bottom of mill shoe is worn smooth with marks indicating 4" +/- OD object in hole. SWI, SDON.

Date : 7/26/2002

Activity: TIH w/ mill shoe, tools & tbg

Remarks : Pick up and TIH w/ 4 3/4 OD / 2 3/4 ID box tap, DC, and tbg. Set down @ 13505'. Rotate tbg to centralize remainder of CIBP. Regain string weight. Rotate tbg to thread onto fish. TBG torques and releases as expected. TOH w/ same. Do not retrieve CIBP. Find no marks on inside of box tap. Marks on bottom of lip guide indicate additional pieces on top of fish or much larger OD. SWI SD over week end.

Date : 7/27/2002 - 7/28/2002

Activity: SDFWE

Remarks :

Date : 7/29/2002

Activity: Drill out CIBP

Remarks : Pick up and TIH w/ 4 3/4 bit, DC, and tbg. Drill 1' with cast iron in returns. Stop making footage. Circulate clean. TOH w/ tbg & tools. Two teeth on new bit are broken. Assume to be through CIBP and on tbg ris. SWI SDON

Date : 7/30/2002

Activity: Squeeze

Remarks : Well is SI. Preparing to squeeze.

Date : 7/31/2002

Activity: RIH with overshot and grapple

Remarks : RIH with 4.75" OD 'short catch' overshot with 3.625" ID grapple, jars, DC, and tubing (this grapple will expand to catch 3.668" tubing coupling). Set down on top of TCP assembly. Pick up/set down with different combinations of weight and torque. No pick-up at any time. POH with tools and tubing. Find marks on end and outside of overshot. SWI, SDON.

Date : 8/1/2002

Activity: RIH with large ID mill shoe

Remarks : RIH with 4.75" OD mill shoe with 4" ID, jars, DC, and tubing. Wash over top of TCP assembly 3 feet down. Stop making hole. POH with tools and tubing. Find bottom of CIBP, 10" of mandrel, and various pieces of cast and spring steel wedged in extension 30" above shoe. OD of CIBP is 4.06". SWI SDON.

# Matador Operating Company

**Maduro Unit Federal #4**

Sec 29, T19S, R33E

**API #30-025-30840**

Lea County, New Mexico

**Date :** 8/2/2002

**Activity:** POH with TCP

**Remarks :** RIH with 4.75" x 3.625" overshot, jars, DC, and tubing. Set down on top of TCP. Pick up to 20 points over string weight. Jar twice. Grapple releases. Catch guns again. Jar once more 30 points over. Loose guns. Set down, pick up with 6 points more weight. POH with tubing and tools. Tubing is full of water on trip until 3500'. No recovery. Spiral grapple is missing from over shot. SWI, SDFWE.

**Date :** 8/3/2002 – 8/4/2002

**Activity:** SDFWE

**Remarks :**

**Date :** 8/5/2002

**Activity:** POH with TCP

**Remarks :** RIH with 4.75" x 3.625" short catch overshot, jars, DC, and tubing. Set down on top of TCP. Pick up to 20 points over string weight. TCP guns in grapple and weight 4 points over string weight. Set down twice to assure good contact within grapple. POH with tubing, tools, and TCP guns. Lay down TCP tools. Find part of spiral grapple from 8/2 on top of tubing disconnect. Vann guns have fired to create number of holes on record. SWI, SDON.

**Date :** 8/6/2002

**Activity:** Drill CIBP

**Days On Completion:** 23

**Remarks :** RIH with 4.75" bit, DC, and tubing. Tag CIBP at 13614'. Circulated with clean 10 lb brine treated with 6% KcL. Drill CIBP. As the packing elements are drilled, circulation is lost 2 mins (5 bbls). Regain circulation with very little gas in returns. Cut plug free. CIH to tag at 13735'. Rotate on remainder of plug 30 mins. No gain in depth. Circulate clean. RD swivel and stripper. POH with 30 stands tubing. SWI, SDON.

