			CISF
SUNDR Do not use th	UNITED STATES DEPARTMENT OF THE INTERIO BUREAU OF LAND MANAGEMENT RY NOTICES AND REPORTS ON his form for proposals to drill or t ell. Use Form 3160-3 (APD) for suc	WELLS to re-enter an	FORM APPROVED OMB No. 1004-0135 Expires November 30, 2000 5. Lease Serial No. NMO33647A 6. If Indian, Allottee or Tribe Name
	PLICATE - Other Instructions of	on reverse side	7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well Oil Well Gas Well	C Other		8. Well Name and No.
2. Name of Operator		4	Mershon Gas Com #2
Matador Operat		· · · · · · · · · · · · · · · · · · ·	9. API Well No 314
3a. Address		ne No. (include area code)	30-015-31401
<u>310 W. Wall, Ste 906 M</u> 4. Location of Well (Footage, Sec		687-5955 WEL	10. Field and Pool, or Exploratory Area Indian Basin; Upper Penn (Pro Gas)
Sec 21, T22S,		OCD ARTESIA	11. County or Parish, State
415 FNL, 1201			Eddy County, NM
12. CHECK AI	PPROPRIATE BOX(ES) TO INDICA	ATE NATURE OF NOTICE, I	REPORT, OR OTHER DATA
TYPE OF SUBMISSION	T	TYPE OF ACTION	······································
<ul> <li>Notice of Intent</li> <li>Subsequent Report</li> <li>Final Abandonment Notice</li> </ul>		ure Treat     Image: Reclamation       Construction     Image: Recomplete       and Abandon     Image: Temporarily A	Well Integrity Other <u>Completion</u> bandon
If the proposal is to deepen dir Attach the Bond under which the following completion of the in-	ectionally or recomplete horizontally, give sul the work will be performed or provide the Bo volved operations. If the operation results in inal Abandonment Notices shall be filed only	bsurface locations and measured and t ond No. on file with BLM/BIA. Requ a multiple completion or recompletion	any proposed work and approximate duration thereof. rue vertical depths of all pertinent markers and zones, uired subsequent reports shall be filed within 30 days in a new interval, a Form 3160-4 shall be filed once damation, have been completed, and the operator has
14. Thereby certify that the forego Name (Printed/Typed) RUSS Mathis	ing is true and correct	Title Productio	n Manager
Signature	mathin	Date 10/04/02	
	THIS SPACE FOR FED	ERAL OR STATE OFFICE US	E
Approved by		Title	Date
Conditions of approval, if any, are	e attached. Approval of this notice does not gal or equitable title to those rights in the su o conduct operations thereon.	warrant or	

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.

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Mershon Gas Com #2 Sec. 21, T22S, R33E API # 30-015-41404 Eddy County, New Mexico

- 01/10/02 Blade and clean location. Fill cellar with pea gravel. Set anchors. Move in Key completion unit. Will RU next am.
- 01/11/02 RU Key. Take delivery of 240 joints new 2-7/8" J-55 6.5# 8rd EUE tubing (7563.75'). Clean and inspect tubing. Pick up and RIH with new 6.125" bit, casing scrapper, 4 4" drill collars, XO and tubing to tag cement at 6280'. Drilled 5' cement. Tag DV tool at 6285'. Circulate clean. SWI, SDON.
- 01/12/02 Continue drill out. Run tools through DV and casing **packer**. Test casing and DV to 3000# for 15 minutes with no loss. CIH to tag at 7550'. Drill/wash soft cement to 7553'. Circulate clean with small amount of rubber in returns. Note: water in returns is black and foul. RD swivel. POH with 20 stands of tubing. SWI, SDOS.
- RIH with tubing to 7530'. RU MacKlaskey pump truck. Tested casing and shoe to 4000# (good). Circulate hole with 2% KCL, packer fluid and H2S scavenger. Spot 10# brine from PBTD to 7250'. Spot 750 gals 20% HCL from 7250' to 6785'. POH with tubing and tools. Top off casing with 17 bbls KCL/packer fluid mix. RD MacKlaskey. RU Howco wireline. RIH with gamma ray, CCL and 4" casing guns loaded 4 SPF with 90 degree phasing. Correlate to open hole log dated 12/22/01. Find PBTD at 7560'. Perforate 7196' 7206' with casing full of fluid. Casing went on a slight vacuum. POH with same. RIH with same guns as before and attempted to perforate 7206' 7222'. Guns misfired. POH with same. Wait on guns 2-1/2 hours. RIH with same guns and perforate 7206' 7222'. Casing remained on a slight vacuum. POH with same. RD Howco wireline. RU MacKlaskey kill truck. Pumped 18 bbls KCL/packer fluid to clear acid from casing at 3 BPM on strong vacuum. SWI, SDON.
- 01/15/02 RU AAA Tubing Testers. RIH with Arrow Set 1X **packer** and tubing testing to 6000 psi above slips. Set **packer** at 7078' with 10 points compression. NU tree. Loaded annulus with 144 bbls 2% KCL and **packer** fluid (calculated FL at 4595'). Tested **packer**, casing and wrap around to 2000 psi for 10 minutes - ok. Tested tree connections and wrap around to 5000 psi. RU swab. FL first run with depthometer at 5590'. Swab to 7000' in 2 runs. Recovered 18 BW in 4 runs. Fluid level scattered. Slight gas blow behind swab. SWI, SDON. Note: tubing detail will be in next report..
- 01/16/02
  13 hour SITP 68 psi. Blew pressure to 0 psi in 2 minutes. Continue swab. Fluid level on first run was at 6500'. Made 1 run per hour. Recovered 10 BW to pit in 6 runs. RU Cudd N2 pump. Pumped 49500 SCF. Shut down pump. ISIP 2350, 60 min 1850. SCF volume equivalent at 2350 psi is 62 bbls. Capacity to top perf is 45 bbls. RD Cudd. SWI, SDON.

