



AMOCO PRODUCTION COMPANY

WELL ANALYSIS COMPARISON

LEASE: GARCIA GC #1E

JANUARY 15, 1993

M-21-29N-10W

	BRDNHD -----	CASING -----
DATE:	1/12/93	1/12/93
NO.:	30041	30042
	MOLE % -----	MOLE % -----
NITROGEN	2.153	0.231
CO2	0.100	1.131
METHANE	88.231	84.986
ETHANE	5.085	7.889
PROPANE	2.114	3.266
I-BUTANE	0.542	0.669
N-BUTANE	0.535	0.860
I-PENTANE	0.284	0.372
N-PENTANE	0.194	0.265
HEXANE+	0.762	0.331
BTU'S	1130.7	1176.0
GPM	2.7892	3.8678
GRAVITY	0.6556	0.6807

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JAN 22 1993

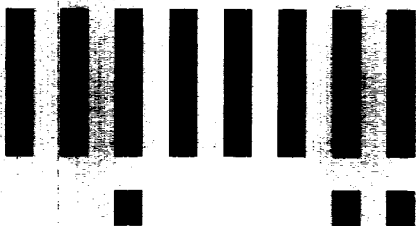
OIL CON. DIV.
DIST. 3



1. *Chlorophyll a* (Chl *a*)

Circumstance	Percentage of Respondents (%)
Self-defense	85
To protect others	75
To protect property	65
To protect the community	55
To protect the environment	45





LTR



Job separation sheet

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.	3004524649
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		7. Lease Name or Unit Agreement Name GARCIA GAS COM "B"
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	2. Name of Operator AMOCO PRODUCTION COMPANY	8. Well No. 1E
3. Address of Operator P.O. Box 800 Denver Colorado 80201		9. Pool name or Wildcat BASIN DAKOTA
4. Well Location Unit Letter M : 790' Feet From The FSL Line and 590' Feet From The FWL Line Section 21 Township 29N Range 10W NMPM SAN JUAN County		
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 5471' G.L.		

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> OTHER: Bradenhead Repair <input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Bradenhead repair to ensure zonal isolation behind casing. See attached procedures.

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JUL 1 1993
OIL CO. V.
DI

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Dallas Kalahar TITLE Business Analyst DATE 06-14-1993

TYPE OR PRINT NAME Dallas Kalahar TELEPHONE NO. (303) 830-5129

(This space for State Use)

Original Signed by CHARLES GHOLSON

APPROVED BY _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE JUL 1 1993

CONDITIONS OF APPROVAL, IF ANY:

031303

121

100



STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

94164

BRADENHEAD TEST REPORT
(Submit 2 copies to above address)

Date of Test 3-17-90 Operator Amoco Production, 200 Amoco Court, Farmington, NM
Lease Name Garcia Gas Com Well No. B#1E Location: Unit Section 21 Township 29 N Range 10 W
Pressure (Shut-in or Flowing) Tubing 283 Intermediate Casing 312 Bradenhead 116

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES:		BRADENHEAD FLOWED	INTERMEDIATE FLOWED
	INTERMEDIATE	CASING		
5 min.		<u>313</u>	Steady Flow <u>✓</u>	
10 min.		<u>314</u>	Surges <u> </u>	
15 min.			Down to Nothing <u> </u>	
20 min.			Nothing <u> </u>	
25 min.			Gas <u> </u>	
30 min.			Gas & Water <u>✓</u>	
			Water <u> </u>	

If Bradenhead flowed water, check description below:

CLEAR FRESH SALTY SULFUR BLACK

REMARKS:

Water after 2 min of flow - water is light brown in color
no sulfur smell

By Armando J. Cruz Witness

Workover Procedure
Garcia Gas Com E #1E
Sec.21-T29N-R10W
San Juan County, NM

1. Contact Federal or State agency prior to starting repair work.
2. Catch gas and/or water sample off of bradenhead and casing, and have analyzed.
3. Install and/or test anchors on location.
4. MIRUSU. Check and record tubing, casing and bradenhead pressures.
5. Blow down well and kill well, if necessary, with 2% KCL water.
6. ND wellhead. NU and pressure test BOP's.
7. TIH and tag PBTD, check for fill. Trip and tally out of hole with tubing, checking condition of tubing.
8. TIH with bit and scraper to top of perforations. A seating nipple and standing valve may be run in order to pressure test tubing. TOH.
9. TIH with RBP and packer. Set RBP 50-100 ft. above perforations. TOH one joint and set packer. Pressure test RBP to 1500 psi.
10. Pressure test casing above packer. Isolate leak, if any, by moving packer up the hole and repeating pressure test.