**Date :** 8/7/2002

**Activity:** RIH with Packer

**Days On Completion:** 24

**Remarks :** COH with tubing and tools. Lay down 6 joints tubing and BHA. Pick up and RIH with wireline re-entry guide, 2.313 XN nipple, 2-7/8 x 10' tubing sub, Howco PLS packer (pulled from well and re-dressed 7/15), on-off tool with 2.313 X, and 427 joints 2-7/8 tubing. Set packer at 13390 with 15 points compression. ND BOP. NU well head, rebuilt and tested by Kvaerner in Hobbs. Test connections to 5000 psi. RU swab. Recovered 16 bw. FL at 2200'. SWI, SDON.

## Tubing Detail

427 jts 2-7/8, N-80, 6.5 lb, 8rd, EUE tubing	13380.83
Slack off for 15 points compression	(4.58)
On-off tool with 2.313 X profile	2.17
Howco 10K PLS big bore (45K shear)	4.04
Ditto tubing sub	10.00
2.313 XN profile nipple	1.38
Ditto tbg coupling	0.42
427 jts total tbg and tools	13394.26
KB Adjustment	12.00
EOT	13406.26

**Date :** 8/8/2002

**Activity:** Swabbing

**Days On Completion:** 25

**Remarks :** SITP 0. Continued swab. FL first run at 3000' (this is the level from which the last swab run was made on previous report). FL drops with each swab run to 5000'. FL stays at 5000' for 3 runs then continues to drop. Recovered 69 bbls water this report. Final FL at 8500'. Leave well open to tank. SD for thunderstorm and lightening. SDON.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

Date : 8/9/2002

Activity: Swabbing

Days On Completion: 26

Remarks : FTP 0. Continued swab. FL first run at 8500' (this is the level from which the last swab run was made on previous report). FL drops with each swab run. Slight gas and oil show. Recovered 22 bbls water this report. FFL at 12400'. Leave open to tank. SDON. Total fluid recovered 107 bbls.

Date : 8/10/2002

Activity: Swabbing

Days On Completion: 27

Remarks : Open to tank. Continued swab. FL first run at 12000'. Slight gas and oil show. Made 2 runs. Waited 2 hours. Very little fluid entry. Recovered 4 bbls water this report. FFL at 12800'. LWOTT, SDFWE.

Date : 8/11/2002

Activity: SDFWE

Days On Completion: 28

Remarks :

Date : 8/12/2002

Activity: Swabbing

Days On Completion: 29

Remarks : Open to tank. Continued swab. FL first run at 7000' and scattered. Slight gas and oil show. Made 6 runs. Waited 2 hours. Very little fluid entry. Recovered 23 bbls water this report. FFL at 12800'. Total fluid recovered to date 134 bbls. LWOTT, SDON.

Date : 8/13/2002

Activity: Swabbing

Days On Completion: 30

Remarks : Open to tank. Continued swab. FL first run at 9000' and scattered. Slight gas and oil show. Made 3 runs. Waited two hours between runs. Very little fluid entry. Recovered 6 bbls water this report. FL at 12800'. Total fluid recovered to date is 140 bbls. Leave open through orifice tester. Flow rate at 8:00 am 8/14/02 at 8 mcf/d with 33 psi TP. SDON.

Date : 8/14/2002

Activity: Swabbing

Days On Completion: 31

Remarks : Open to orifice test meter. FTP 33 psi. Estimated gas flow rate of 8 mcf/d. Continued swabbing. FL first run at 10000' and scattered. Gas show, with skim of oil. Made 3 runs. Waited 2 hours, made one run. Very little fluid entry. Recovered 5 bbls water this report. FL at 12800'. Total fluid recovered to date is 145 bbls. RU kill truck. Pumped 22 bbls 10 lb brine with 6% KCL. Calculated fluid level of 9000'. Preparing to re-perf and fire stim tube on 8/15/02. SWI, SDON.

Date : 8/15/2002

Activity: SI

Days On Completion: 32

Remarks : Shut down until 8/16/02. Wireline unit that was scheduled for 8/15/02 was tied up on another job so perf/stim was re-scheduled for 8/16/02.

