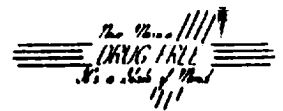




STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DIVISION
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

Date: 12/17/93

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Proposed MC _____
Proposed NSL _____
Proposed WFX _____
Proposed NSP _____

Proposed DHC 2 _____
Proposed SWD _____
Proposed PMX _____
Proposed DD _____

Gentlemen:

I have examined the application received on Nov. 15, 93
for the Amow OPERATOR Juanilla A #2E LEASE & WELL NO.

0-18-26N-SW and my recommendations are as follows:
UL-S-T-R

Approve

Yours truly,

31.8



Amoco Production Company

Southern Rockies Business Unit
Amoco Building
1670 Broadway
Post Office Box 800
Denver, Colorado 80201
303-830-4040

November 4, 1993

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
310 Old Santa Fe Trail
Post Office Box 2088
Santa Fe, New Mexico 87504

File: CAW-297-986.511

Application for Exception to Rule 303-A
Downhole Commingling
Jicarilla A-2E Well
1120' FSL, 1520' FEL, Sec. 18, T26N-R5W
Basin Dakota and Tapacito Gallup Pools
Rio Arriba County, New Mexico

RECEIVED
NOV 5 1993
OIL CON. DIV.
DIST. 3

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Basin Dakota and Tapacito Gallup pools in the Jicarilla A-2E well referenced above. This will also require a location exception for the Tapacito Gallup pool which Amoco is filing under a separate application. The ownership (WI, RI, ORRI) of these two pools is identical in this wellbore. Production methods are limited due to the 4 1/2" casing in the well. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserve and violation of correlative rights.

A copy of this application will be sent to the offset operators. If there are any questions concerning this matter, please contact me at (303) 830-5072.

Sincerely,


J. W. Hawkins

Enclosures

cc: Wayne Branam
Lara Kwartin

Frank Chavez, Supervisor
Amoco District III
1000 Rio Brazas Road
Aztec, NW 87410

Robert Kent
Bureau of Land Management
435 Montano NE
Albuquerque, NM 87107

Meridian Oil, Inc.
P. O. Box 4289
Farmington, NM 87499

HORIZONTAL DATUM NAD27

Application for Exception to Rule 303-SEGREGATION OF PRODUCTION FROM POOLS

D. REQUIREMENTS

(1) Name and address of the operator:

Amoco Production Company
P. O. Box 800
Denver, CO 80201

(2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name: Jicarilla/A/
Well Number: 2E
Well Location: 11200' FSL & 1520' FEL
Sec. 18, T26N-R5W
Rio Arriba County, New Mexico
Pools Commingled: Tapacito, Gallup
Basin Dakota

(3) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

Attached (Attachment I)

(4) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

Attached (Attachment II)

(5) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes. (This requirement may be dispensed with in the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be permitted.)

Dakota Completion: Historical production curve attached, well was shut-in since 1991.

(Attachment III)

Gallup Completion: New completion, no production history available, completion report attached.

(Attachment IV)

(6) Estimated bottomhole pressure for each artificially lifted zone. A current (within 30 days) measured bottom hole pressure for each zone capable of flowing.

Dakota Completion:	BH Press.	SI Tub. Press.	Fluid Level
Jicarilla B-5E	3560 psi	1090 psi	193

Jicarilla B5-E is representative of the Dakota SIBHP in this area. Jicarilla A-2E well has no SI pressure data available due to casing leak. This leak has been repaired during the Gallup completion work.

Gallup Completion:	BH Press.	SI Tub. Press.	Fluid Level
Jicarilla A-5	1827 psi	445 psi	3749

This well is in Section 20 diagonally offset to the Jicarilla A-2E and has been shut-in for about 2 years. This is best estimate of SI BH Press. for the Gallup formation in this area.

- (7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the wellbore.

