



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

April 18, 1995

Losee, Carson, Haas & Carroll  
Attn: Ernest L. Carroll  
P. O. Box 239  
Artesia, New Mexico 88211-0239

---

Campbell, Carr, Berge & Sheridan, P. A.  
Attn: William F. Carr  
P. O. Box 2208  
Santa Fe, New Mexico 87504-2208

Re: Case Nos. 11,602 and 11,603, Applications of Bass Enterprises Production Company For Approval of the Expansion of the Atoka Participation Area in the James Ranch Unit, Eddy County, New Mexico.

Dear Messrs. Carroll and Carr:

An Examiner's Hearing to consider this matter is hereby set for 9:00 a.m., Monday, May 5, 1997 in Room 318 at the New Mexico State Capitol Building in Santa Fe, New Mexico.

Sincerely,

Michael E. Stogner  
Chief Hearing Officer/Engineer

MES/kv

cc: Oil Conservation Division - Artesia  
William J. LeMay, Director - OCD, Santa Fe  
Rand Carroll, Counsel - OCD, Santa Fe  
Florene Davidson - OCD, Santa Fe

---

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

July 17, 1995

Bureau of Land Management  
Department of Interior  
P. O. Box 1397  
Roswell, New Mexico 88201

Attention: Mr. Tony Ferguson

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Floyd Prando

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. Roy Johnson

Re: Initial Atoka "A" Participating Area  
James Ranch Unit No. 70  
James Ranch Unit  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as Unit Operator of the Poker Lake Unit Agreement, pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the attached commercial determination for the James Ranch Unit No. 70 Well and selection of the following described lands to comprise the Initial Participating Area for the Atoka "A" Formation:

S/2 Section 12, T22S-R30E containing 320.00 acres of land.

In support of this application the following numbered items are attached hereto and made a part hereof:

1. An ownership map (Exhibit "A") depicting the boundaries of the proposed initial participating area for the Atoka "A" Formation.
2. A schedule (Exhibit "B") identifying the lands entitled to participation in the unitized substances produced from the Atoka "A" Formation with the percentage of participation of each lease or tract indicated thereon.

July 17, 1995  
Page 2

3. A completed worksheet for Commercial Determination with various supporting documentation regarding the JRU No. 70 Well.
4. A geological discussion regarding the characteristics of the Atoka Formation with six attachments thereto.
5. An engineering analysis regarding reservoir and well performance of the Atoka Formation with eight attachments thereto.
6. One (1) copy of that certain Communitization Agreement dated to be effective January 22, 1995, communitizing all federal leases comprising the S/2 of Section 12, T22S-R30E.

It should be noted that the No. 70 Well has been evaluated by Bass as capable of producing in commercial quantities. The proposed initial participating area is predicated upon the knowledge and information first obtained upon the completion of Unit Well No. 70 (located in the SW/4 SE/4 of Section 12, T22S-R30E) on January 22, 1995. According to the Unit Agreement it is our understanding that the effective date of this initial participating area will be January 22, 1995. Therefore, Bass respectfully requests your approval of the hereinabove selection of lands to constitute the Initial Atoka "A" Participating Area to be effective January 22, 1995. Thank you very much for your cooperation in this regard and should you require additional information concerning same, please don't hesitate to contact the undersigned.

Very truly yours,

  
J. Wayne Bailey

JWB:ca

ACCEPTED AND AGREED this \_\_\_\_\_ day of \_\_\_\_\_, 1995.

BUREAU OF LAND MANAGEMENT    NEW MEXICO OIL CONSERVATION DIVISION

By: \_\_\_\_\_ By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

Grace  
1-Salome H T21S-R30E

T21S-R31E

26510 TD 7500 1-19-91  
26313 TD 7530 ?

26429 T22S-R30E 1

T22S-R31E 6

25788 TD 7480  
26304 TD 7500

26437 TD 7418

21098  
McKnight  
1 Campana  
TD 14,050  
4-4-75

25758 3-A TD 7490  
25699 Phillips 2-A James TD 6000  
26031 TD 7511 5-5-89  
26314 Phillips 10-A James TD 7500  
25962 TD 6200  
25232 TD 7557  
1-A

26436  
Phillips 5-Livingston Rd  
Troporo  
Sub 1-Cabana TD 13,950  
25398 TD 7555 1-71-91

5757  
Phillips 3-E James TD 7476 0-23-87  
26254 TD 7500  
26371 TD 7620  
11  
11

11-E 12-E 12

7

Phillips 1-E James TD 13,950  
26380 TD 7525

13-E 14-E

James Ranch Unit Boundary

Phillips Perr.  
80 Ac.  
NM 0479142

Bess  
200 Ac.

48

JRU  
70

40 Ac.

Mitchell Energy  
NM 89051

UNIT TRACT No. 1

NM 0300

14

13

18

Mitchell  
Apache -  
13-Fed

23

Bass Enterprises Production Co.

**JAMES RANCH UNIT**  
Eddy County, New Mexico

EXHIBIT "A"

Atoka Participating Area  
All Federal Lands - 320 Ac.

EXHIBIT "B"

Initial Atoka "A" Participating Area  
James Ranch Unit  
Eddy County, New Mexico

<u>Unit Tract No.</u>	<u>Lease No.</u>	<u>Description</u>	<u>Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owner</u>
NA*	NM 89051	Sec. 12, T22S-R30E: SE/4 SE/4	40.00	-0-	Mitchell Energy - 100%
NA*	NM 0479142	Sec. 12, T22S-R30E: N/2 SW/4	80.00	-0-	Phillips Petroleum - 100%
1	NM 0300	Sec. 12, T22S-R30E: S/2 SW/4, N/2 SE/4, SW/4 SE/4	<u>200.00</u>	<u>100.00%</u>	Bass Enterprises - 100%
Totals			320.00	100.00%	
Total Federal Lands:		320.00 ac.			
Total Unit Lands:		200.00 ac.			

\* These tracts are not located within the James Ranch Unit boundary.

**WORKSHEET FOR COMMERCIAL DETERMINATION  
AND PARTICIPATING AREA IN FEDERAL UNITS**

**WELL DATA**

WELL	James Ranch Unit #70			FORMATION	Altoña					
LOCATION	0	UNIT,	660	FEET FROM	S	LINE &	1980	FEET FROM	E	LINE
SECTION	12	TOWNSHIP	22S	RANGE	30E	COUNTY	Eddy, NEW MEXICO			
SPUD DATE	10/15/94		COMPLETION DATE	1/22/95		INITIAL PRODUCTION	1/22/95			
PERFORATIONS	12742-55'									

**STIMULATION:**

ACID Acid wash tbg w/ 200 gals 15% HCL then 500 gals  
Pump 1000 gals 50/50 mixture 7-1/2% HCL and methanol. Displace acid from 1.25" tbg with 25,000 SCF N2

FRACTURE \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

POTENTIAL (PI) 54 BOPD + 9534 MCFD + 10 BWPD. FTP 430 (3/10/95)

(Attach Copy of C-105. Attach Copy of Wellbore Sketch of Completed Well.)

**VOLUMETRIC CALCULATION**

	SANDS PERFORATED	SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	320	
Porosity (por), %	11.2%	
Water saturation (Sw), %	10%	
Net Thickness (h), ft.	5	
Temperature (T), Fahrenheit	190	
Bottom Hole pressure (P), psia	3,100	
Recovery factor (RF), %	95%	
Recoverable gas, MCF *(See eq. below)	1,500.257	

\*Unable to match performance due to net pay uncertainty.

Formula = (43,560) (A) (h) (por) (1-Sw) (Bgi) (RF)      Bgi = 0.03535 P/zT (MSCF/cu.ft.) =      0.1873

James Ranch Unit #70  
Continued

PERFORMANCE DATA

(If sufficient history exists, attach plot of oil production rate v time.)

CUMULATIVE PRODUCTION TO 4/1/95 ; 324,800 MCF.  
 INITIAL RATE (qi) 7,713  
 ECONOMIC LIMIT (qi) 100 MCFPD  
 DECLINE RATE, dy Hyperbolic d=96% n=.5  
 REMAINING GAS (Q) = 2,020,000  
 ULTIMATE RECOVERABLE GAS 2,344,400

(Attach plot showing proration unit and participating area.)