Date : 8/16/2002

Activity: Perforate

Days On Completion: 33

Remarks : 39 hr SITP: 820 psi RU Howco WL w/ 5K lubricator and grease injection. TIH w/ Gamma ray, 2" hollow steel carrier loaded 4 SPF, 60 deg phase, 6.8 gram charges, for .25" EH and 24" penetration, and wl. Correlate to gamma ray. Perforate 13632' - 13640'. No change in TP. TOH w/ same. TIH w/ 6' X 2" 'Stim Stick', CCL, and WL (fluid level @ 8850'). Fire @ 13633' - 13639'. No change in TP. TOH w/ same. When tools are 150' from surface, 'kink' in WL is hung in grease tube. RLS tbg pressure. TP: 0# Remove lubricator, clamp WL. Pull tools from tbg. RD Howco. RU swab. FL first run @ 6000' and scattered. Recover 7 bw with gas show behind swab. Leave open to tank. Production Testing will watch over night.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

Date : 8/17/2002

Activity: Swab test

Days On Completion: 34

Remarks : Open to tank. Continue swab. FL first run @ 6000' and scattered. Slight gas and oil show. Make eight runs. Wait two hr between runs. Very little fluid entry. Recover 28 bbl water this report. FL @ 12800'. Total fluid recovered to date: 146 bbl. Leave open through orifice tester @ estimated flow rate of 5 mcf.

Date : 8/18/2002

Activity: Swab test

Days On Completion: 35

Remarks : Estimated gas rate of 5 mcf. Continue swab. FL first run @ 8000' and scattered. Slight gas and oil show. Make two runs to 13400'. Recover 5 bbl water this report. FL @ 12800'. Total fluid recovered to date: 151 bbl. Leave open through orifice tester. Estimated flow rate of 5 mcf.

Date : 8/19/2002

Activity: Swab test

Days On Completion: 36

Remarks : Estimated gas rate of 5 mcf. Continue swab. FL first run @ 6000' and scattered. Recover 5 bbl water this report. Load tbg w/ 80 bbl 10 lb brine and 6% KcL. ND well head. NU 5K hydraulic BOP. RLS PKR. SWI SDON

Date : 8/20/2002

Activity: Perforate

Days On Completion: 37

Remarks : POH with 427 joints tubing and packer. RU Howco wireline. RIH with 4.625" gauge ring/junk basket, and wireline to 13650'. Must work up and down to move tools to bottom. Pull up to 13200'. Same problem going down again. POH with same. Find several small pieces of rubber in junk basket, but nothing sticking to the outside to prevent free movement. RIH with same tools as before, but with extra weight bar, to 13700' (no problems). POH with same. RIH with 10K Howco E-Z drill CIBP, CCL, and wireline. Set plug at 13619'. POH with wireline and tools. Loaded casing with 46 bbls 10 lb brine and 6% KCL. RIH with 4" perf guns loaded 3 SPF, 120 deg phase with 19 gram Millennium charges for .51" EH and 24.18" penetration, CCL and wireline. Correlate and perforate Morrow from 13546-48, 13553-56, and 13561-63 in one run. No change in pressure. POH with same. RD Howco. SWI, SDON.

Date : 8/21/2002

Activity: RIH with Packer

Days On Completion: 38

Remarks : SICP 100 psi. Pick up and RIH with Howco BHA as before and 427 joints tubing. Set packer at 13390' with 17 points compression. ND BOP. NU wellhead. RU swab. FL first run at 200'. On second run, sand line parted 15' above rope socket. Find end of line to be brittle. ND wellhead. NU BOP. Release packer. Began RIH with tubing and packer.

Date : 8/22/2002

Activity: RIH with Packer

Days On Completion: 39

Remarks : TP 225 psi, CP 10 psi. COH with tubing and packer. Find swab sitting on no-go in XN nipple. Pick up and RIH with XN nipple, 10' tubing sub, redressed PLS packer with 2.313 X nipple in on-off tool, and 427 joints 2-7/8" tubing. Set packer at 13390' with 15 points compression. ND BOP. NU wellhead. SWI, SDON. (Key will spend remainder of day replacing sand line on rig.)