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Eddy County, New Mexico

Mershon Gas Com #2

Sec. 21, T22S, R33E

#### Tubing Detail:

Jing Detail.	
224 jts New Lone Star 2-7/8" J-55 EUE 8rd	7059.24
T-2 on/off, SS top sub, nickel plated skirt	1.53
SS gudgeon with 2.31" F profile	1.29
7 x 2-7/8 Arrow Set 1X packer, plastic coa	ated
ID, nickel plated OD, H2S service rubb	er <u>8.45</u>
224 jts total tubing and tools	7070.51
KB adjustment	15.00
10 points compression	(2.00)
J slot in packer	(1.50)
Correction to wireline	<u>7.00</u>
EOT	7089.01

- 01/17/02 17 hour SITP at 680 psi. Blew pressure to 0 psi in 20 minutes. Continue swab. Fluid level first run at 5500' and scattered. Recovered 5 BW to pit in 6 runs. SWI, SDON.
- 01/18/02 17 hour SITP 68 psi. Continued swab. Made one run, recovered no fluid. RU Dowell and Tree Savers. Pump 2500 gals 20% NEFE with 1500 scfm N2 per bbl acid. Loaded hole, pumped at combined rate of 7 bpm at 4900 psi. Pumped 20 bbls acid, dropped 60 ball sealers, 20 bbls acid, dropped 60 ball sealers, pumped remainder of acid then flushed with 100% N2 at 7 bpm. Slow increase in pressure from ball sealers with pressure decrease during flush. ISIP 3300 psi, 5 min 1330 psi, 10 min 1450 psi, 15 min 1272 psi, 60 min 720 psi. RD Dowell and Tree Savers. Begin flowback. Pressure to 80 psi in 30 minutes on open choke. Well flowed estimated 6 bbls to pit with decreased rate. RU and RIH with swab to packer. Find fluid light and scattered. Recovered 4 bbls first run. Recovered 1 bbl second run. Waited 30 minutes and made run. Recovered no fluid. Made one run per hour with no fluid recovered. SWI, SDON.
- 01/19/02 14 hour SITP 235 psi. Blew to pit. TP 0 psi in 15 minutes. Continue swab. Fluid scattered first run. Recovered 1 BW. Waited 3 hours and made swab run. Recovered 1 BW. RU orifice tester. Measured gas flow rate of 8.3 MCFD. SWI, SDON.
- 01/21/02
  42 hour SITP is 250 psi. Blew pressure to 0 psi in 20 minutes. Continue swab. Fluid level first run at 6000' and scattered. Recovered 2 BW first run. Waited 90 minutes and made run. Recovered 1/2 BW. Made 1 run every 2 hours. Recovered 4 BW total. Light gas blow behind each run. SWI, SDON.
- 01/22/02
  18 hour SITP 255 psi. Blew pressure to 0 psi in 20 minutes. Continued swab. Fluid level first run at 5000' and scattered. Recovered 5 BW first run. Made second run immediately and recovered 1 BW. Light gas blow behind swab. ND tree. NU BOP. Get off on/off tool, let equalize. Latch on/off tool. Release packer. POH with tubing. RU Howco wireline. RIH with 4" perf guns loaded 4 SPF 120 degree phasing, .45" EH, 16.9" penetration, CCL and wireline. Find FL at 5700'. Perforated 7230' 7255' in two runs. No pressure change. POH with same. RD Howco. SWI, SDON. Packer taken to BJ Services in Hobbs.