ECONOMIC

WELL COST \$ 1,453,000 (to the depth of formation completed)

RECOMPLETION COST \$ \_\_\_\_\_

TOTAL COST \$ 1,453,000

YEAR	GROSS GAS	NET INCOME	OPERATING COST	10% NET BPIT DISCOUNTED CASH FLOW
ZERO	<u>0</u>	<u>0</u>	<u>0</u>	<u>-1,453,000</u>
1	<u>1,347,900</u>	<u>1,921,500</u>	<u>196,900</u>	<u>1,351,100</u>
2	<u>430,900</u>	<u>534,700</u>	<u>74,700</u>	<u>402,500</u>
3	<u>175,700</u>	<u>219,100</u>	<u>46,900</u>	<u>135,900</u>
4	<u>95,400</u>	<u>118,500</u>	<u>38,000</u>	<u>58,000</u>
5	<u>59,900</u>	<u>74,400</u>	<u>34,200</u>	<u>28,400</u>
REMAINDER	<u>35,200</u>	<u>43,700</u>	<u>25,200</u>	<u>10,100</u>

WELL IS COMMERCIAL

DISTRICT I  
P.O. Box 1960, Hobbs, NM 58240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 38210

DISTRICT III  
1000 Elia Brazos Rd., Aztec, NM 37410

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form O-10  
Revised February 10, 1977  
Instruction on Back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		LIVINGSTON RIDGE NE
Property Code	Property Name	Well Number
	JAMES RANCH UNIT	70
OGRID No.	Operator Name	Elevation
001801	BASS ENTERPRISES PRODUCTION CO.	3329'

Surface Location

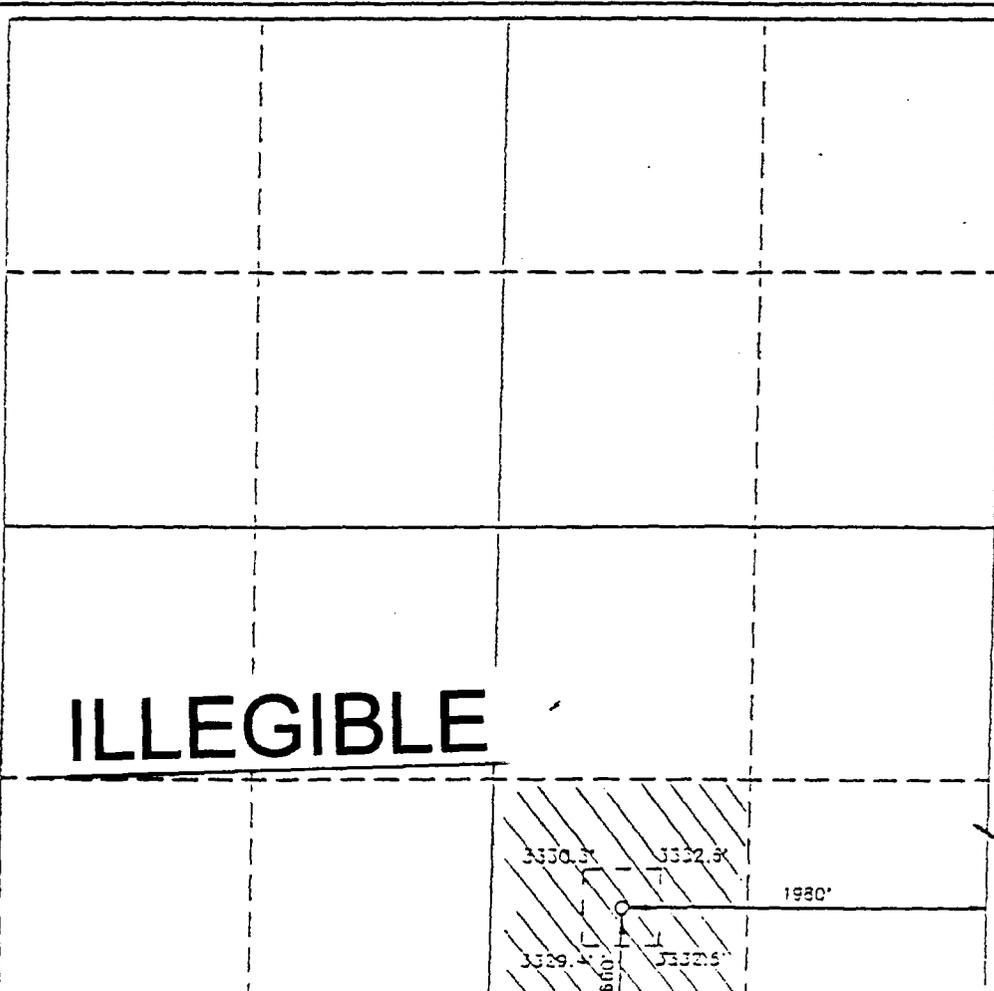
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	12	22S	30E		660	SOUTH	1980	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320	N	U	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**OPERATOR CERTIFICATION**

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

*William R. Dannels*  
Signature

William R. Dannels  
Printed Name

Division Drilling Supt.  
Title

4-10-90  
Date

**SURVEYOR CERTIFICATION**

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 belief.

March 28 1990  
Date Surveyed

Signature & Seal of Professional Surveyor  
7977

W.D. [Signature] - 6557  
Certificate No.

# JAMES RANCH UNIT NO. 70

LOC: 660' FSL & 1980' FEL, UNIT O, SEC 12, T22S, R30E

API NO: 30-015-28012

ELEVS: GL 3331.1' DF 3356.7' KB 3358.7'

SPUD DATE: 10/15/94

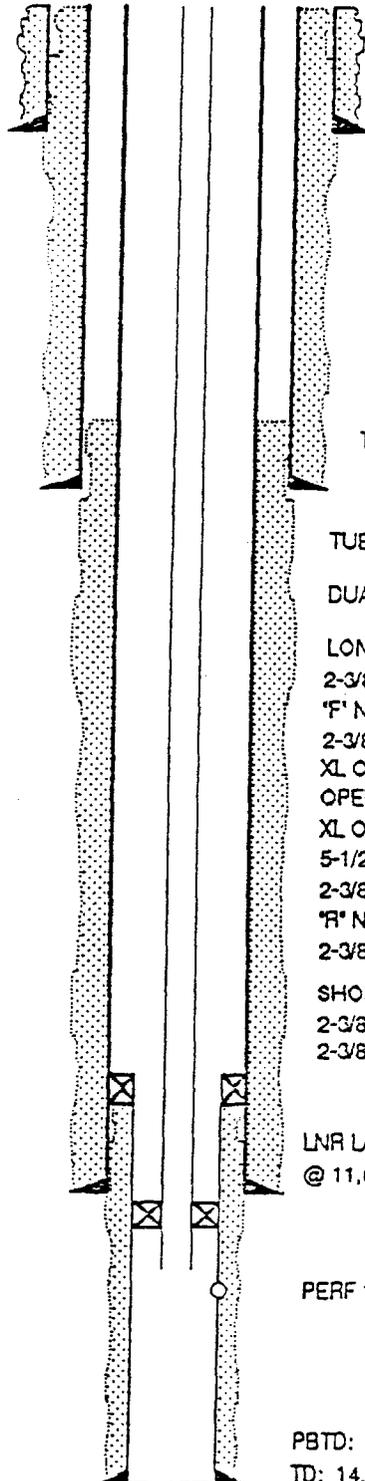
BASS ENTERPRISES LIVINGSTON RIDGE NE EDDY COUNTY, NM DATE: 3/22/95; LAH; JRU70
---

16" 65# H-40 BUTTRESS CSA 718'.  
 CMT W/420 SX CL C. CMT CIRC.  
 20" HOLE 0-718'.

10-3/4" 45.5 LT&C BUTTRESS HC-55  
 CSA 3840'. CMTD W/2350 SX.  
 CMT CIRC. 14-3/4" HOLE 718-3840'.

7-5/8" 29.7 M-95 LTC CSA 12,000'.  
 CMTD W/1360 SX. DV TOOL @ 7806'.  
 CIRC 40 SX OUT DV TOOL. CMTD 2ND  
 STAGE W/1700 SX. TOC 3404' (TS).  
 9-7/8" HOLE 3840-12,000'.

5-1/2" 20# S-95 LSA 11,654-14,139'.  
 CMT W/350 SX. CMT CIRC.  
 6-1/2" HOLE 12,000-14,139'.



## WELBORE INFORMATION

TOC 3404' (TS)

### TUBING STRING:

DUAL 2-3/8" X 7-5/8" WELLHEAD

#### LONG STRING

2-3/8" 4.7# N-80 TBG TO 12,656'  
 'F' NIPPLE 12,656-57'  
 2-3/8" 4.7# N-80 TBG 12,657-88'  
 XL ON/OFF TOOL OVERSHOT 12,688-90'  
 OPEN SPACE BETWEEN PKR & TBG 12,690-94'  
 XL ON/OFF TOOL W/'F' PROFILE 12,694-96'  
 5-1/2" UNI-6 PKR 12,696-702'  
 2-3/8" 4.7# N-80 TBG 12,702-33'  
 'R' NIPPLE W/NO-GO 12,733-34'  
 2-3/8" WL ENTRY GUIDE 12,734-35'

#### SHORT STRING (NOT IN USE)

2-3/8" 4.7# N-80 TBG TO 59'  
 2-3/8" STANDARD SN 59-60'

LNR LAP ISOL PKR & TIE-BACK RECEPTACLE  
 @ 11,666'. TOL @ 11,654'.