The fluids have no abnormal components that would prohibit commingling, or promote the creation of emulsions or scale (see attached produced gas and fluid analysis).

- (8) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams.

<u>Dakota Production</u>		<u>Gallup Production</u>	
Oil, BOPD	3.6	Oil, BOPD	3.4
Gas, MCFD	88	Gas, MCFD	1196
Water, BWPD	0	Water, BWPD	3

The combined production from the Gallup-Dakota formations will be approximately 1284 MCFD/7 BOPD/3 BWPD. Since the BTU content and API gravities of the produced fluids are very similar, we would expect the commingled production to have the same value as the sum of the individual streams.

- (9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula:

Based on C-116 report:

	<u>Dakota</u>	<u>Gallup</u>
Gas -	$88/1284 = 7\%$	$1196/1284 = 93\%$
Oil -	$3.6/7 = 51\%$	$3.4/7 = 49\%$

- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

All offsetting operators will receive a copy of this application by certified mail. The offsetting operator is: Meridian Oil Inc., P. O. Box 4289, Farmington, NM 87499.

Submit to Appropriate
District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
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 LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Amoco Production Company			Lease JICARILLA A		Well No. 2E
Unit Letter O	Section 18	Township 26N	Range 5W	NMPM	County RIO ARRIBA
Actual Footage Location of Well: 1120' feet from the FSL line and 1520' feet from the FEL line					
Ground level Elev. 6601GR	Producing Formation TAPACITO GALLUP		Pool TAPACITO GALLUP		Dedicated Acreage: 3.20 ACRE Acres
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? ☐ Yes ☐ No If answer is "yes" type of consolidation _____ If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.					
			OPERATOR CERTIFICATION		
			<i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>		
			Signature 		
			Printed Name WAYNE BRANAM		
			Position BUSINESS ANALYST		
Company Amoco Production Company					
Date 110393					
SURVEY CERTIFICATION					
<i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.</i>					
Date Surveyed Nov 18, 1980					
Signature & Seal of Professional Surveyor ON FILE					
Certificate No.					

OIL CONSERVATION DIVISION

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

Submit 2 copies to Appropriate
District Office.

DISTRICT I
P.O. Box 1080, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

GAS - OIL RATIO TEST

Operator Amoco Production Company		Pool Tapacito Gallup		County Rio Arriba											
Address P. O. Box 800		TYPE OF TEST - (X)		Completion ☐ Scheduled ☐ Special ☒											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBO. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL.		
		U	S	T						R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.	GAS MCF.
Jicarilla A	2E	0	18	26N	5W	091593	P	None	221	24	3:1	65	3.43	1196	348,688
										Back Pressure 210 lb.					

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Signature
A. Wayne Branam

Wayne Branam, Business Analyst

Printed name and title

092093

Date

(303) 830-4912

Telephone No.

DISTRICT
P.O. Box 1980, Hobbs, NM 88240
DISTRICT
P.O. Drawer DD, Artesia, NM 88210
DISTRICT
1000 Rio Diazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

GAS - OIL RATIO TEST

Operator		Pool		County											
Amoco Production Company		Basin Dakota		Rio Arriba											
Address		TYPE OF TEST - (X)		Completion ☐ Scheduled ☒											
P.O. Box 800, Denver, CO 80201		TYPE OF TEST - (X)		Completion ☐ Scheduled ☒											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBQ. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL.		
		U	S	T						R	WATER BBL.S.	GRAY. OIL		OL. BBL.S.	GAS MCF.
Jicarilla A	2E	0	18	26N	5W	040191	P	None	.845	24	.02	60	3.6	88	24,444

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

Wayne Branam
Signature
Wayne Branam, Business Analyst
Printed name and title
092093
Date
(303) 830-4912
Telephone No.