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01/23/02 14 hour SITP vacuum. RIH with 2-7/8" x 2-1/4" seating nipple and 228 joints tubing to 7201' KB. ND BOP. NU tree. Tie in flow back manifold. Made one swab run. Find FL at 6000'. SWI, SDON.
Tubing Detail: 228 its New Lone Star 2-7/8" L55 FLUE 8rd 7185.42

7185.42
<u>1.10</u>
7186.52
<u>15.00</u>
7201.52

- 01/24/02 RU Schlumberger, Tree Savers, and Flo Co to treat with 20000 gal gelled 15% NEFE. Pump acid at 12.5 bpm mixed with 5.5 bpm BO2 and 6694 scfm N2 for a total slurry rate of 25 bpm. Drop 150 ball sealers when half of acid is pumped. See no ball action. Average treating pressure at 4384 psi. Max pressure (during flush with CO2 and N2) at 6453 psi. Average rate at 23 bpm. With balls at perfs and half of total fluid pumped, pressure is at 5850 psi and slowly decreased to 5700 psi before start of flush. ISIP 2735 psi, 1 min 2340 psi. Began flow back in 12 minutes. TP 1500 psi, CP 780 psi. Flow back on 18/64 choke increasing to 48/64 choke in 6 hours. SICP at 550 psi. Made 2 swab runs, recovered 18 bbls. Well flowed at 200 psi on 48/64 choke gradually decreasing throughout the evening. Well died at 8:00 pm. SICP 600 psi.
- 01/25/02 Attempt to flow well overnight. Recovered total of 149 BW (estimated) to pit. FTP 0 psi after 9 hours. Leave open and monitor casing pressure. SICP steady at 550 psi. RU swab. FL first run at 4000'. Continue to swab/flow through day. Fluid remains scattered from surface to SN. Recovered 12 bbls per hour with acid gas and CO2 blow behind swab. Casing pressure dropped 5-10 psi per swab run. Made 14 swab runs. Recovered 81 bbls (estimated) to pit. Leave open to pit. SICP 420 psi. Well flowed for 3 hours lifting 14 BW. SICP 380 psi. SDON. Total fluid 95 BW.
- 01/26/02 SICP 380 psi. Continued swab. FL first run at 5500'. Made 16 runs. FL is scattered from surface to SN. Light blow of **acid** gas and CO2/N2 behind swab. SICP at end of day is 230 psi. Fluid recovered 94 BW. Leave well open to pit.
- 01/27/02 SICP 230 psi. Continued swab. FL first run at 6000'. Made 25 runs. FL is scattered from surface to SN. Light blow of **acid** gas and CO2/N2 behind swab. SICP at end of day is 170 psi. Fluid recovered 76 BW. Leave well open to pit. Note: last 15 swab runs, recovery was steady at 3 bbls per swab. Casing pressure decline is becoming much less.
- 01/28/02 SICP 150 psi. Slight gas blow from tubing overnight. Continue swab. FL first run at 6000'. After first run, casing pressure increased to 155 psi. Swab runs recovered 1-2 bbls with increased gas during run and better gas show behind swab. Gas will not burn. Swab 5 hours. Made 13 runs. RD Key service unit. MIRU Key swab unit. First run after 2 hour rig change, FL at 6800'. Made 12 swab runs (total of 25 runs). Recovered 48 BW. No hydrocarbon show. SICP 155 psi. Leave well open to tank. SDON.