Tubing Detail:

427 jts	2-7/8, N-80, 6.5 lb, 8rd, EUE tubing	13380.83
	Slack off for 15 pts compression	(4.58)
	Otis style On-off tool w/ 2.313 X profile	2.17
	Howco 10K PLS big bore (45K shear)	4.40
	Ditto tbg sub	10.00
	2.313 XN profile nipple	1.38
	Ditto tbg coupling	0.42
427 jts	total tubing and tools	13394.26
	KB adjustment	12.00
	EOT	13406.26

# Matador Operating Company

**Maduro Unit Federal #4**  
Sec 29, T19S, R33E

**API #30-025-30840**  
Lea County, New Mexico

**Date :** 8/23/2002

**Activity:** Swabbing

**Days On Completion:** 40

**Remarks :** 18 hour SITP 20 psi. RU swab. FL first run at 1500'. Swabbed 10 hours. FL at 12800'. Slight gas show. Recovered 68 BW. SWI, SDON.

**Date :** 8/24/2002

**Activity:** Swabbing

**Days On Completion:** 41

**Remarks :** 14 hour SITP 750 psi. RU swab. FL first run at 11500'. Made 2 runs. FL at 12800'. Slight gas show. Waited 2 hours, made run. Very little fluid entry. Recovered 8 BW. LWOTT. Total fluid recovered 76 BW. SDON.

**Date :** 8/25/2002

**Activity:** Swabbing

**Days On Completion:** 42

**Remarks :** Open to tank. Continued swab. FL first run at 6500' and scattered. Made 3 runs. FL at 12800'. Good gas show with 10% oil. Recovered 4 bbls. Leave well open to orifice tester. Total fluid recovered 81 BW. SDON.

**Date :** 8/26/2002

**Activity:** Swabbing

**Days On Completion:** 43

**Remarks :** Open to orifice tester. Gas rate of 43 mcf/d. FTP 86 psi. Continued swab. FL scattered from 6000'. Swab to 12800' in 2 runs. Recovered 6 bbls with estimated 15% oil in sample. Made swab runs every 2 hours. Very little fluid entry with good gas show. Fluid recovered this report 7 bbls. Total fluid from these perms 87 bbls. SWI, SDON.

**Date :** 8/27/2002

**Activity:** Shut in for build up

**Days On Completion:** 44

**Remarks :** 16 hour SITP is 925 psi. Leave well shut in for build up.

**Date :** 8/28/2002

**Activity:** Shut in for build up

**Days On Completion:** 45

**Remarks :** 40 hour SITP at 8:00 am 8/27/02 is 1780 psi. Left well shut in for build up.

**Date :** 8/29/2002

**Activity:** Shut in for build up

**Days On Completion:** 46

**Remarks :** 64 hour SITP at 8:00 am 8/29/02 is 2475 psi. Left well shut in for build up.

**Date :** 8/30/2002

**Activity:** Attempt pump

**Days On Completion:** 47

**Remarks :** 88 hour SITP is 3081 psi. (BHP calculates to be 4180 psi.) Note: well was still building. SICP is 50 psi. RU Tree Savers, and Schlumberger for pump in test. Pump 64 bbls 6% KcL down tubing. 5 bpm at 6600 psi, casing pressure increased to 3250 psi (calculated fluid level +/- 9150'). Tubing hanger on well head leaks. SD pumps. ISIP 5167 psi. RD Schlumberger and TSI. Flow tubing and casing to tank. Load tubing with 6% KcL. ND well head. Release packer. Reverse circulate with 100 bbls 10 lb brine and 6% to tank. Well continued to flow 45 bbls water with gas, to tank. NU BOP. Begin POH and lay down 2-7/8 tbg (80 joints). Reverse circulate 110 bbls same fluid as before. 60 bbls to start circulation. SWI, SDON.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

**Date :** 8/31/2002

**Activity:** Lay Down Tbg

**Days On Completion:** 48

**Remarks :** 16 hour SITP 80 psi, CP 0. Continued POH and LD 2-7/8" tubing. Send PLS packer to Howco for storage and re-dress. ND tubing hanger flange. Replaced secondary seal and ring gasket. NU same. Test flange to 3000. SWI, SD for holiday.