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

DISTRICT I
P.O.Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107
Revised 4-1-91

OIL CONSERVATION DIVISION

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

Filing Instructions
Bottom of Page

APPLICATION FOR MULTIPLE COMPLETION

Operator	Address
Amoco Production Company, P.O. Box 800, Denver, CO 80201	

Lease	Well No.	Unit Ltr. - Sec - Twp - Rge	County
Jicarilla A	2E	O 18 T26N R5W	Rio Arriba

All applicants for multiple completion must complete Items 1 and 2 below.

1. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Tapacito Gallup		Basin Dakota
b. Top and Bottom of Pay Section (Perforations)	6780-6800		7288-7520
c. Type of production (Oil or Gas)	Oil GAS		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
e. Daily Production ☒ Actual ☐ Estimated Oil Bbls. Gas MCF Water Bbls.	3.43 BOPD 1196 MCFD 3.1 BWPD		3.6 BOPD 88 MCFD .02 BWPD

2. The following must be attached:

- Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

OPERATOR:

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

Signature Wayne Branam
Printed Name & Title Wayne Branam, Bus. Analyst

Date 092093 Telephone (303) 830-4912

OIL CONSERVATION DIVISION

Approved by: _____

Title: _____

Date: _____

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

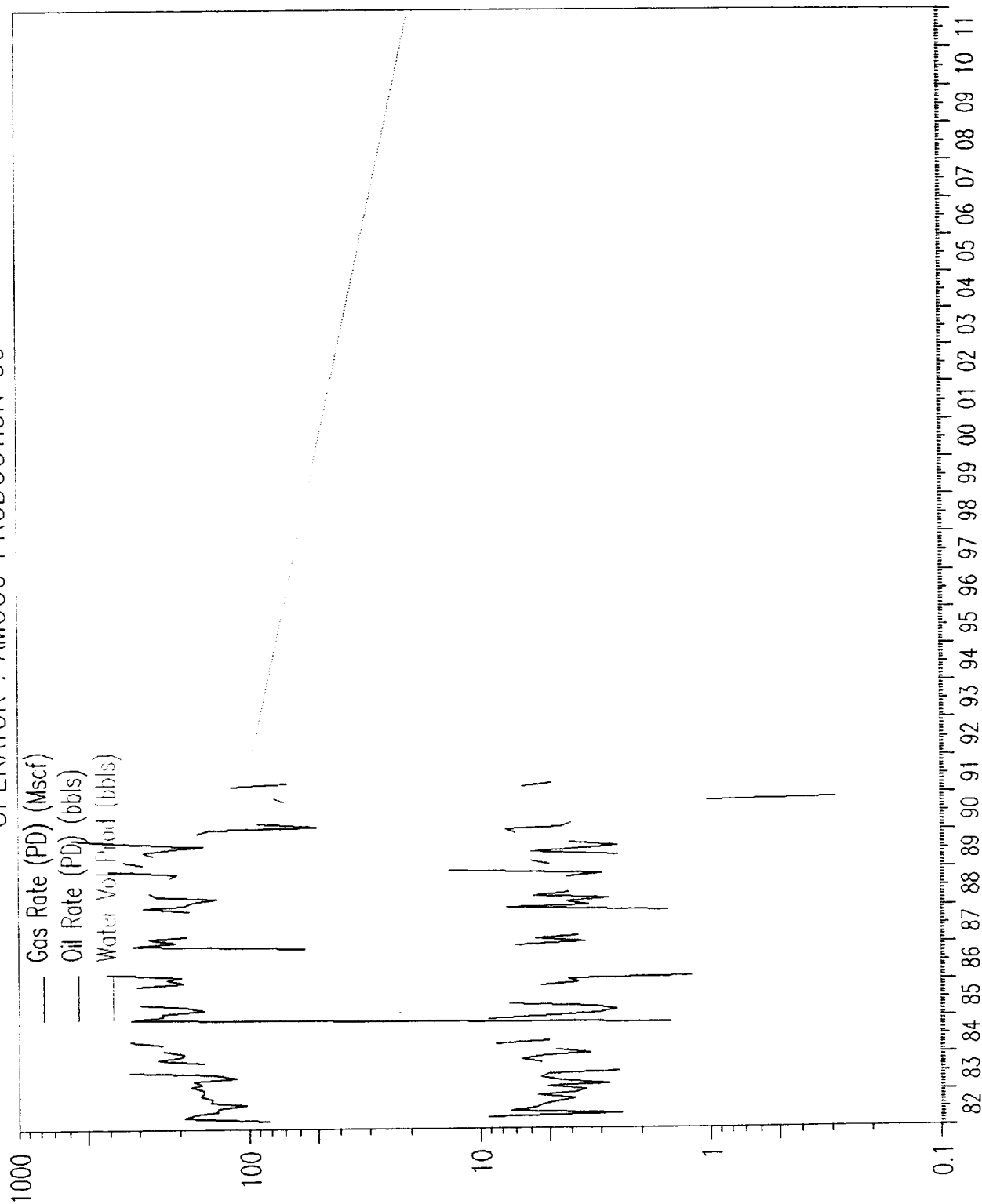
FILING INSTRUCTIONS:

- District Approval -- See rule 112-A-B -- Submit 4 copies of Form C-107 with attachments to appropriate district office.
- Division Director Administrative Approval -- See Rule 112-C -- Submit 2 copies of Form C-107 with attachments to Division office in Santa Fe and 2 copies of Form C-107 with attachments to appropriate district office.
- Multiple completions not qualifying for District or Division Director approval may be set for hearing as outlined in Rule 112-A-E.

JICARILLA A 2E

WELL: 300392258100:DK

OPERATOR : AMOCO PRODUCTION CO



CONTRACT 110

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

JICARILLA

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

JICARILLA A 2E

9. API WELL NO.

3003922581

10. FIELD AND POOL, OR WILDCAT
TAPACITO-GALLUP

11. SEC., T., R., M., OR BLOCK. AND SURVEY OR AREA

Section 18

Township 26N Range 5W

12. COUNTY OR PARISH
RIO ARRIB

13. STATE	NM
-----------	----

15. DATE SPUDDED 08/15/81	16. DATE T.D. REACHED 08/31/81	17. DATE COMPL. (Ready to prod.) 09/01/83	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6601GR	19. ELEV. CASINGHEAD
------------------------------	-----------------------------------	--	---	----------------------

20. TOTAL DEPTH, MD & TVD 7567'	21. PLUG, BACK T.D., MD & TVD 7548'	22. IF MULTIPLE COMPL., HOW MANY* 1	23. INTERVALS DRILLED BY —	ROTARY TOOLS YES	CABLE TOOLS NO
------------------------------------	--	---	----------------------------------	---------------------	-------------------

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)*	25. WAS DIRECTIONAL SURVEY MADE
6780-6800 GALLUP	NO

26. TYPE ELECTRIC AND OTHER LOGS RUN	27. WAS WELL CORED
	N

28. CASING RECORD (Report all strings set in well)

Title 18 U.S.C. Section 1001, makes 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.