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- 01/29/02 SICP 160 psi. Slight gas blow from tubing overnight. Continue swab. FL first run at 6500'. Made all swab runs from SN. Gas increased through day and will burn. 30 psi behind swab. Made 33 swab runs and recovered 37 BW. Leave well open to tank. SDON.
- 01/30/02 SICP 130 psi. Slight gas blow from tubing overnight. Continue swab. FL first run at 6200'. Made all swab runs from SN. Gas increased through day and will burn. 30 psi behind swab. Made 24 swab runs, recovered 21 BW. Leave well open tot tank. SICP 120 psi. SDON.
- 01/31/02 SICP 110 psi. 20# flow from tubing overnight. 6 bbls fluid to tank. Continue swab. FL first run scattered from surface. 30 psi behind swab. Made 16 swab runs and recovered 9 BW. Flow through PPS test equipment. Flow rate of 200 MCFD at 60 psi FTP. SICP 120 psi.
- 02/01/02 SICP 120 psi. FTP 60 psi. Current flow rate through PPS meter is 160 mcfd. No fluid over night. RIH with swab. Fluid scattered from surface to SN. Made 12 swab runs, recovered 10 BW. Pumped 2 bbls fresh water with 2 gallons of liquid foamer down casing. RU chemical pump to inject 15 gallons/day of liquid foamer and water mix. Flow through PPS equipment. Current flow rate of 175 mcfd. Gas specific gravity from field sample is .990.
- 02/02/02 SICP 123 psi. FTP 61 psi. Current flow rate of 165 mcfd. No fluid over night. RIH with swab. Fluid scattered from surface to SN. Recovered 2 BW first run. 100 psi behind swab. After 3 quick runs, SICP is 115 psi. Made total of 12 runs, recovered 14 BW. Strong gas blow behind swab. Will lift fluid with gas at a rate of 12 bpd. Skim of condensate present on fluid sample. Leave open to tank with no back pressure for 5 hours, then put through PPS test unit. SICP at 108 psi.
- 02/03/02 SICP 120 psi. Estimated flow rate of 180 mcfd. FTP 30 psi to pit. No fluid to tank or pit overnight. Continue swab. Made 3 swab runs. Fluid scattered. Recovered 4 BW. SICP 115 psi. Dropped 6 soap sticks and shut in. Tubing and casing pressure equal at 130 psi after 15 minutes. Leave shut in one hour. Pressure at 147 psi. Flow to pit two hours. FTP 30 psi, SICP 115 psi. Gas flow lifting fluid at 1/2 bph rate. Made swab run, recovered 15 gals. Shut down swab unit. Continue flow through PPS equipment. When flow rate/pressure drops, drop soap and shut in for short time. Resume flow.
- 02/04/02 SICP 131 psi, FTP 61 psi. Flow rate through test unit of 190 mcfd. Continue swab. FL scattered to SN. Recovered 3/4 bw first run. Second run dry. Made swab runs every 2 hours. Made 8 runs, recovered 8 bw. Continued to flow through PPS test unit. Flow rate of 200 mcfd. SICP 112 psi, FTP 58 psi.
- 02/05/02 SICP 110 psi, FTP 52 psi. Flow rate through test unit of 233 mcfd. Continue swab. FL scattered to SN. Recovered 3/4 bw first run. Second run dry. Made swab runs every 2 hours. Made 6 runs, recovered 4 bw. Opened casing and tubing to test unit. Flowed 2 hours. Flow rate of 250 mcfd with FTP/FCP of 38 psi. Made swab run, 0 fluid recovered. Continued flow over night through PPS test unit.