**Date :** 9/1/2002 – 9/2/2002

**Activity:** SD for Holiday

**Days On Completion:** 49 & 50

**Date :** 9/3/2002

**Activity:** RIH with Packer

**Days On Completion:** 51

**Remarks :** Take delivery of 482 joints 3-1/2 tubing. Tubing is mixed on truck and not sorted by grade. Clean and inspect tubing on rack. Will sort by grade. RU Howco wireline. RIH with 4.6" gauge ring to 13600' (FL at 2800'). POH with same. RIH with wireline re-entry guide, 2.313" XN nipple, 8' and 3' and 10' 2-7/8 N-80 tubing subs, and wireline set BWB permanent packer. Set packer at 13498'. POH with wireline. RD Howco. RU AAA tubing testers to pressure N-80 to 8000 psi and P-110 to 10000 psi above slips. Pick up and RIH with wireline re-entry guide, 2.313 X nipple, 1 joint 2-7/8 tubing, Howco 10K PLS packer, 2-7/8 X 3-1/2 cross over, and 97 joints 3-1/2, 9.3 ppf, N-80, EUE 8rd tubing. SWI, SDON.

**Date :** 9/4/2002

**Activity:** CIH with packer and tubing

**Days On Completion:** 52

**Remarks :** CIH with packer and tubing. Test N-80 tubing at 8000 psi and P-110 at 10000 psi above slips. Permian Metallurgical checks tubing wall and coupling hardness to determine grade. Tubing is marked and sorted (116 joints are P-110). Have 330 joints tubing in hole. SWI, SDON.

**Date :** 9/5/2002

**Activity:** Set packer

**Days On Completion:** 53

**Remarks :** CIH with packer and tubing. Test P-110 at 10000 psi above slips. Set Howco 10K PLS dressed for 60 point shear at 13398' with 27 points compression. ND BOP. NU 4-1/16 - 10K well head. Test well head and all flanges at 10000 psi (tubing head at 3K). RU Pro wireline. RIH with 2.313 blanking plug. Can not get plug through X nipple in on-off tool at 13399. POH with same. RU kill truck. Pump 34 bbls 6% KcL at up to 4300 psi at .7 bpm. Monitor casing, no change. Load casing with 18 bbls same fluid. RIH with re-dressed plug. Set plug in 2.313 XN at 13520'. POH with wireline. Pressure test both packers and tubing to 7000 psi for 25 mins (good). Release pressure. RD kill truck. RIH with equalizing tool and wireline, tool will shear when equalizer opens. POH with same. Find tool did not shear. Will bail suspected debris from plug next AM. SWI, SDON.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

### Tubing Detail:

	Slack off for 27 pt compression	(5.00)	
114 jts	3.5 P-110, 9.3 ppf, 8rd tubing	3357.57	
324 jts	3.5 N-80/L-80. 9.3 ppf, 8rd tubing	10026.70	
	3.5 X 2.875 cross over	0.60	
	5.5 X 2.875 XL on-off tools w/ 2.313 X nipple	2.16 @ 13399.47	
	5.5 X 2.875 13-17# PLS 10K packer	4.04	
	2.36" ID - 60 pt shear		
1 jt	2.875 L-80 tubing	31.28	
	2.313 X profile	1.01 @ 13436.95	
	WL re-entry guide	0.43	
	Bottom packer detail:		
	Howco BWB permanent pkr (3" ID)	3.45 @13498.00	
	PR to 2.875 EUE XO	0.54	
	2.875 N-80 tbg sub	10.00	
	Ditto tbg sub	8.10	
	2.313 XN nipple (2.205 no-go)	1.42 @ 13520.09	
	WL re-entry guide	0.43	
	CIBP	@ 13619	
	KB Adjustment	19.00	
	EOT	13461.73	

Date : 9/6/2002

Activity: Pull Blanking Plug

Days On Completion: 54

Remarks : SITP 0 psi. RIH with 1.75" bailer and wireline. Find little fill by depth. POH with same. Recovered 3 quarts fine rust particles. Made total of 5 bailer trips. Recovered 1.5 gallons of solids. RIH and equalized plug. POH. RIH with pulling tool. Latch plug and jar 40 mins. Unable to pull plug. POH with pulling tool. RU swab. Swab fluid to 2700'. RIH with pulling tool. Latch plug and jar 40 mins. Unable to pull plug. POH with pulling tool. RD Pro wireline. SWI, SDON.