NOTE: If this can not be accomplished, contact Greg Grotke in Denver at (303) 830-4079. If no leak is found, it may be necessary to perforate the casing below surface casing depth or above the top of cement in order to circulate cement to surface.

11. Establish injection rate into leak, if found, and attempt to circulate to surface.
12. Release packer, spot sand on RBP and TOH with packer.
13. Run, if necessary, a CBL and CCL to determine cement top.
14. Perforate casing above cement top, if necessary, with 4 JSPF and circulate dye to determine cement volume.

15. Depending on depth of hole and circulating pressure, a packer or cement retainer may be needed.
16. Mix and pump sufficient cement (Class B or equivalent, with a setting time of 2 hours) to circulate to surface. Shut bradenhead valve and attempt to walk squeeze to obtain a 1000 psi squeeze pressure. WOC.
17. TIH with bit and scraper and drill out cement. Pressure test casing to 1000 psi. TOH with bit and scraper.
18. TIH with retrieving head for RBP. Circulate sand off of RBP and TOH with RBP.
19. TIH with sawtooth collar and/or bailer and clean out hole to PBTD, if fill was found in step 7. TOH.
20. TIH with production string (1/2 mule shoe on bottom and seating nipple one joint off bottom) and land tubing to original depth. NDBOP. NU wellhead.
21. Swab well in and put on production.
22. RDMOSU.

GARCIA GAS COM B #1E
LOCATION - 21M- 29N- 10W
SINGLE DK
ORIG.COMPLETION - 10/81
ELEVATION 5471 GL
LAST FILE UPDATE - 5/93 BY CSW

OJ AT 476

KL AT 1092

FL AT 1448

PC AT 1748

BOT OF 9.625 IN OD CSA 296
32.3 LB/FT, H-40 CASING
W/375 SKS
CIR TO SURFACE

MV AT 3390

DV TOOL @4413

GP AT 5274

DK AT 6168

DK-2SPF PERF 6233-6266

BOT OF 2.375 IN OD TBG AT 6228

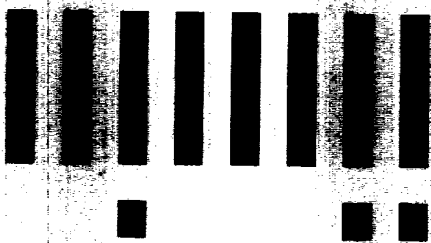
6404-6416

PBTD AT 6438 FT.

BOT OF 4.5 IN OD CSA 6451
10.5 LB/FT, K-55 CASING
W/1285 SKS
CIR TO SURFACE

TOTAL DEPTH 6509 FT.

FILENAME:
04524649



LTR



Job separation sheet

1. The first part of the document is a list of the names of the persons who have been appointed to the various positions of the Board of Directors of the Corporation. The names are as follows:

2. The second part of the document is a list of the names of the persons who have been appointed to the various positions of the Board of Directors of the Corporation. The names are as follows:

3. The third part of the document is a list of the names of the persons who have been appointed to the various positions of the Board of Directors of the Corporation. The names are as follows:

4. The fourth part of the document is a list of the names of the persons who have been appointed to the various positions of the Board of Directors of the Corporation. The names are as follows:

5. The fifth part of the document is a list of the names of the persons who have been appointed to the various positions of the Board of Directors of the Corporation. The names are as follows:

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Energy, Minerals and Natural Resources Department

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Revised 1-1-89

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DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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SEP 20 1993

OIL CON. DIV.

DIST. 3

WELL API NO.	3004524649
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	GARCIA GAS COM "B"
8. Well No.	1E
9. Pool name or Wildcat	BASIN DAKOTA
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	5471' G.L.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
OIL WELL ☐ GAS WELL ☐ OTHER

2. Name of Operator
AMOCO PRODUCTION COMPANY
Attention: Dallas Kalahar

3. Address of Operator
P.O. Box 800 Denver Colorado 80201

4. Well Location
Unit Letter M : 790' Feet From The FSL Line and 590' Feet From The FWL Line
Section 21 Township 29N Range 10W NMPM SAN JUAN County

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
CHANGE PLANS <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: Bradenhead Repair <input checked="" type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