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- 02/06/02 FCP 34 psi, FTP 34 psi. Flow rate of 233 mcfd. No fluid over night. RD Key swab unit. RU Key service unit. ND well head. NU stripper head. Pick up and RIH with 10 joints of 2-7/8" J-55 6.5# EUE 8rd tubing (SN at 7516'). ND stripper. NU well head. RD Key service unit. RU swab unit. Continued swab. Made 8 swab runs. Recovered 25 bw. Six hour SICP is 240 psi. Open casing to PPS test unit over night. (Pumped total of 70 bbls 2% KcL down tubing & casing for well control.)
- 02/07/02 FCP 34 psi, FTP 0 psi. Flow rate of 229 MCFD. No fluid over night. Continue to flow gas up casing. Continue swab. FL first run at 6500'. Made 26 swab runs, recovered 47 bbls (72 bw recovered after lowering tubing). Some gas behind last 2 swab runs with little fluid recovered. Flow over night through PPS test unit at approximately 300 MCFD.
- 02/10/02 FCP 127 psi, FTP 0 psi. Flow rate of 238 MCFD. No fluid over night. Back-pressure valve malfunctioned causing higher pressure. Gas rate before pressure increase is 327 MCFD. Continue to flow gas up casing. Continue swab. FL first run at 7200'. Made 6 swab runs, recovered 4 bbls in 6 hours. Gas blow behind swab. Gas rate increased to 353 MCFD. Flow over night through PPS test unit.
- 02/11/02 FCP 58 psi, FTP 0 psi. Flow rate of 317 mcfd. No fluid over night. Continue to flow gas up casing. Continued swab. FL first run at 7200'. Made 3 swab runs, recovered 5 bw with gas blow behind last run. By-pass test unit to reduce back pressure to 30 psi for 2 hours. Made swab run. Recovered 1/2 bw with gas behind swab. Flow same as before for 2 hours. Shut in 30 minutes to exchange test unit for a lower pressure vessel. SICP at 90 psi. Made swab run with casing shut. Recovered 2 1/2 bw. Opened tubing and casing to PPS test unit at 300 MCFD. 12 swab runs this report. Recovered 8 bw. Note: the change in gas volumes reported is due to meter variance.
- 02/12/02 FCP 37 psi, FTP 37 psi. Flow rate of 300 mcfd. No fluid over night. Continued to flow gas up casing. Continued swab. FL first run at 7200'. Made 3 swab runs, recovered 2 bw with gas blow behind last run. Made swab runs every 2 hours until gas show behind swab. Made 12 runs. Recovered 5 bw total. Flow through PPS test unit.
- 02/13/02 FCP 34 psi, FTP 34 psi. Flow rate of 304 mcfd. No fluid over night. Continue to flow gas up casing. Continued swab. FL first run at 7200'. Made 3 swab runs, recovered 2 bw with gas blow behind last run. Made swab runs every 2 hours until gas show behind swab. Made total of 10 swab runs. Recovered 5 bw. Continued to flow through PPS test unit.
- 02/14/02 FCP 34 psi, FTP 34 psi. Flow rate of 308 mcfd. No fluid over night. Continue to flow gas up casing. Continued swab. FL first run at 7000'. Made 3 swab runs, recovered 4 bw with gas blow behind last run. Made swab runs every 2 hours until gas show behind swab. Made 6 swab runs total. Recovered 5 bw. Continue flow through PPS test unit.
- 02/15/02 FCP 33 psi, FTP 33 psi. Flow rate of 308 mcfd. No fluid over night. Continue to flow gas up casing. Continued swab. FL first run at 7000'. Made 3 swab runs, recovered 3 bw with gas blow behind last run. Made swab runs every 2 hours until gas show behind swab. Made total of 12 runs. Recovered 5-1/2 bw. Continue flow through PPS test unit.

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- 02/16/02 FCP 33 psi, FTP 33 psi. Flow rate of 316 mcfd. No fluid over night. Continue to flow gas up casing and tubing. Continue flow through PPS test unit.
- 02/17/02 FCP 33 psi, FTP 33 psi. Flow rate of 312 mcfd. No fluid over night. Continue to flow gas up casing and tubing. Continue flow through PPS test unit.
- 02/18/02 **CORRECTED.** FCP 33 psi, FTP 33 psi. Flow rate of 312 mcfd. No fluid over night. Continue to flow gas up casing. Continued swab. FL first run at 7000'. Made 6 swab runs, recovered 8 bw with gas blow behind last run. Made swab runs every 2 hours until gas show behind swab. Made total of 12 swab runs. Recovered 10 bw. Continued to flow through PPS test unit.
- 02/19/02 FCP 31 psi, FTP 32 psi. Flow rate of 314 mcfd. No fluid over night. Continue to flow gas up casing. Continued swab. FL first run at 7100'. Made 4 swab runs, recovered 3 bw with gas blow behind last run. RD Key swab unit. RD PPS test unit and flow back manifold. SWI.
- 02/20/02 4/24/02 Shut in. Waiting on Pipeline
  - 4/25/2002 Nolan H. Brunson set Lufkin M160D-213-86 pumping unit, serial # E86205J 442197 with 10 hp electric motor.
  - 4/26/2002 SITP 260, SICP 200. MIRU KEY #362. Connect blow down line to annulus and flow down. Unload 210 3/4" and 95 7/8" steel grade "KD" rods F/ TRICO / WTHFRD. R/D flowline. RU pump truck. Pump 25 BFW down tubing. ND 2-9/16" x 7-1/16" 5M tree. NU 7-1/6" 3M bowl and slip tubing hanger. RU rod BOP and PMPG tee. PU 2-1/2" x 1-1/4" x 16' RHBC pump with strainer nipple. PU 208 3/4" and 89 7/8", FHSM boxes. Space rods out with 2', 4', 6' and 8' rod subs, 22' x1-1/2" polished rod. Load tubing with 31 BFW. Longstroked pump to 800 PSI. RD pump truck. Hang well on to pump. Rods spaced out 1' off bottom. Build PMPG. Tee well head connection with adjustable choke by-pass on annulus.