PERF 12,748-56', 4 SPF (1/14/95)

PBTD: 14,139' (1/95)

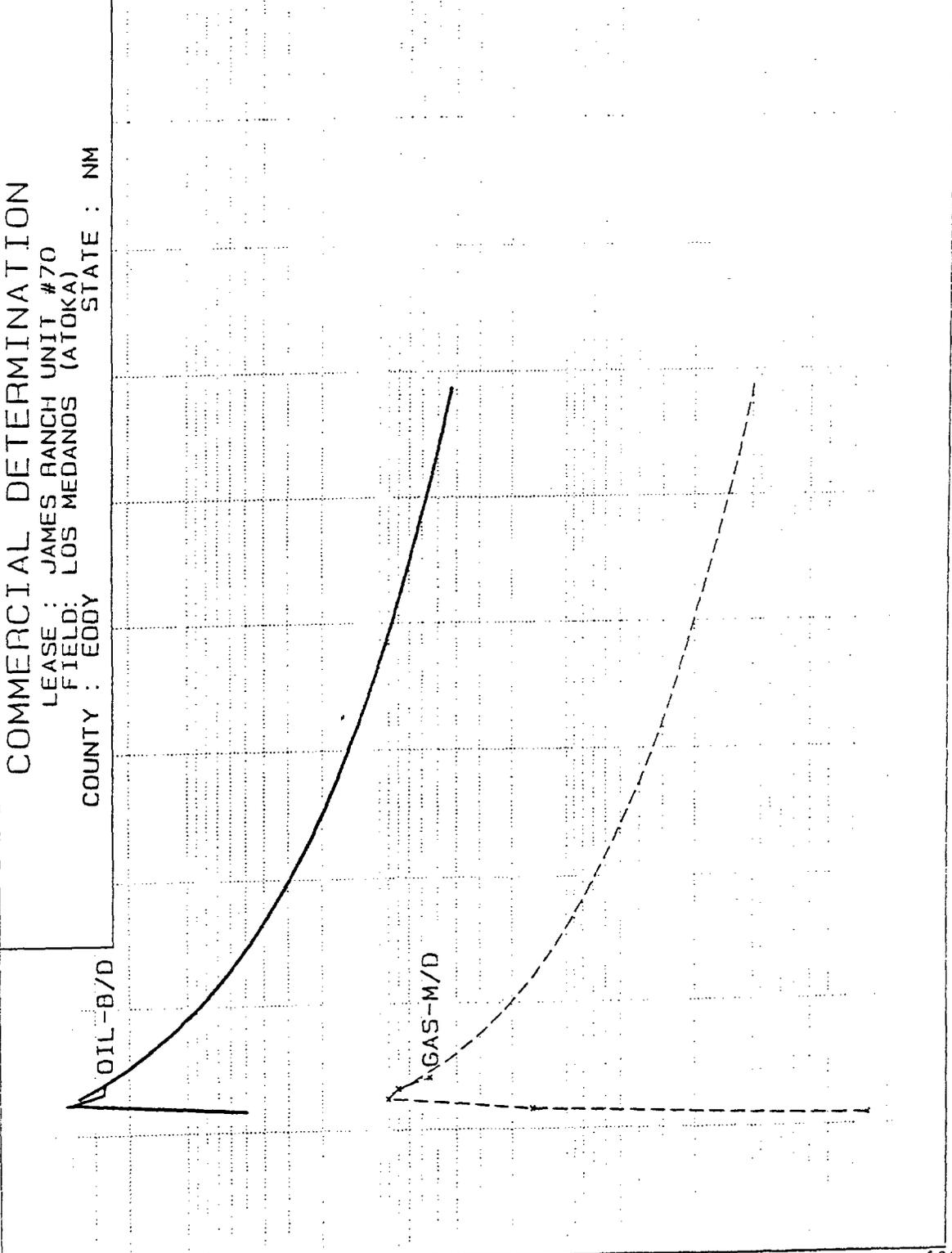
TD: 14,139'

OIL - ATOKA  
 Ref = 04/95  
 Cum = 1.386  
 Rem = 8.730  
 EUR = 10.116  
 Yrs = 5.667  
 Qi = .0  
 De = .000  
 n = .000  
 Qab = .0

GAS - ATOKA  
 Ref = 04/95  
 Cum = 324.602  
 Rem = 2020.000  
 EUR = 2344.602  
 Yrs = 5.667  
 Qi = 298183.8  
 De = 95.862  
 n = .500  
 Qab = 3041.0

COMMERCIAL DETERMINATION

LEASE : JAMES RANCH UNIT #70  
 FIELD: LOS MEDANOS (ATOKA) STATE : NM  
 COUNTY : EDDY



DATE 94 95 96 97 98 99 00 01 02 03

1000000  
 100000  
 10000  
 1000  
 100  
 10  
 1  
 GAS-M/D  
 OIL-B/D  
 1000000  
 100000  
 10000  
 1000  
 100  
 10  
 1

**CONFIDENTIAL**  
 UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT

**OPERATOR'S COPY**  
 FOR APPROVED  
 OMB NO. 1004-0137  
 Expires December 31, 1991

WF

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

2. TYPE OF COMPLETION: NEW WELL  WORK OVER  REFIN. BY  FISH  DIFF. CONCR.  Other \_\_\_\_\_

3. NAME OF OPERATOR:  
 Bass Enterprises Production Co.

4. ADDRESS AND TELEPHONE NO.  
 P O Box 2760 Midland, Tx 79702-2760 (915)683-2277

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements):  
 At surface 660' FSL & 1980' FEL Unit Letter O  
 At top prod. interval reported below  
 At total depth same as above

6. LEASE DESIGNATION AND SERIAL NO.  
 NMM0300

7. IF INDIAN, ALGONQUIAN OR TRIBE NAME  
 \_\_\_\_\_

8. UNIT AGREEMENT NAME  
 James Ranch Unit

9. FARM OR LEASE NAME, WELL NO.  
 James Ranch Unit #70

10. API WELL NO.  
 30-015-29012

11. FIELD AND POOL OR WILDCAT  
 Livingston Ridge NE Atoka

12. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA  
 Section 12, T22S, R30E

13. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_  
 14. COUNTY OR PARISH Eddy 15. STATE N.M.

16. DATE SPUNDED 10-15-94 17. DATE T.D. REACHED 12-8-94 18. DATE COMPL. (Ready to prod.) 1-22-95 19. ELEVATIONS (DT, ANS, RT, ST, ETC.) \* 3331.1' GR 3358.7' RKB 20. ELEV. CASINGHEAD ---

21. TOTAL DEPTH, MD & TVD 14,139' 22. PLUG, SACKS PER MD & TVD 14,026' 23. IF MULTIPLE COMPL. HOW MANY \* single 24. INTERVALS DRILLED BY 25. ROTARY TOOLS 26. CABLE TOOLS

27. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) \* 12,748-12,756' (36 holes) Atoka - Gas 28. WAS DIRECTIONAL SURVEY MADE no

29. TYPE ELECTRIC AND OTHER LOGS RUN GR-CNL-LDT, Phasor Dual Induction & Dual Lateroloc/Micro-SFL 30. WAS WELL COILED no

**CASING RECORD (Report all strings set in well)**

CASING HOLE GRADE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLES SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
16"	65#	712'	20"	Circ 720 sx CI "C"	none
10 3/4"	45.5#	3840'	14 3/4"	Circ 2550 sx Hall-L Prem	none
7 5/8"	29.7#	12,000'	9 7/8"	TS 3404-3060 sx Hall-L Po	none
		DVT 7606'			

**LINER RECORD**      **TUBING RECORD**

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
5 1/2"	11,667'	14,139'	350 sx		2 3/8"	12,702'	12,702'

**PERFORATION RECORD (Interval, size and number)**      **ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.**

perfs: 3 3/8" csg gun 4 JSPF 90% phased 12,748-12,756' (36 holes)	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
	12,748-12,756'	700 gal 15% Hcl acid & 1000 gal 50/50 mixture 7 1/2% Hcl methanol w/additives

**PRODUCTION**

31. FIRST PRODUCTION 1-22-95 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) flowing WELL STATUS (Producing or shut-in) producing

32. OF TEST 3-10-95 HOURS TESTED 24 CHOKE SIZE w/o PROD'N. FOR TEST PERIOD → OIL—BSL. 54 GAS—MCF. 9524 WATER—BSL. 10 OIL-GAS RATIO 177481

33. W. TUBING PERM. 430 CASING PRESSURE packer CALCULATED 24-HOUR RATE → OIL—BSL. 54 GAS—MCF. 9524 WATER—BSL. 10 OIL GRAVITY-API (CORR.) 59.6

DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sales & Lease Use TEST WITNESSED BY Pro Well Tester

LIST OF ATTACHMENTS 2 each of above logs

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE Sr.—Production Clerk DATE 3-22-95

ANCH UNIT #70  
 FOM RIDGE NE (ATOKA)  
 RU  
 J by: R.R. BIRKBELO

DATE : 05/15/95  
 TIME : 11:04:53  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SEQ NUMBER : 14

# ILLEGIBLE

INPUT DATA

SCHEDULE UNTIL

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

CALCULATED DATA

SCHEDULE UNTIL

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

SCHEDULE UNTIL

PROCEDURE

PROCEDURE

SCHEDULING RATES	ULTIMATE	LAST	BFF. DRCL	INIT. RATE	FINAL RATE
04/95	2344.602	11/00	95.86	298184.	3042.