Date : 9/7/2002

Activity: Jet Cut Tubing

Days On Completion: 55

Remarks : RU Rotary wireline. RIH with 2-1/16" jet cutter and CCL. Find BWD packer at 13505', tag plug at 13526' (uncorrected wireline). Fire jet cutter at 13523'. Tag plug. POH with same. RU Schlumberger. Loaded tubing with 13.5 bbls 6% KcL. Pressured to 8000 psi. RU Pro wireline. RIH with 2.25" gauge tool. Tag at 13522'. POH with same. RD Pro. RU Rotary. RIH with chemical cutter. Tag at 13548' uncorrected depth. POH with same. RD Rotary. Pressured annulus to 2000 psi. Pumped 10 bbls 6% KcL. Pressured to 10000 psi. ISIP 7000 psi, 10 mins 6000 psi. SWI, SDON.

Date : 9/8/2002

Activity: Data Frac

Days On Completion: 56

Remarks : RU JSI wireline. RIH with CCL, jars, and wireline. Tag at 13517'. Jar down to 13520'. Run CCL log 13517' to 13332' (found lower packer at 13517', top packer at 13369). POH with same. RIH with chemical cutter, CCL and wireline. Cut off at 13516', tag at 13611'. POH with same. RD JSI. RU Schlumberger. Pumped 150 bbls 6% KcL as follows: (1) 115 bbls 6 bpm at 7100 av psi (2) 35 bbls 8.5 bpm at 8140 av psi (3) Final rate and pressure 8.5 bpm at 8140 psi. ISIP 6350 psi, 5 mins 5751 psi, 15 mins 4735 psi, 60 mins 2981 psi, 120 mins 1894 psi, 180 mins 1440 psi. Calculated closure 11200 psi BHP in 11 mins (.83 psi/ft). RD Schlumberger. SWI, SDON.

Date : 9/9/2002

Activity: WO Frac

Days On Completion: 57

Remarks : SITP Vacuum. RD Key. Well will remain shut in. Frac will be designed, then pumped on Friday, 9/13/02.

Date : 9/10/2002 - 9/17/2002

Activity: WO Frac

Days On Completion: 58 - 65

# Matador Operating Company

**Maduro Unit Federal #4**

Sec 29, T19S, R33E

**API #30-025-30840**

Lea County, New Mexico

**Date :** 9/18/2002

**Activity:** Perforate

**Days On Completion:** 66

**Remarks :** 10 day SITP 2550 psi. Release pressure. RU Baker Atlas wireline. RIH with 2.125 gauge ring, CCL, and wireline to 13550'. POH with same. RIH with 10K Alpha CIBP for 2-7/8 - 6.5 ppf tubing, CCL, gamma ray, and wireline to 13550' (fluid level at 4700'). Pull gamma ray and CCL log across zone of interest and correlate. Set CIBP in tubing sub below permanent packer at 13514'. POH with tools and wireline. RU Schlumberger and loaded tubing with 41 bbls 6% KcL and pressure test plug to 7000 psi. Pressure dropped to 6300 psi in 10 mins. Pressure back to 7000#. Leak off is the same. Repeat twice more to allow for gas in tubing. Same result. RD Schlumberger. RIH with spiral strip perf gun loaded 6 SPF, 40 deg phase, 401 NT charges for .27" EH and 23.6" penetration. Perforate Morrow from 13440' - 13443' and 13464' - 13467' in two runs. Fluid level remains at surface. RD Baker Atlas. SWI, SDON.

Tubing Detail:

	Slack off for 27 pt compression	(5.00)	
114 jts	3.5 P-110, 9.3 ppf, 8rd tubing	3357.57	
324 jts	3.5 N-80/L-80. 9.3 ppf, 8rd tubing	10026.70	
	3.5 X 2.875 cross over	0.60	
	5.5 X 2.875 XL on-off tools w/ 2.313 X nipple	2.16	@ 13399.47
	5.5 X 2.875 13-17# PLS 10K packer	4.04	
	2.36" ID - 60 pt shear		
1 jt	2.875 L-80 tubing	31.28	
	2.313 X profile	1.01	@ 13436.95
	WL re-entry guide	0.43	
Bottom packer detail:			
	Howco BWB permanent pkr (3" ID)	3.45	@13498.00
	PR to 2.875 EUE XO	0.54	
	2.875 N-80 tbg sub	10.00	
	Ditto tbg sub	4.00	
	CIBP		@ 13619
	KB Adjustment	19.00	
	EOT	13455.78	