#### Rod Detail:

	1-1/2" x 22' polished rod	22
	2', 4', 6', 8' rod subs	20
	3/4" grade KD rods	2225
208	7/8" grade KD rods	5200
	2-1/2" x 1-1/4" x 16' RHBC pump	17
	KB adjustment	<u>15</u>
		7499

- 4/27/2002 5/10/2002 SI. Waiting on Pipeline.
- 5/10/2002 5/14/2002 SI. Waiting on pipeline. Ditching lines & Laying lines.
- 5/15/2002 SI. Finish hooking up gas and water line to Marathon/Chevron. Test lines. Found Marathon lines crossed. Will switch lines and put on production 5/16/02.

**Mershon Gas Com #2** Sec. 21, T22S, R33E

API # 30-015-41404 Eddy County, New Mexico

5/16/2002 Lay 3" SDR 7 (black poly, 260 psi wp) water line and gas line to Mershon Gas Com 1 location. Tie into Marathon lines to transport to Chevron 'Helbing #1' location. At that point lines are tied into Chevron's gas and liquid system. Put on line using Rhino Rental generator at a cost of \$3150/month including fuel. Gas flow rate of 380 mcfd at 65 psi line pressure.

5/17/2002 0 oil, 359 MCF, 22 water, 120 csg pressure, 60 line pressure, 367 mcfd flowrate 5/18/2002 0 oil, 383 MCF, 3 water, 80 tbg pressure, 110 csg pressure, open choke on casing 5/20/2002 0 oil, 402 MCF, 2 water, 83 tbg pressure, 90 csg pressure 5/21/2002 0 oil, 413 MCF, 2 water, 80 tbg pressure, 80 csg pressure, pumped off, shut down pumping unit 5/22/2002 0 oil, 382 MCF, 0 water, 83 tbg pressure, 90 csg pressure 5/23/2002 0 oil, 353 MCF, 3 water, 111 tbg pressure, 100 csg pressure, hooking up electricity 5/24/2002 0 oil, 399 MCF, 0 water, 95 tbg pressure, 220 csg pressure 5/25/2002 0 oil, 180 MCF, 0 water, 75 tbg pressure, 160 csg pressure 5/26/2002 0 oil, 369 MCF, 0 water, 80 tbg pressure, 100 csg pressure 5/27/2002 0 oil, 410 MCF, 3 water, 79 tbg pressure, 80 csg pressure 5/28/2002 0 oil, 398 MCF, 3 water, 79 tbg pressure, 80 csg pressure 5/29/2002 0 oil, 411 MCF, 3 water, 83 tbg pressure, 75 csg pressure 5/30/2002 0 oil, 410 MCF, 0 water, 82 tbg pressure, 75 csg pressure 5/31/2002 0 oil, 409 MCF, 2 water, 83 tbg pressure, 75 csg pressure 6/1/2002 0 oil, 454 MCF, 3 water, 83 tbg pressure, 80 csg pressure 6/2/2002 0 oil, 408 MCF, 2 water, 84 tbg pressure, 75 csg pressure 6/3/2002 0 oil, 407 MCF, 2 water, 82 tbg pressure, 70 csg pressure 6/4/2002 0 oil, 392 MCF, 0 water, 81 tbg pressure, 80 csg pressure 6/5/2002 0 oil, 406 MCF, 2 water, 83 tbg pressure, 83 csg pressure, POC last 14.7 hrs on 3.6 off 6/6/2002 0 oil, 392 MCF, 2 water, 83 tbg pressure, 80 csg pressure 6/7/2002 0 oil, 398 MCF, 2 water, 78 tbg pressure, 70 csg pressure 6/08/2002 0 oil, 396 MCF, 2 water, 82 tbg pressure, 70 csg pressure 6/09/2002 0 oil. 391 MCF, 2 water, 83 tbg pressure, 75 csg pressure 6/10/2002 0 oil, 391, MCF, 0 Water, 110 tbg pressure, 100 csg pressure 6/11/2002 0 oil, 367 MCF, 2 water, 85 tbg pressure, 85 csg pressure, 10119 total volume