DATE : 05/15/95  
 TIME : 11:04:53  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SBQ NUMBER : 14

# ILLEGIBLE

RANCH UNIT #70  
 STON RIDGE NE (ATOKA)  
 JRU  
 ad by: R. R. BIRKBELO

## R E S E R V E S   A N D   E C O N O M I C S

	AS OF DATE: 1/95				5.8 YR
	12/95	12/96	12/97	12/98	12/00 TOTAL
ENDING					
IP					
--- BANKING INTEREST, \$ 100.000 100.000 100.000 100.000 100.000 100.000 100.000					
/ANNU INTEREST, \$ 87.500 87.500 87.500 87.500 87.500 87.500 87.500					
MENTS, M\$					
--- BROWED CAPITAL					
JITY INVESTMENTS	.0	.0	.0	.0	.0
SK	1613.0	.0	.0	.0	-58.1 1554.9
TOTAL	1613.0	.0	.0	.0	-58.1 1554.9
ASB					
--- OIL, MB	6.7	1.9	.8	.4	.3 .2 10.1
OIL, MB	5.8	1.6	.7	.4	.2 .1 8.9
REVENUE, M\$	93.4	26.1	10.6	5.8	3.6 2.1 141.6
PRICE, \$/B	16.00	16.00	16.00	16.00	16.00 16.00
ASB					
--- GAS, MMP	1547.6	430.6	175.7	95.4	59.9 35.2 2344.4
GAS, MMP	1354.1	376.8	153.7	83.5	52.4 30.8 2051.3
REVENUE, M\$	1828.1	508.7	207.5	112.7	70.8 41.6 2769.3
PRICE, \$/MCF	1.350	1.350	1.350	1.350	1.350 1.350 1.350
ICS, M\$					
--- REV. TO INTR.	1921.5	534.7	218.1	118.5	74.4 43.7 2910.9
SV. TAX	151.6	42.2	17.2	9.3	5.9 3.4 229.6
AD VALOREM TAX	17.7	4.9	2.0	1.1	.7 .4 26.8
OPERATING COSTS	27.6	27.6	27.6	27.6	23.0 161.0
SWD	.0	.0	.0	.0	.0 .0 .0
CAPITAL REPAYMENT	.0	.0	.0	.0	.0 .0 .0
INTEREST PAID	.0	.0	.0	.0	.0 .0 .0
NET OWNED - PAID	.0	.0	.0	.0	.0 .0 .0
NET INCOME	1724.6	460.0	171.3	80.4	40.3 16.9 2493.5
INVESTMENTS & RSK	1613.0	.0	.0	.0	.0 -58.1 1554.9
BIT NET	113.6	460.0	171.3	80.4	40.3 75.0 938.6
F WORTH @ 10.00 \$					
--- INCOME	1651.1	402.5	135.9	58.0	26.4 10.1 2283.9
VESTMENTS & RISK	1613.0	.0	.0	.0	.0 -33.6 1579.4
IT NET	38.1	402.5	135.9	58.0	26.4 43.7 704.5
4 BIT NET	38.1	440.6	576.5	634.4	660.8 704.5 704.5

DATE : 05/15/95  
 TIME : 11:04:53  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SRQ NUMBER : 14

**ILLEGIBLE**

RANCH UNIT #70  
 STON RIDGE NR (ATOKA)  
 JRJ  
 ad by: R.R. BIRKBELO

AFTER TAX ECONOMICS

AS OF DATE: 1/95  
 5.8 YR TOTAL

	12/95	12/96	12/97	12/98	12/99	12/00	TOTAL
ENDING							
<b>STATEMENT OF INVESTMENTS, M\$</b>							
INT. REV. TO INTR.	1921.5	534.7	218.1	118.5	74.4	43.7	2310.9
REVENUE TAX	151.6	42.2	17.2	9.3	5.9	3.4	229.6
NET TAX	.0	.0	.0	.0	.0	.0	.0
PR. COSTS & ATX	45.3	32.5	29.6	28.7	28.3	23.4	187.8
PI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0
DEPR. & CAP INT	1032.0	.0	.0	.0	.0	.0	1032.0
RECIABLE	581.0	.0	.0	.0	.0	-58.1	522.9
<b>CALCULATIONS, M\$</b>							
REV. TO INTR.	1921.5	534.7	218.1	118.5	74.4	43.7	2310.9
REVENUE TAX	151.6	42.2	17.2	9.3	5.9	3.4	229.6
NET TAX	.0	.0	.0	.0	.0	.0	.0
PR. COSTS & ATX	45.3	32.5	29.6	28.7	28.3	23.4	187.8
PI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0
DEPR. & CAP INT	1032.0	.0	.0	.0	.0	.0	1032.0
RECIABLE	581.0	.0	.0	.0	.0	-58.1	522.9
NET INCOME	1613.0	460.0	161.3	80.2	19.1	12.2	1348.5
NET INVESTMENTS & RSK	1613.0	460.0	161.3	80.2	19.1	12.2	1348.5
NET WORTH @ 10.00 %	1613.0	460.0	161.3	80.2	19.1	12.2	1348.5
<b>STATEMENT OF INVESTMENTS, M\$</b>							
INT. REV. TO INTR.	1921.5	534.7	218.1	118.5	74.4	43.7	2310.9
REVENUE TAX	151.6	42.2	17.2	9.3	5.9	3.4	229.6
NET TAX	.0	.0	.0	.0	.0	.0	.0
PR. COSTS & ATX	45.3	32.5	29.6	28.7	28.3	23.4	187.8
PI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0
DEPR. & CAP INT	1032.0	.0	.0	.0	.0	.0	1032.0
RECIABLE	581.0	.0	.0	.0	.0	-58.1	522.9
NET INCOME	1613.0	460.0	161.3	80.2	19.1	12.2	1348.5
NET INVESTMENTS & RSK	1613.0	460.0	161.3	80.2	19.1	12.2	1348.5
NET WORTH @ 10.00 %	1613.0	460.0	161.3	80.2	19.1	12.2	1348.5

DATE : 05/15/95  
 TIME : 11:04:53  
 DBS FILE : DAILY  
 SETUP FILE : COMDET  
 SEQ NUMBER : 14

RANCH UNIT #70  
 BOSTON RIDGE NE (ATOKA)  
 JRU  
 Prepared by: R.R. BIRKHO

ECONOMIC INDICATORS

AS OF DATE: 1/95

B.F.I.T. WORTH M\$-----	A.F.I.T. WORTH M\$-----	A.F.I.T. BONUS M\$-----
-------------------------------	-------------------------------	-------------------------------

NET WORTH PROFILE AND  
 OP-RETURN VS. BONUS TABLE

0.	938,571	630,406	959,856
2.	885,649	577,247	877,708
4.	836,087	527,758	793,754
6.	789,558	481,557	716,941
8.	745,775	438,312	646,387
10.	704,489	397,733	581,349
20.	528,547	226,943	319,677
30.	390,382	95,086	130,134
40.	278,228	-10,682	-14,293
50.	184,827	-98,053	-128,784
60.	105,459	-171,898	-222,308
70.	36,910	-235,458	-300,523
80.	-23,087	-290,974	-367,176
90.	-76,185	-340,054	-424,855
100.	-123,620	-383,883	-475,405

OP RETURN, PCT.	76.2	39.0
COUNTED PAYOUT, YRS.	.94	1.29
NETED PAYOUT, YRS.	.98	1.57
COUNTED NET/INVEST.	1.60	1.41
NETED NET/INVEST.	1.45	1.25

ILLEGIBLE

Contract No. \_\_\_\_\_

THIS AGREEMENT, entered into as of the date shown in Section 10 hereof by and between the parties subscribing, ratifying, or consenting hereto, such parties being hereinafter referred to as "parties hereto".

W I T N E S S E T H:

WHEREAS, the Act of February 25, 1920 (41 Stat. 437), as amended and supplemented, authorizes communitization or drilling agreements communitizing or pooling a Federal oil and gas lease, or any portion thereof, with other lands, whether or not owned by the United States, when separate tracts under such Federal lease cannot be independently developed and operated in conformity with an established well-spacing program for the field or area and such communitization or pooling is determined to be in the public interest; and

WHEREAS, the parties hereto own working, royalty or other leasehold interests, or operating rights under the oil and gas leases and lands subject to this agreement which cannot be independently developed and operated in conformity with the well-spacing program established for the field or area in which said lands are located; and

WHEREAS, the parties hereto desire to communitize and pool their respective mineral interests in lands subject to this agreement for the purpose of developing and producing communitized substances in accordance with the terms and conditions of this agreement:

NOW, THEREFORE, in consideration of the premises and the mutual advantages to the parties hereto, it is mutually covenanted and agreed by and between the parties hereto as follows:

1. The lands covered by this agreement (hereinafter referred to as "communitized area") are described as follows:

S/2 Section 12, T22S-R30E, NMPM, Eddy County, New Mexico

containing 320 acres, and this agreement shall include only the Wolfcamp, Atoka, and Morrow Formations underlying said lands and the hydrocarbons, hereinafter referred to as "communitized substances", producible from such formations. This agreement shall apply separately to the Wolfcamp, Atoka, and Morrow formations in the same manner as though a separate agreement for each formation had been entered into.