7-30-93 MIRUSU- Bled off press - ND well head NUBOP -TIH tagged @6410' & TOH w/196 jts tbg . TIH w/ bit & scraper to 6325 TOH w/ scraper. TIH w/ RBP & set @6118' - filled hole & press test to 1000 psi - held ok - TOH w/ ret head. NDBOP - changed out seals on well head & tested to 1500 psi- NUBOP - RU wireline & ran CBL CCL, GR from 2600' to surf. CMT top @ 1820' -RIH and perf csg @1730' w/ 3 1/8 HCG 2 JSPF 90 DEG phased - est inj rate of 1 BPM @ 900 psi.RIH & set cmt ret @ 1550' - TIH w/ cmt stinger and stung into cmt ret @ 1550. press test to 500 psi- RU cmt equip and mixed & pumped 150 sxs of class B cmt w/ .8% Halad-322 & 5%cal seal & 6.25# gilsonite. Displaced cmt & stung out of cmt ret w/ 1300 pse - TOH w/ cmt stinger - RU WLE RIH - perf csg @ 1070' w/ 3 1/8 HCG 2 jspf 90 deg phased .41hole - RD WLE - est circ on Bradenhead @ 3BPM @ 600psi circ for 2 hrs 45 min. -Pumped dye w/ 90 bbls -RU cmt equip - pump 450 sxs Class B cmt w/ .3% Halad 344 & 5% cal seal & .2%super CBL- circ.15 bbls to surf w/ 230PSI .TIH w/ bit and scraper & 10 3/8 DC tagged plug @ 790' drill on plug to 880' -drill cmt from 880 to 1080 circ hole clean . Press test to 500 psi. Held OK TIH & tagged cmt @ 1520- drill cmt & cmt ret @ 1550 to 1735- fell free - circ hole press test to 500 psi held ok. TOH w bit -TIH w/ ret head circ off sand on RBP @ 6120' pulled up to 6088. RU to swab recovered 86 bbls. (CONTINUED SEE ATTACHED)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Dallas Kalahar TITLE Business Analyst DATE 09-13-1993

TYPE OR PRINT NAME Dallas Kalahar TELEPHONE NO. 303-830-5129

(This space for State Use)

APPROVED BY Original Signed by CHARLES GHOLSON DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE SEP 20 1993

CONDITIONS OF APPROVAL, IF ANY:

GARCIA GAS COM "B" #1E

Bradenhead Repair

(continued from page 1)

TIH and released RBP and TOH - TIH w/ pump bailer - tagged up @6333' cleaned out to 6348' unable to make any hole. TOH w/ bailer. (changed out csg valves). TIH w/ pump bailer to 6343' pump 20 bbl - worked bailer 45 min. - unable to make any hole. TOH w/ bailer - TIH w/ 1/2 mule 1 jt. - sn with F collar - TIH to 6120' unable to get any N2 - TIH w/ prod string - TIH and tagged up @ 6341' rigged up N2 equip - tried to clean out- unable to make any hole- pulled up & landed tbg @ 6318'. Pump 30 K of N2 - unloaded hole. NDBOP - NU well head- RU to swab - well started to flow- flowed well for 3.5 hrs on 3/4 " choke. Rec 25 bbls SWI - RDMOSU 8-7-93.



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6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	Garcia Gas Com B
8. Well No.	1E
9. Pool name or Wildcat	Basin Dakota
10. Elevation (Show whether DF, RKB, RT, GR, etc.)	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	2. Name of Operator Amoco Production Company	Attention: Gail M. Jefferson, Rm 1295C
3. Address of Operator P.O. Box 800 Denver Colorado 80201 (303) 830-6157	4. Well Location Unit Letter M : 790' Feet From The South Line and 590' Feet From The West Line Section 21 Township 29N Range 10W NMPM San Juan County	5. Pool name or Wildcat Basin Dakota
10. Elevation (Show whether DF, RKB, RT, GR, etc.)		

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: Well Repair ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Amoco Production Company has repaired the above referenced well per the attached.

If you have any questions please contact Gail M. Jefferson at (303) 830-6157.

RECEIVED
SEP - 1 1995
OIL CON. DIV.
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Gail M. Jefferson TITLE Sr. Admin. Staff Asst DATE 08-31-1995
TYPE OR PRINT NAME Gail M. Jefferson, Rm 1295C TELEPHONE NO. (303) 830-6157

(This space for State Use)

APPROVED BY Johnny Robinson TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #2 DATE SEP - 1 1995
CONDITIONS OF APPROVAL, IF ANY:

Garcia Gas Com B 1E - Repair - Subsequent

MIRUSU 8/9/95. Blew well down. POOH w/2 3/8" tbg. NDWH. NUBOP.

Ran 1.9 Gamma Ray log to 6269'. Ran Slick wire line and set slickline plug & 6260'. Had no tight tubing spots.

Cleaned out with N2 from 6337-6438' and circ @ 1000 scf/m. Recovered sand and 70 bbls wtr in 6 hrs. Waited 2.5 hrs and made 12' fill clean out. TOH blowing hard.

Flowed well. SICP 440#, FCP 440#.

Set CIBP @ T6316' and B6318'.

Received permission from Johnny Robinson of NMOCD to abandon perfs from 6404' -T/16.

TIH w/2.375" tbg and profile nipple. Land tbg @ 6256'.

NDBOP. NUWH. RDMOSU 8/22/95.