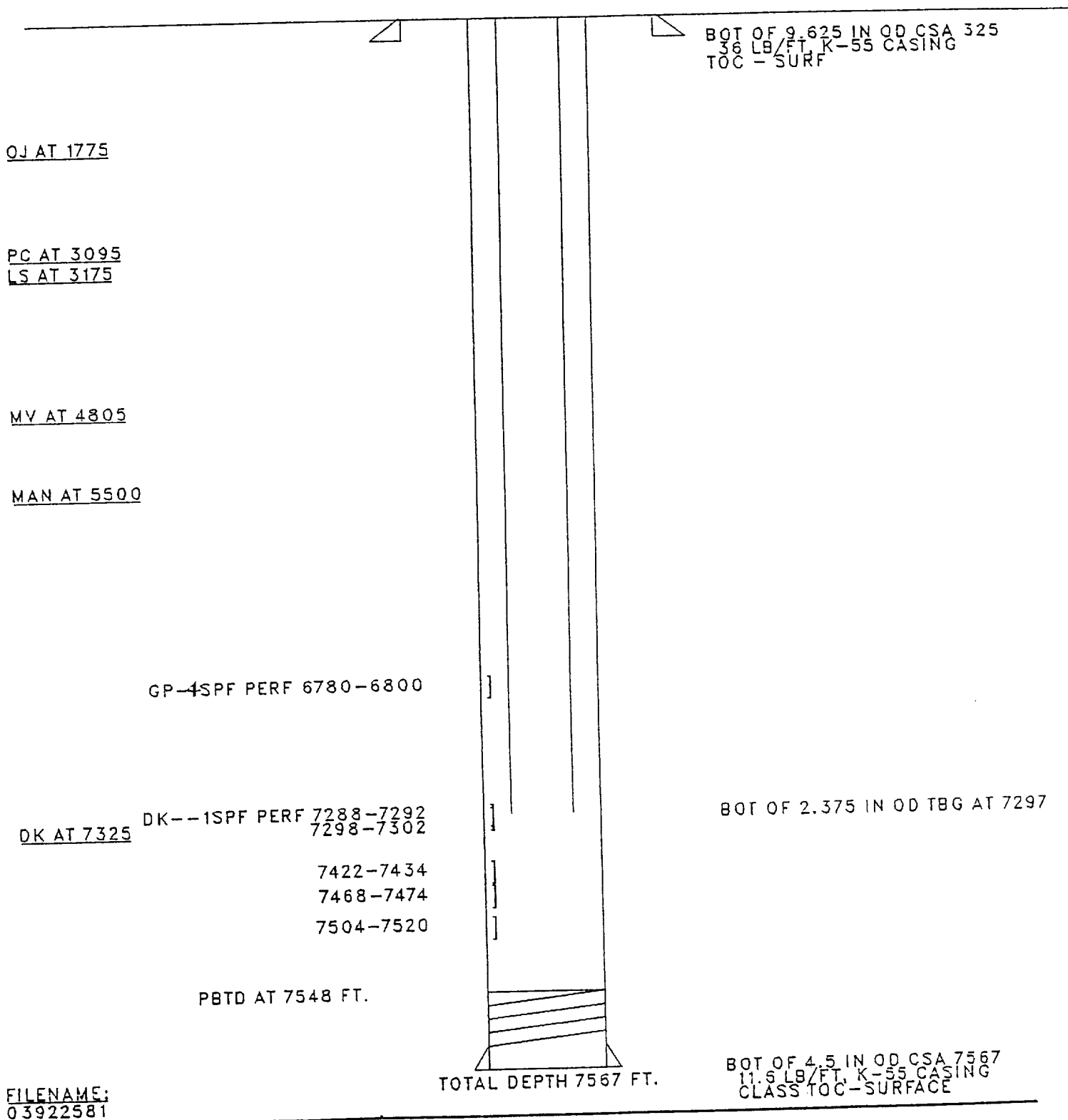
081893 MIRUSU, TAKE PRESSURES, TBG AND CSG WERE DEAD, NDWH, NUBOP, TIH W/7 JTS TBG DID NOT TAG FILL, TOH, TIH W/SCRAPPER TAG AT 7557 W/9' FILL, TOH, TIH W/RBP & PKR TO 7200', SET RBP & PRESS TEST, DID NOT TEST, MOVE RBP UP HOLE 30' RESET & RETEST, TEST TO 1000#, HELD, BLED OFF & RETEST, DID NOT HOLD, TIH LATCH ONTO RBP, TOH, SET RBP AT 7061', TEST TO 1000#, HELD, TOH TO 6624', TEST CSG TO 3500#, HELD, TOH W/PKR LOOKING FOR LEAK, CSG LEAKS FOUND 2580' TO 2107', TOH, PMP 8 BBLs KCL WATER TO LOAD HOLE, MIX & PMP 22 BBLs CMT/.8% HALAD-322/.5% CAL SEAL SPOT OVER LEAKS, DISP W/3 BBLs 2% KCL, TOH, LOAD HOLE W/4.75 BBLs KCL WATER, SQZ W/11 BBLs AT 600#, WAIT 45 MIN, SQZ W/2 BBLs CMT AT 240#, WAIT 30 MIN, SQZ W/.25 BBL. SI, TIH W/ BIT & SCRAPER, TAG TOC AT 2147', DRL CMT TO 2651', CIRC CLEAN, PRESS TEST TO 500#, HELD, TOH, TIH W/TBG TO 6800', SWAB TO 6000+, TOH,