2. Attached hereto, and made a part of this agreement for all purposes, is Exhibit "B", designating the operator of the communitized area and showing the acreage, percentage and ownership of oil and gas interests in all lands

within the communitized area, and the authorization, if any, for communitizing or pooling any patented or fee lands within the communitized area.

3. All matters of operation shall be governed by the operator under and pursuant to the terms and provisions of this agreement. A successor operator may be designated by the owners of the working interest in the communitized area, and four executed copies of a designation of successor operator shall be filed with the Authorized Officer.
4. Operator shall furnish the Secretary of the Interior, or his authorized representative, with a log and history of any well drilled on the communitized area, monthly reports of operations, statements of oil and gas sales and royalties and such other reports as are deemed necessary to compute monthly the royalty due the United States, as specified in the applicable oil and gas regulations.
5. The communitized area shall be developed and operated as an entirety, with the understanding and agreement between the parties hereto that all communitized substances produced therefrom shall be allocated among the leaseholds comprising said area in the proportion that the acreage interest of each leasehold bears to the entire acreage interest committed to this agreement.

All proceeds, 8/8ths, attributed to unleased Federal, State or fee land included within the communitized area are to be placed in an interest earning escrow or trust account by the designated operator until the land is leased or ownership is established.

6. The royalties payable on communitized substances allocated to the individual leases comprising the communitized area and the rentals provided for in said leases shall be determined and paid on the basis prescribed in each of the individual leases. Payments of rentals under the terms of leases subject to this agreement shall not be affected by this agreement except as provided for under the terms and provisions of said leases or as may herein be otherwise provided. Except as herein modified and changed, the oil and gas leases subject to this agreement shall remain in full force and effect as originally made and issued. It is agreed that for any Federal lease bearing a sliding or step-scale rate of royalty, such rate shall be determined separately as to production from each communitization agreement to which such lease may be committed, and separately as to any noncommunitized leases production, provided, however, as to leases where the rate of royalty for gas is based on total lease production per day, such rate shall be determined by the sum of all communitized production allocated to such a lease plus any noncommunitized lease production.

7. There shall be no obligation on the lessees to offset any well or wells completed in the same formation as covered by this agreement on separate component tracts into which the communitized area is now or may hereafter be divided, nor shall any lessee be required to measure separately communitized substances by reason of the diverse ownership thereof, but the lessees hereto shall not be released from their obligation to protect said communitized area from drainage of communitized substances by a well or wells which may be drilled offsetting said area.
8. The commencement, completion, continued operation, or production of a well or wells for communitized substances on the communitized area shall be construed and considered as the commencement, completion, continued operations, or production on each and all of the lands within and comprising said communitized area, and operations or production pursuant to this agreement shall be deemed to be operations or production as to each lease committed hereto.
9. Production of communitized substances and disposal thereof shall be in conformity with allocation, allotments, and quotas made or fixed by any duly authorized person or regulatory body under applicable Federal or State statutes. This agreement shall be subject to all applicable Federal and State laws or executive orders, rules and regulations, and no party hereto shall suffer a forfeiture or be liable in damages for failure to comply with any of the provisions of this agreement if such compliance is prevented by, or if such failure results from, compliance with any such laws, orders, rules or regulations.
10. The date of this agreement is January 22, 1995 and it shall become effective as of this date or from the onset of production of communitized substances, whichever is earliest upon execution by the necessary parties, notwithstanding the date of execution, and upon approval by the Secretary of Interior or by his duly authorized representative, and shall remain in force and effect as to the Wolfcamp, Atoka and Morrow formations individually for a period of two (2) years and for as long thereafter as communitized substances are, or can be, produced in paying quantities from communitized formations or formation. Provided that prior to production in paying quantities from the communitized area and upon fulfillment of all requirements of the Secretary of the Interior, or his duly authorized representative, with respect to any dry hole or abandoned well, this agreement may terminate at any time by mutual agreement of the parties hereto. This agreement shall not terminate upon cessation of production if, within sixty (60) days thereafter, reworking or drilling operations on the communitized area are commenced and are thereafter conducted with reasonable diligence during the period of non-production. The 2-year term of this agreement will not in itself serve to extend the term of any Federal lease which would otherwise expire during said period.

11. The covenants herein shall be construed to be covenants running with the land with respect to the communitized interests of the parties hereto and their successors in interests until this agreement terminates and any grant, transfer, or conveyance of any such land or interest subject hereto, whether voluntary or not, shall be and hereby is conditioned upon the assumption of all obligations hereunder by the grantee, transferee, or other successor in interest, and as to Federal land shall be subject to approval by the Secretary of the Interior, or his duly authorized representative.
12. It is agreed between the parties hereto that the Secretary of the Interior, or his duly authorized representative, shall have the right of supervision over all fee and State mineral operations within the communitized area to the extent necessary to monitor production and measurement, and assure that no avoidable loss of hydrocarbons occurs in which the United States has an interest pursuant to applicable oil and gas regulations of the Department of the Interior relating to such production and measurement.
13. This agreement shall be binding upon the parties hereto and shall extend to and be binding upon their respective heirs, executors, administrators, successors, and assigns.
14. This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument, in writing, specifically referring hereto, and shall be binding upon all parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all parties had signed the same document.
15. Nondiscrimination: In connection with the performance of work under this agreement, the operator agrees to comply with all of the provisions of Section 202(1) to (7) inclusive, of Executive Order 11246 (30 F.R. 12319), as amended, which are hereby incorporated by reference in this agreement.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written and have set opposite their respective names the date of execution.

BASS ENTERPRISES PRODUCTION CO., OPERATOR  
PERRY R. BASS, INC.  
SID R. BASS, INC.  
LEE M. BASS, INC.  
THRU LINE INC.  
KEYSTONE, INC.

By: W. Frank McCreight  
W. Frank McCreight  
Vice President of all above corporations

STATE OF TEXAS

COUNTY OF TARRANT

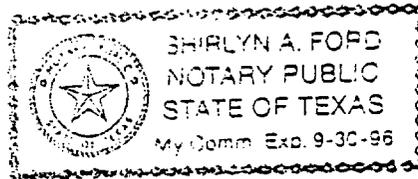
This instrument was acknowledged before me on the 6<sup>th</sup> day of March, 1995, by W. FRANK MCCREIGHT, the VICE PRESIDENT of BASS ENTERPRISES PRODUCTION CO., PERRY R. BASS, INC., SID R. BASS, INC., LEE M. BASS, INC., KEYSTONE, INC., and THRU LINE INC., all Texas corporations, on behalf of said corporations.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 6<sup>th</sup> day of March, 1995.

Shirlyn A. Ford  
Notary Public, State of Texas

My commission expires:

9/30/96



# EXHIBIT "A"

Plat of communitized area covering S/2 Section 12. T22S-R30E. N.M.P.M.,  
Livingston Ridge N.E. Field, Eddy County, New Mexico.

<p>Phillips Petroleum Company Tr. No. ① 80.00 Acres NM 0479142</p>	<p>Perry R. Bass, Inc. Sid R. Bass, Inc. Lee M. Bass, Inc. Keystone, Inc. Terra Line, Inc. Tr. No. ② 200.00 Acres NM 0300</p>
<p>BEPCo. James Ranch Unit #70 TD 14139'</p>	<p>Mitchell Energy Corporation Tr. No. ③ 40.00 Acres NM 89051</p>



Scale: 1" = 1000'

EXHIBIT "B"

To Communitization Agreement dated January 22, 1995 embracing 320 acres.

Operator of Communitized Area: Bass Enterprises Production Co.

DESCRIPTION OF LEASES COMMITTED

Tract No. 1

Lease Serial No.: NM 0479142

Lease Date: January 1, 1964

Lease Term: 10 years

Lessor: United States of America

Lessee on effective date of agreement if different from present lessee: Mrs. Bonnie J. Andrikopoulos

Present Lessee: Phillips Petroleum Company

Description of Land Committed:

Township 22 South Range 30, East N.M.P.M.