**Date :** 9/19/2002

**Activity:** Cap CIBP with Cement

**Days On Completion:** 67

**Remarks :** 14 hours SITP 1900 psi. Release pressure. RU Baker Atlas wireline. RIH with 2' x 10' bailer, CCL, and wireline to 13507'. Dump cement calculated fill of 5'. POH with same (fluid level at 500'). Find cement set in bailer. Mix high temp cement. Made second run and dump as before. RD Baker Atlas. RU Schlumberger to pump data frac next am. SWI, SDON.

**Date :** 9/20/2002

**Activity:** Data Frac

**Days On Completion:** 68

**Remarks :** 16 hour SITP 140 psi. RU Schlumberger for data frac with 6% KcL. Pressured annulus to 1500 psi and monitored. Loaded tubing with 12.8 bbls. Pump at rate of 1.4 bpm. Pressure built to 9600 psi while pumping 10 bbls then climbed slowly to max pressure of 9982 while pumping 8 bbls at 1.3 bpm. ISIP 9594 psi, 5 min 7332 psi, 10 min 7035 psi, 15 min 6819 psi. Resume pumping at same rate. Pressure is 9844 psi after 7 bbls. ISIP 9562 psi, 5 min 7808 psi, 10 min 7497 psi, 15 min 7287 psi. SICP 1700 psi. RD Schlumberger. MIRU Key swab unit. Made 9 runs. Recovered 47 bbls. FL at 5000'. SWI, SDOWE.

**Date :** 9/21/2002 - 9/22/2002

**Activity:** SDFWE

**Days On Completion:** 69 & 70

**Date :** 9/23/2002

**Activity:** Swabbing

**Days On Completion:** 71

**Remarks :** SITP 40 psi. Continued swab. FL first run at 3500'. Swabbed 11 hours. Recovered 51 bbls. Tubing on vacuum between runs. FL at 9600'. SWI, SDON.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

Date : 9/24/2002

Activity: Swabbing

Days On Completion: 72

Remarks : Continued swab. FL first run at 8000'. Swabbed 11 hours. Recovered 34 bbls. Tubing on vacuum between runs. FL at 12000' SWI, SDON.

Date : 9/25/2002

Activity: Data Frac

Days On Completion: 73

Remarks : Continue swab. FL first run at 11800'. Swabbed 5 hours. Recovered 14 bbls. Tubing on vacuum between runs. FL at 13000'. RU Schlumberger for acid job/data frac. Pumped 1000 gals 15% HcL with double iron control and clay stabilizer, NEFE and mutual solvent. Dropped 20 ball sealers followed by 500 gals same acid. Flushed with 6% KcL. Hole loaded with 91 bbls. Pressured to 8600 psi at 1 bpm. Pressured annulus to 1500 psi with 19 bbls. Continued pumping down tubing after 23 min delay. Pumped 23 bbls into perfs 9700 psi at 1.4 bpm, casing pressure 1800 psi. Pressure increased on casing and decreased on tubing (CP 4200#, TP 5000#). SD pumps. Released tubing pressure. Reverse circulated acid. Acid to surface after 78 bbls pumped. Recovered 36 bbls acid. Circulated 24 bbls 6% KcL water. RD Schlumberger. SWI, SDON.

Date : 9/26/2002

Activity: RD Swab Unit

Days On Completion: 74

Remarks : Tubing is on vacuum. RD Key swab unit. Left well shut in.

Date : 9/27/2002

Activity: Swabbing

Days On Completion: 75

Remarks : RU Key swab unit. Swabbed 8 hour. Recovered 115 bbls. FL at 3200'. Leave open to tank. SDON.

Date : 9/28/2002

Activity: Swabbing

Days On Completion: 76

Remarks : Continued swab. Swabbed 11 hours. Recovered 77 bbls. FL at 6700'. SWI, SDON.

Date : 9/29/2002

Activity: Swabbing

Days On Completion: 77

Remarks : SITP 30 psi. SICP 70 psi. Continued swabbing. Swabbed 11 hours. Recovered 59 bbls. FL at 8800'. SWI, SDON.