TIH PERF THE GALLUP INTERVAL W/4 JSPF 12G CHARGE FROM 6780' TO 6800', NO INITIAL PRESS RESPONSE WAS SEEN AFTER PERFORMING, TIH W/ FRAC STRING, SET PKR AT 6633' AND PRESS TEST TO 6500#, HELD, FISH STD VALVE,

FRAC WELL W/ 56,000 GALLONS OF 70 QUALITY NITROGEN FOAM AND 110,000 LBS 20/40 BRADY SAND DOWN THE CSG AT 15 BPM, AND WHIP = 3050 PSI, DISPLACE W/ BASE GEL

SI AND RIG UP FLOWLINE, OPEN WELL AT 6:30 PM, TBG 890# FLOWING THRU .25" CHOKE, .REL PKR, KILL WELL W/80 BBLs KCL WATER, TOH, TIH W/ PRD TBG, TAG SAND AT 6776', TOH 3 STDS, TAKE PRESS READINGS CSG 480# TBG 480#, CO SAND FROM 6776' TO 6932', TOT OF 156' OF SAND, W/127,000 SCF N2, TOH, LAND PRD TBG AT 6807', PMP 5 BBLs KCL KILL WELL, NDBOP, NUWH, RDSU 090193, CO CMT FROM PIT. TEST GALLUP TBG 90# CSG 400#, MADE SEVERAL ATTEMPTS TO KICK OFF WELL, TBG BLEW DN TO 0# IN 5 MIN, CSG MAINTAINED 400#, WOULD NOT UNLOAD, BLEW 2 HRS, CSG PRESS BUILT A LITTLE. TBG PRESS 68# CSG 450#, TURNED WELL ON, BLEW DOWN TO 0#, 2ND ATTEMPT 2 HRS LATER, BLEW DOWN TO 0#, WILL NOT UNLOAD & FLOW. TBG 75# CSG 455#, TBG BLEW DOWN IN 5 MIN, BLEW WELL FOR 3 HRS, WOULD NOT UNLOAD. TBG 160# CSG 480#, BLEW WELL 2 HRS, WELL STARTED TO COME AROUND, SI FOR 15 MIN, TURNED INTO TEST SEP W/150# BACK PRESS, FLOWING TBG 175#, CSG 425#. TBG 162# CSG 425# FLOWING 706 MCFD. TBG 165# XSG 420# FLOWING 743 MCFD. TBG 200# CSG 440# 798 MCFD.