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Gas Component Analysis:

Carbon Dioxide	C0 2	0.6546	
Nitrogen Hydrogen Sulfide	N2 H2 S	0.9254	
Methane	C1	90.056	
Ethane	C2	9 4.7355	1.265 8
Propane	C3	1.4904	0.410 4
Iso-Butane	IC4	0.2919	4 0.095 5
Nor-Butane	NC 4	0.4930	0.155 4
lso-Pentane	IC5	0.1894	0.069 3
Nor-Pentane	NC 5	0.1685	0.061 0
Hexane Plus	C6 +	0.7044	0.307 3
Total		100.00 00	2.364 7

Remarks: H2S on location: 0.2900% = 2,900 PPM

6/12/2002 0 oil, 391 MCF, 0 water, 83 tbg pressure, 75 csg pressure
6/13/2002 0 oil, 389 MCF, 2 water, 82 tbg pressure, 70 csg pressure
6/14/2002 0 oil, 376 MCF, 2 water, 94 tbg pressure, 100 csg pressure
6/15/2002 0 oil, 395 MCF, 3 water, 103 tbg pressure, 90 csg pressure
6/16/2002 0 oil, 363 MCF, 0 water, 81 tbg pressure, 80 csg pressure
6/17/2002 0 oil, 460 MCF, 3 water, 80 tbg pressure, 70 csg pressure
6/18/2002 0 oil, 390 MCF, 2 water, 80 tbg pressure, 80 csg pressure

**Mershon Gas Com #2** Sec. 21, T22S, R33E

#### Water analysis: sample date 5/20/02

ph - 7.600 specific gravity - 1.010	)	
Dissolved Gasses	MG/L	
Hydrogen Sulfide	not present	
Carbon Dioxide	not determined	
Dissolved Oxygen	not determined	
Cations	MG/L	
Calcium	1,002	
Magnesium	304	
Sodium	2,447	
Barium	not determined	
Anions	MG/L	
Hydroxyl	0	
Carbonate	0	
Bicarbonate	49	
Sulfate	550	
Chloride	5,999	
Total Dissolved Solids	10,351	
Total Iron	55	
Total hardness as CaCO3 3,753		
Resistivity at 75 F (calculated) - 0.394/cm		

6/19/2002 0 oil, 391 MCF, 0 water, 87 tbg pressure, 80 csg pressure, TD 73% 11.1 hrs, YD 61% 14.8 hrs
6/20/2002 0 oil, 389 MCF, 0 water, 80 tbg pressure, 80 csg pressure, YD 62% 15 hrs
6/21/2002 0 oil, 390 MCF, 2 water, 80 tbg pressure, 80 csg pressure, YD 39% 9.5 hrs
6/22/2002 0 oil, 390 MCF, 0 water, 81 tbg pressure, 75 csg pressure, YD 87% 21 hrs
6/23/2002 0 oil, 389 MCF, 2 water, 82 tbg pressure, 80 csg pressure, YD 64% 15.4 hrs
6/24/2002 0 oil, 388 MCF, 2 water, 81 tbg pressure, 75 csg pressure, YD 81% 19.5 hrs
6/25/2002 0 oil, 390 MCF, 1 water, 86 tbg pressure, 85 csg pressure, YD 99% 18.4 hrs, FINAL REPORT

STATE OF NEW MEXICO DEVIATION REPORT			
352	1/2		
562	1/2		
1,522 2,021	1/4		
2,520	3/4 3/4		
3,047	1/2		
3,545	1/2		
4,041	3/4		
4,538	3/4		
5,032	1		
5,188	1		
5,371	1 1/4		
5,527	1 3/4		
5,683	1 3/4		
5,840	1 1/2		
6,027	1 1/4		
6,464	1		
7,020	2 1/2		
7,107	2		
7,268	3		
7,334	3	/ e <sup>1</sup> 1 2002 <u>e</u> )	
7,604	2 1/2	RECEIVED S OCD ARTESIA	

By

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on this 3rd day of January, 2002, by Steve Moore on behalf of Patterson-UTI Drilling Company LP, LLLP.

ls Notary Public for Midland County, Texas

My Commission Expires: 3/31/2003

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