N/2 SW/4 Section 12

Number of Acres: 80.00

Royalty Rate: 12-1/2 percent

Name and Percent ORRI Owners:

John G. Andrikopoulos & Judy K. Andrikopoulos	0.0781%
A. G. Andrikopoulos Resources, Inc.	4.4531%
Dorothy J. Tucker, Trustee of Dorothy J. Tucker Trust	1.5625%
Gale Kelly & Patsy R. Kelly	1.5625%
Estelle C. Haefele & James W. Haefele	1.5625%

Name and Percent WI Owners: Phillips Petroleum Company 100%

Tract No. 2

Lease Serial No.: NM 0300

Lease Date: November 1, 1951

Lease Term: 5 years

Lessor: United States of America

Lessee on effective date of agreement if different from present lessee: Allie V. Tapp

Present Lessee: Perry R. Bass, Inc., Sid R. Bass, Inc., Keystone, Inc., Thru Line Inc., Lee M. Bass, Inc.

Description of Land Committed:

Township 22 South Range 30, East N.M.P.M.

N/2 SE/4, SW/4 SE/4, S/2 SW/4 Section 12

Number of Acres: 200.00

Royalty Rate: 12-1/2 percent

Name and Percent ORRI Owners:

Paul Slayton	2.70%
M. C. Jones	0.30%

Name and Percent WI Owners:

Perry R. Bass, Inc.	25.00%
Sid R. Bass, Inc.	18.75%
Keystone, Inc.	18.75%
Thru Line Inc.	18.75%
Lee M. Bass, Inc.	18.75%

Tract No. 3

Lease Serial No.: NM 89051

Lease Date: June 1, 1992

Lease Term: 5 years

Lessor: United States of America

Lessee on effective date of agreement if different from present lessee: Not applicable

Present Lessee: Mitchell Energy Corporation

Description of Land Committed:

Township 22 South Range 30 East N.M.P.M.

SE/4 SE/4 Section 12

Number of Acres: 40.00

Royalty Rate: 12-1/2 percent

Name and Percent ORRI Owners: Not Applicable

Name and Percent WI Owners: Mitchell Energy Corporation 100.00%

## RECAPITULATION

<u>Tract No.</u>	<u>No. of Acres Committed</u>	<u>Percentage of Interest in Communitized Area</u>
1	80.00	25.00000%
2	200.00	62.50000%
3	<u>40.00</u>	<u>12.50000%</u>
	320.00	100.00000%

CONSENT AND RATIFICATION OF  
COMMUNITIZATION AGREEMENT  
S/2 SECTION 12,  
TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M.  
EDDY COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of that certain Communication Agreement between BASS ENTERPRISES PRODUCTION CO., as Operator, and YATES PETROLEUM CORPORATION, ET AL, as Non-Operators, dated as of January 22, 1995, covering gas and associated liquid hydrocarbons producible from the WOLFCAMP, ATOKA and MORROW formations in the S/2 of Section 12, Township 22 South, Range 30 East, N.M.P.M., Eddy County, New Mexico (the "Communitized Area") and acknowledge that the undersigned has read the same and is familiar with the terms and conditions thereof. The undersigned also being the owner of leasehold, royalty of interest in the lands or minerals embraced in said Communitized Area, as indicated on the schedule attached to the Communitization Agreement as Exhibit "B", does hereby authorize the communitization or pooling of all of its interest in said Communitized Area pursuant to said Communitization Agreement, does hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Communitization Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in its respective acknowledgement.

YATES PETROLEUM CORPORATION

By: *Peyton Yates* NY

STATE OF NEW MEXICO

COUNTY OF EDDY

This instrument was acknowledged before me on the 1st day of May, 1991, by Peyton Yates, ~~the Vice President~~ Attorney-in-Fact for Yates Petroleum Corp., a New Mexico corporation, on behalf of said corporation.

*Dillon Wood*  
Notary Public, State of NEW MEXICO

My commission expires:

10-7-96

June 19, 1995

BASS ENTERPRISES PRODUCTION CO.  
First City Bank Tower  
201 Main Street  
Fort Worth, Texas 76102

Attn: Mr. Worth Carlin



**RE: JAMES RANCH UNIT WELL NO. 70**  
S/2 Section 12, T22S - R30E  
Eddy County, New Mexico

Dear Mr. Carlin:

Reference is made to your request for Mitchell to execute a Communitization Agreement for the captioned well. You may simply file a copy of the Compulsory Pooling Order No. R-10171 with the BLM and they will approve your Communitization Agreement.

Very truly yours,

**MITCHELL ENERGY CORPORATION**

Larry D. Cunningham  
District Landman



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201-2019

IN REPLY REFER TO:

NMNM70965X  
1408001558  
3180 (06557)

Bass Enterprises Production Co.  
Attn: J. Wayne Bailey  
201 Main Street  
Fort Worth, Texas 76102-3131

**JUL 27 1995**

Re: James Ranch Unit No. 11  
Section 36, T.22 S., R.30 E.  
Eddy County, New Mexico  
Commercial Well Determination

Pursuant to your letter dated June 17, 1995, it has been determined by this office that under existing conditions the James Ranch Unit No. 11, 1980' FNL and 920' FWL, Section 36, T. 22 S., R. 30 E., Eddy County, New Mexico, is not capable of producing unitized substances from the Atoka formation in paying quantities as defined in Section 11 of the James Ranch unit agreement. This well is therefore not entitled to be part of a Atoka participating area and production from this well shall be handled and reported on a lease basis.

Please contact Alexis Swoboda, P.E., or the Division of Minerals at 505-627-0272 if you have any questions.

Our mailing address has been updated as noted in the letterhead of this document.

Sincerely,

Tony L. Ferguson  
Assistant District Manager  
Minerals

CC:  
MMS - Denver (3240)

**WORKSHEET FOR COMMERCIAL DETERMINATION  
AND PARTICIPATING AREA IN FEDERAL UNITS**

**WELL DATA**

---

WELL James Ranch Unit #11 FORMATION Atoka  
 LOCATION E UNIT, 920 FEET FROM W LINE & 1980 FEET FROM N LINE  
 SECTION 35 TOWNSHIP 22S, RANGE 30E, COUNTY Eddy, NEW MEXICO  
 SPUD DATE 9/19/80 COMPLETION DATE 5/15/81 INITIAL PRODUCTION 5/15/81  
 PERFORATIONS 13038-48'

---

STIMULATION:

ACID \_\_\_\_\_

FRACTURE \_\_\_\_\_

POTENTIAL (P) 18 BOPD + 2350 MCFD + 1 SWPD. FTP 1350 (5/30/81)

(Attach Copy of C-105. Attach Copy of Wellbore Sketch of Completed Well.)

**VOLUMETRIC CALCULATION**

---

	SANDS PERFORATED	SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	<u>320</u>	
Porosity (por), %	<u>9.7%</u>	
Water saturation (S <sub>w</sub> ), %	<u>34%</u>	
Net Thickness (h)	<u>7</u>	
Temperature (T), Fahrenheit	<u>180</u>	
Bottom Hole pressure (P), psia	<u>2,500</u>	
Recovery factor (RF), %	<u>90%</u>	
Recoverable gas, MCF *(See eq. below)	<u>862,583</u>	

Formula =  $(43,550) (A) (h) (por) (1-S_w) (B_{gi}) (RF)$

$B_{gi} = 0.03535 P/zT (MSCF/cu.ft.) = 0.1534$

PERFORMANCE DATA

(If sufficient history exists, attach plot of oil production rate v time.)

CUMULATIVE PRODUCTION TO	<u>2/1/95</u>	:	<u>1,102,116</u>	MCF.
INITIAL RATE (qi)	<u>203 MCFPD</u>			
ECONOMIC LIMIT (qe)	<u>100 MCFPD</u>			
DECLINE RATE, dy	<u>Exponential d = 4.737%</u>			
REMAINING GAS (Q) =	<u>773,325</u>			
ULTIMATE RECOVERABLE GAS	<u>1,869,353</u>			

(Attach plot showing proration unit and participating area.)