JICARILLA A 002E
Location - 180- 26N- 5W
SINGLE dk
Orig.Completion - 10/81
LAST FILE UPDATE - 9/93 BY CSW



FILENAME:
03922581

SQZ'D LEAKS @2580-2107 W/22 BBLS CMT

To: JAKE



1115 FARMINGTON AVE. - FARMINGTON, NM 87401

(505) 325-6622

ANALYSIS NO. AMO30329

WELL/LEASE INFORMATION

COMPANY: AMOCO PRODUCTION COMPANY PRESSURE: 200 PSIG
WELL NAME: JICARILLA A-2E SAMPLE TEMP.: DEG. F
LOCATION: DATE SAMPLED: 9/14/93
FORMATION: GALLUP SAMPLE SRC: METER TUBE
COUNTY: RIO ARriba, NM SAMPLED BY: DICK THOMPSON
STATION NO.: PROD FOREMAN: JAKE NUNEZ
REMARKS: TEST WELL

ANALYSIS

COMPONENT	MOLE %	GPM**	B.T.U.*	SP. GR.*
NITROGEN	1.141	0.0000	0.00	0.0110
CO2	0.616	0.0000	0.00	0.0094
METHANE	76.851	0.0000	777.95	0.4257
ETHANE	12.444	3.3954	220.72	0.1292
PROPANE	5.352	1.5045	134.97	0.0815
I-BUTANE	0.682	0.2275	22.22	0.0137
N-BUTANE	1.615	0.5195	52.82	0.0324
I-PENTANE	0.473	0.1756	18.97	0.0118
N-PENTANE	0.439	0.1624	17.66	0.0109
HEXANE	0.387	0.1724	19.92	0.0125
TOTAL	100.000	6.1583	1265.23	0.7381

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

** @ 15.025 & 60 DEG. F

COMPRESSIBILITY FACTOR (1/Z) 1.0038
BTU/CU.FT. (DRY) CORRECTED FOR (1/Z) 1295.5
BTU/CU.FT. (WET) CORRECTED FOR (1/Z) 1272.9
REAL SPECIFIC GRAVITY 0.7405

ANALYSIS RUN AT 15.025 PSIA & 60 DEGREES F

CYLINDER PRESSURE: 194 PSIG
CYLINDER NO.: RC3224
DATE RUN: 9/15/93
ANALYST: CURTIS DUBERTIN

HALLIBURTON DISTRICT LABORATORY **WATER ANALYSIS DATA SHEET**

to: 9-15-93

Report No. _____

MOCO PRODUCTIONY JAKE Date Received 9-15-93JICARILLA A #2E - GP

Formation _____

Data For ReportSpecific Gravity 1.004pH 6.80

Ion	Calculation	ppm
<u>Fe Log</u>	_____	<u>15</u>
<u>K + T</u>	_____	<u>300</u>
<u>Na + T</u>	_____	<u>935</u>
<u>Ca</u>	_____	<u>47</u>
<u>Mg</u>	_____	<u>28</u>
<u>Cl</u>	_____	<u>1343</u>
<u>SO4 Log</u>	_____	<u><10</u>
<u>CO3</u>	_____	_____
<u>HCO3</u>	_____	<u>952</u>
<u>TDS</u>	_____	<u>3620</u>

RW 3.71 @ 65.5°FNotice

on sound engineering practices, but because of variable well conditions and other information which must be relied upon, Halliburton warrants, express or implied, as to the accuracy of the data or of any calculations or opinions expressed herein. You agree that Halliburton is not responsible for any loss or damage whether due to negligence or otherwise arising out of or in connection with such data, calculations or opinions.

GAS CO OF N.M.

ID:5056324234

AUG 18 '93 14:45

109231

DK

GAS ANALYSIS INFORMATION (GANL)

Meter Name: JICARILLA A

E002

Effective Gas Date:

08/30/90

Analyzed By:
Analyzed Date:Sampled By:
Sampled Date:

Sample Gravity:

BTU Pressure Base:

Dry BTU:

Wey BTU:

0.6860

14.730

1183.0000

0.0000

Mol %

CO2	1.0360
N2	0.6160
Methane	0.0000
Ethane	0.0000
Propane	0.0000
I-butane	0.0000
N-butane	0.0000
I-pentane	0.0000
N-pentane	0.0000
Hexanes (C6+)	0.0000

TOTALS:

1.6520

Remark:

Revised by

on ??/??

Carry over
To
MIPS

Name