Date : 9/30/2002

Activity: Release Packer

Days On Completion: 78

Remarks : SITP 30 psi, SICP 80 psi. Continued swab. Swabbed 4 hours. Recovered 22 bbls. FL at 10000'. RD Key swab unit. RU Key well service unit. ND well head. NU 5K hydraulic BOP. Attempted to release packer. Worked 3 hours with different torque/weight combinations. Can feel some free travel, packer will not release. Mandrel turns through packer as though it is released, but packer will not move. Unlatch on/off tool. Pull up hole 8'. Tubing travels free. SWI, SDON.

Date : 10/1/2002

Activity: POH with tbg and pkr

Days On Completion: 79

Remarks : RU line scale on service unit. Latch on/off tool. Attempt to release packer. Pulled 60 points over weight to shear same. POH with tubing and packer. SWI, SDON.

# Matador Operating Company

## Maduro Unit Federal #4

Sec 29, T19S, R33E

API #30-025-30840

Lea County, New Mexico

Date : 10/2/2002

Activity: Perforate

Days On Completion: 80

Remarks : RU Howco wireline with full 5K lubricator and grease. RIH with 3.375" hollow steel carrier loaded 6 SPF, 60 deg phase, 25 gram Millennium charges for .4" EH and 30" penetration. Correlated and perforated Morrow 13439 - 13446 and 13464 - 13478 in two runs. Little change in well condition. FL at 9600'. RD Howco. RIH with 2.313 X nipple, 10' and 3' - 2-7/8 tubing subs, re-dressed Howco 10K PLS packer, and tubing to 2500'. SWI, SDON.

Date : 10/3/2002

Activity: RIH with Packer

Days On Completion: 81

Remarks : CIH with packer and tubing. Set packer at 13399' with 25 points compression. RU swab. FL first run at 7000'. Recovered 9 bbls in 3 runs. FL at 8000'. SWI, SDON.

Tubing Detail:

Slack off for 27 pt compression	(5.00)	
114 jts 3.5 P-110, 9.3 ppf, 8rd tubing	3357.57	
325 jts 3.5 N-80/L-80, 9.3 ppf, 8rd tubing	10026.70	
3.5 X 2.875 cross over	0.60	
5.5 X 2.875 XL on-off tools w/ 2.313 X nipple	2.16	@ 13396
5.5 X 2.875 13-17# PLS 10K packer	4.04	
2.36" ID - 60 pt shear		
3' (top) and 10' 2.875 L-80 tubing subs	13.50	
2.313 X profile	1.01	@13417
WL re-entry guide	0.43	
Bottom Packer Detail:		
Howco BWD permanent pkr (3" ID)	3.45	@ 13498
PR to 2.875 EUE XO	0.54	
2.875 N-80 tbg sub	10.00	
Ditto tbg sub	4.00	CIBP in tbg at 13514
CIBP		@13619.00
KB Adjustment	19.00	
EOT	13438.00	

Date : 10/4/2002

Activity: Swab test

Days On Completion: 82

Remarks : SITP 10 psi, SICP 10 psi. Continued swab. FL first run at 8000'. Swabbed 11 hours. Recovered 34 bw. FL at 11000'. No oil or gas show. SICP remains 10 psi. SWI, SDON.

Date : 10/5/2002

Activity: Swab test

Days On Completion: 83

Remarks : SITP Vacuum, SICP 50 psi. Continued swab. FL first run at 10000'. Swabbed 6 hours. Recovered 17 bw. FL at 12000'. No oil or gas show. SICP remains 50 psi. SWI, SDON.

Date : 10/6/2002

Activity: SDFWE

Days On Completion: 84

Date : 10/7/2002

Activity: Swabbing

Days On Completion: 85

Remarks : 42 hour SITP 35 psi, SICP 180 psi. Continued swab. FL first run at 10000'. Swabbed 5 hours. Recovered 14 bw. FL at 11500'. No oil, slight gas show. Release packer. POH and lay down 154 joints 3-1/2 tubing. SWI, SDON.

Date : 10/8/2002

Activity: SI. Waiting on Orders.

Days On Completion: 86

Morrow Interval proved to be non-commercial. Well SI pending evaluation.