ECONOMIC

WELL COST \$	<u>2,513,000</u>	(to the depth of formation completed)
RECOMPLETION COST \$	<u>                    </u>	
TOTAL COST \$	<u>2,513,000</u>	

<u>YEAR</u>	<u>GROSS GAS</u>	<u>NET INCOME</u>	<u>OPERATING COST</u>	<u>10% NET BFIT DISCOUNTED CASH FLOW</u>
ZERO	<u>0</u>	<u>0</u>	<u>0</u>	<u>-2,513,000</u>
1	<u>81,000</u>	<u>228,500</u>	<u>114,900</u>	<u>113,600</u>
2	<u>96,800</u>	<u>269,000</u>	<u>133,100</u>	<u>116,200</u>
3	<u>89,500</u>	<u>255,300</u>	<u>77,000</u>	<u>140,400</u>
4	<u>72,200</u>	<u>213,200</u>	<u>65,400</u>	<u>106,600</u>
5	<u>18,700</u>	<u>54,700</u>	<u>46,600</u>	<u>6,000</u>
6	<u>21,500</u>	<u>65,700</u>	<u>28,700</u>	<u>20,500</u>
7	<u>94,000</u>	<u>285,600</u>	<u>44,500</u>	<u>130,100</u>
8	<u>107,100</u>	<u>320,900</u>	<u>59,000</u>	<u>128,100</u>
9	<u>103,300</u>	<u>246,900</u>	<u>53,000</u>	<u>84,600</u>
10	<u>111,900</u>	<u>164,800</u>	<u>60,900</u>	<u>41,900</u>
REMAINDER	<u>932,700</u>	<u>1,257,400</u>	<u>837,000</u>	<u>117,600</u>

WELL IS NOT COMMERCIAL

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1. Indicate Type of Lease  
State  Federal

2. State Oil & Gas Lease No.  
E-5229

10. TYPE OF WELL  
 a. TYPE OF COMPLETION  
 OIL WELL  GAS WELL  DRY  OTHER Condensate  
 NEW WELL  WORK OVER  OCCUPY  PLUG BACK  DIFF. RESUM.  OTHER

7. Unit Agreement Name  
James Ranch  
 8. Farm or Lease Name  
James Ranch

2. Name of Operator  
Belco Petroleum Corporation

9. Well No.  
11

3. Address of Operator  
10,000 Old Katy Road, Suite 100, Houston, Texas 77055

10. Field and Pool, or Wildcat  
Los Medanos (Atoka)

4. Location of Well  
UNIT LETTER E LOCATED 920 FEET FROM THE West LINE AND 1980 FEET FROM

11. County  
Eddy

THE North LINE OF SEC. 36 TWP. 22-S RGE. 30-E

15. Date Spudded 9-19-80 16. Date T.D. Reached 2-13-81 17. Date Compl. (Ready to Prod.) 5-16-81 18. Elevations (D.F., R.H.I., R.T., G.R., etc.) 3324' KB 19. Elev. Casinghead 3306'

20. Total Depth 14,600' 21. Plug Back T.D. 13,235' 22. If Multiple Compl., How Many - 23. Intervals Drilled By Rotary Tools  Cable Tools

24. Producing Interval(s), of this completion - Top, Bottom, Name  
13044-48'

25. Was Directional Sp Made  
Yes

26. Type Electric and Other Logs Run  
Compensated Neutron-Formation Density-Gamma Ray

27. Was Well Cored  
No

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

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULL
16"	65	450'	20"	750'	-
10-3/4"	40.5-45.3	3800'	14-3/4"	2300'	-
7-5/8"	29.7-33.7	11933'	9-7/8"	1040'	-

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
5"	10,795'	13,881'	350		2-7/8"	10,674'	10,674'
2-7/8"	13,515'	14,599'	180				

31. Perforation Record (Interval, size and number)  
13,048-44' w/4 SPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
<u>13,044-48'</u>	<u>Not treated</u>

33. PRODUCTION

Date First Production 5-16-81 Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing Well Status (Prod. or Shut-in) Producing

Date of Test	Hours Tested	Choke Size	Prodn. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas-Oil Ratio
<u>5-30-81</u>	<u>24</u>	<u>17/64"</u>	<u>→</u>	<u>18</u>	<u>2350</u>	<u>1</u>	<u>130,555</u>

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)
<u>1350#</u>	<u>Pkr</u>	<u>→</u>	<u>18</u>	<u>2350</u>	<u>1</u>	<u>55.5</u>

34. Disposition of Gas (Sold, used for fuel, vented, etc.)  
Sold to pipeline except for 3 hr cleanup period. Test Witnessed By Belco Petroleum Corp.

35. List of Attachments  
2 copies CNL-DL & Deviation Survey

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Carl M. [Signature] TITLE Production Superintendent DATE June 2, 1981

OIL CONSERVATION DIVISION  
 P. O. BOX 2000  
 SANTA FE, NEW MEXICO 87501

NO. OF LEASES APPLICABLE	
DATE OF FILING	
WELL TYPE	
FILE	
W.D.P.	
LOCAL OFFICE	
TRANSPORTER	OIL
	NATURAL GAS
OPERATOR	
REGISTRATION OFFICE	

REQUEST FOR ALLOWABLE  
 AND  
 AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator  
 Belco Petroleum Corporation

Address  
 10,000 Old Katy Road, Suite 100, Houston, Texas 77055

Reason(s) for filing (Check proper box)		Other (Please explain)	
New Well <input checked="" type="checkbox"/>	Change in Transporter of:		
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/>	Dry Gas <input type="checkbox"/>	
Change in Ownership <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/>	Condensate <input checked="" type="checkbox"/>	

If change of ownership give name and address of previous owner \_\_\_\_\_

DESCRIPTION OF WELL AND LEASE

Lease Name James Ranch	Well No. 11	Pool Name, Including Formation Los Medanos (Atoka)	Kind of Lease State, Federal or Free State	Lease E-522
Location				
Unit Letter E	920	Feet From The West	Line and 1980	Feet From The North
Line of Section 36	T. orship 22-S	Range 30-E	N.M.P.I.D. Eddy	Co.

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
NAVAJO CRUDE OIL PURCHASING COMPANY	P.O. DRAWER 175, ARTESIA, NEW MEXICO 88210
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Natural Gas Pipeline Co. of America	P. O. Box 283, Houston, Texas 77001
If well produces oil or liquids, give location of tanks.	Unit, Sec., Twp., Rge. Is gas actually conserved? When
	E 36 22-S 30-E Yes 5-27-81

If this production is commingled with that from any other lease or pool, give commingling order number: \_\_\_\_\_

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'n.	Diff. P.
		X	X					
Date Spudded 9-19-80	Date Compl. Ready to Prod. 5-16-81	Total Depth 14600'		P.B.T.D. 13235'				
Elevations (DF, RKB, RT, CR, etc.) 3324' KB	Name of Producing Formation Atoka	Top Oil/Gas Pay 13037'		Tubing Depth 10674'				
Perforations 13044-48'				*Depth Casing Shoe				

TUBING, CASING, AND CEMENTING RECORD

DATE & TUBING SIZE	DEPTH SET	SACKS CEMENT
--------------------	-----------	--------------

MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION AT

Form C-102  
Supersedes C-1  
Effective 12-5.

All distances must be from the outer boundaries of the Section.

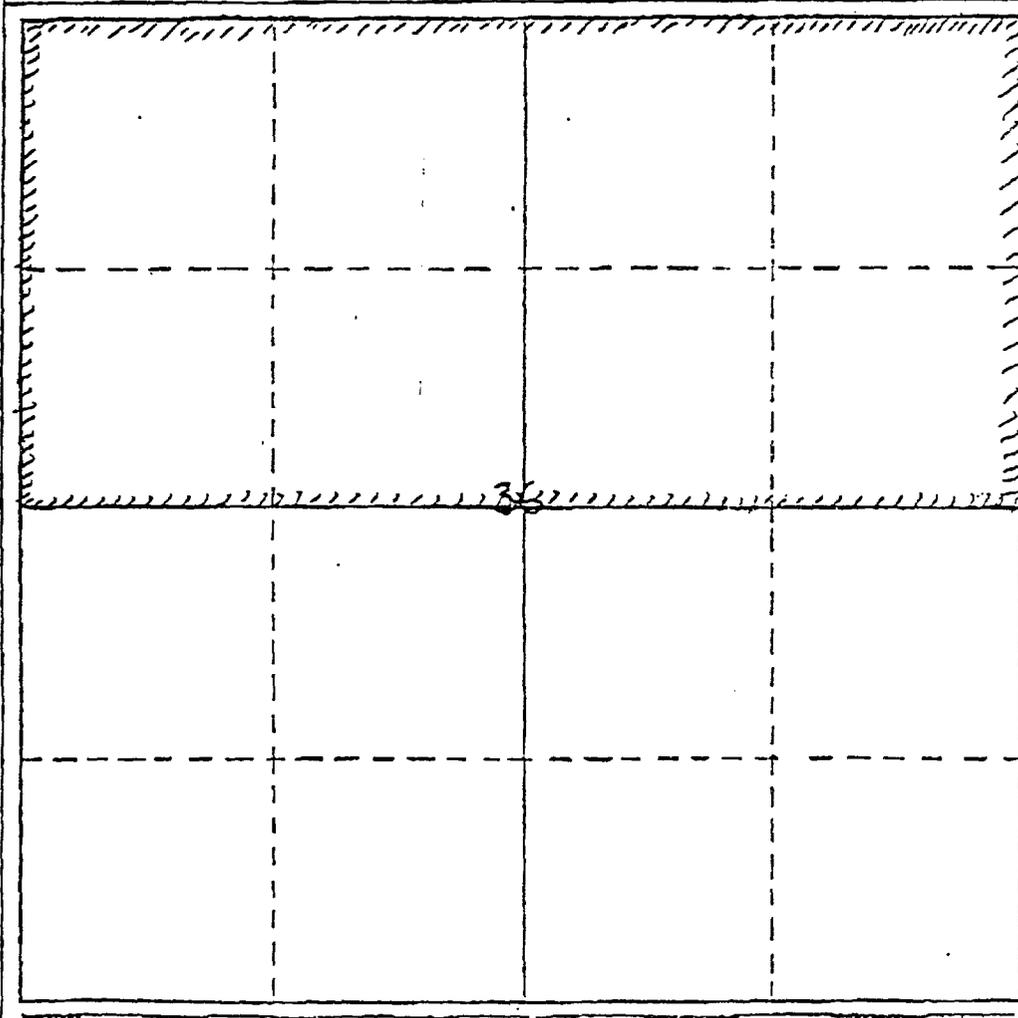
Operator <b>BELCO PETROLEUM CORPORATION</b>			Lease <b>JAMES RANCH</b>		Well No. <b>11</b>
Unit Letter <b>E</b>	Section <b>36</b>	Township <b>22-S</b>	Range <b>30-E</b>	County <b>EDDY</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>NORTH</b> line and <b>920</b> feet from the <b>WEST</b> line					
Ground Level Elev: <b>3306</b>	Producing Formation <b>ATOKA</b>		Pool <b>LOS MEDANOS</b>	Dedicated Acreage: <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interests 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 Commission.



**CERTIFICATION**

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

*Carl M. Houser*  
Name

**CARL M. HOUSER**

Position  
**PRODUCTION SUPERINTENDENT**

Company  
**BELCO PETROLEUM CORPORATION**

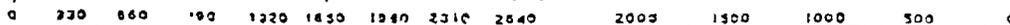
Date  
**June 2, 1981**

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.

Date Surveyed \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor

Certificate No. \_\_\_\_\_

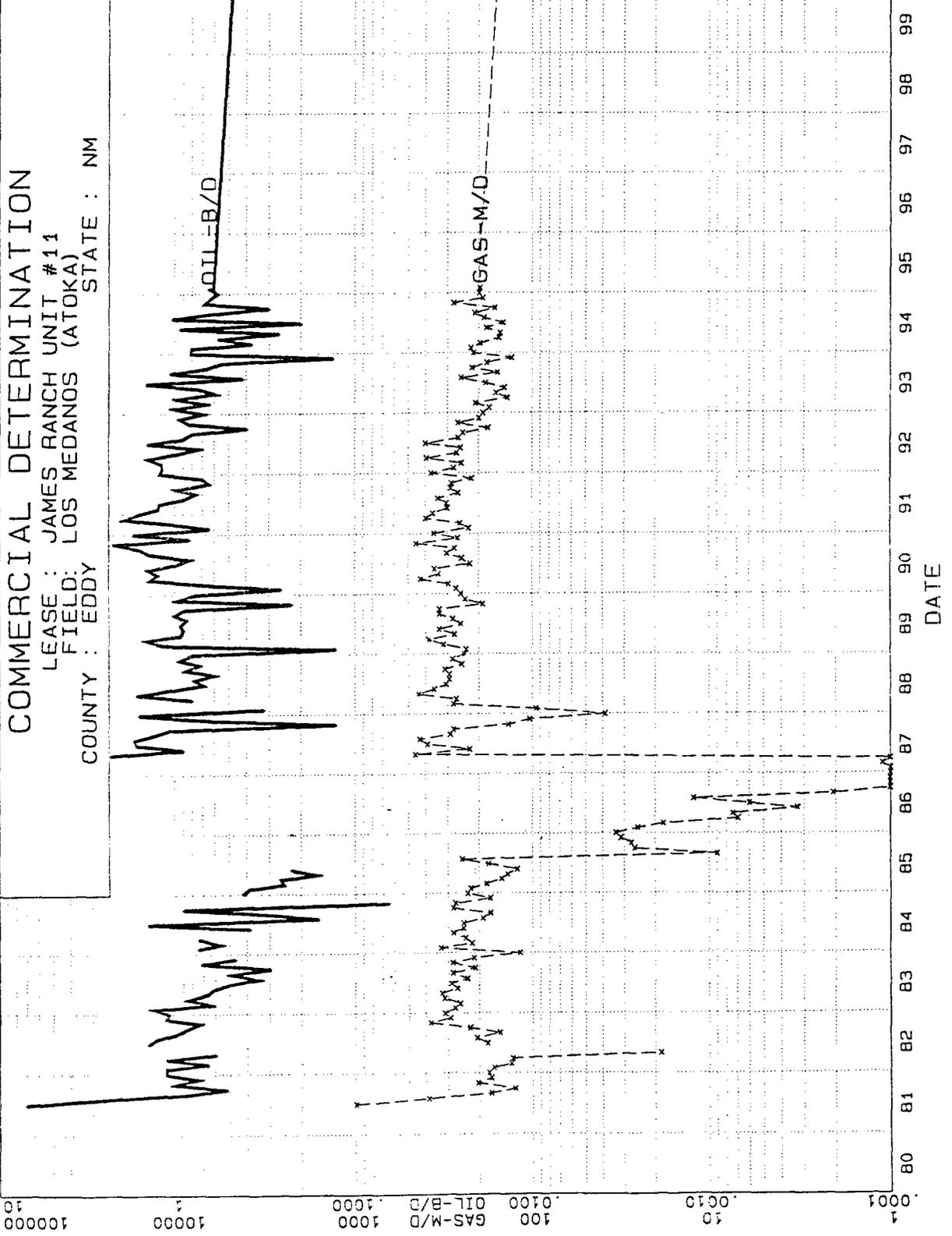


# COMMERCIAL DETERMINATION

LEASE : JAMES RANCH UNIT #11  
 FIELD: LOS MEDANOS (ATOKA)  
 COUNTY : EDDY STATE : NM

**OIL** - ENRON  
 Gal = 01/95  
 Ref = 3.827  
 Cum = 2.328  
 Rem = 6.155  
 EUR = 14.583  
 Yrs = 0  
 Qi = .000  
 De = .000  
 n = .000  
 Gab = .0

**GAS** - ENRON  
 Gal = 01/95  
 Ref = 1096.028  
 Cum = 773.325  
 Rem = 1869.353  
 EUR = 14.583  
 Yrs = 6165.6  
 Qi = 4.737  
 De = .000  
 n = 3042.0





566 *	5280.00	X	\$/M	1/94	AD	PC	.00	12/93	5280.000	5280.000
567 *	3903.00	X	\$/M	1/95	AD	PC	.00	12/94	3903.000	3903.000
568 *	4000.00	X	\$/M	TO	LIFE	PC	.00	7/09	4000.000	4000.000
573 STX/OIL	7.08	X	¢	TO	LIFE	PC	.00	7/09	.071	.071
578 STX/GAS	7.93	X	¢	TO	LIFE	PC	.00	7/09	.079	.079
583 ATX	1.00	X	¢	TO	LIFE	PC	.00	7/09	.010	.010
700 NET/MI	100.0000	D	¢	TO	LIFE	FLAT	.00	7/09	1.000	1.000
720 HST/NIC	87.5000	D	¢	TO	LIFE	FLAT	.00	7/09	.875	.875
740 NET/NIG	87.5000	D	¢	TO	LIFE	FLAT	.00	7/09	.875	.875

OVERLAYS	SCHEDULING RATES	SCHEDULE UNTIL	PROCEDURE	ULTIMATE	LAST	EFF. DECL	INIT. RATE	FINAL RATE
905 LOAD	P.GAS GAS 6/81 #			1102.116	1/95			
910 LOAD	P.OIL OIL 6/81 #			3.847	1/95			

INVESTMENT	TANGIBLES & INTANGIBLES	TIME	PROCEDURE	TOTAL T&I	MONTH	RISK INV.	TOT. T&I&R	RSC. T&I&R
800 DRILL	1005.00 1508.00 M\$G	6/81 AD		2513.000	6/81	.	2513.0	2513.0
801 SALVAGE	-100.50 .00 M\$G	6/81 AD		-100.500	6/81	.	-100.5	-100.5

RESERVE PARAMETERS	ITEM
201 LOSS	NO
205 CUM0, MB	3.83 CUMG, MMF 1096.03 CUML, MB

PROJECT ASSUMPTIONS

BASE DATE : 6/81 TIME FRAMES : 38\*12 1\*600

P.W. DATE : 6/81 PW #-AGE : 10.0 DISC. FREQUENCY : MO

REPORT DATE : 6/81 PROD QUAL : ENRON OWNER QUAL : ; OTHER QUAL :

JAMES RANCH UNIT #11  
 LOS MEDANOS (ATOKA)  
 0833102  
 R.R. BIRKLEO

DATE : 05/15/95  
 TIME : 09:37:38  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SEQ NUMBER : 224

R E S E R V E S A N D E C O N O M I C S  
 AS OF DATE: 6/81

PERIOD ENDING	5/82	5/83	5/84	5/85	5/86	5/87	5/88	5/89	5/90	5/91	S TOT	AFTER	TOTAL
---------------	------	------	------	------	------	------	------	------	------	------	-------	-------	-------

OWNERSHIP

1) WORKING INTEREST, %	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
2) REVENUE INTEREST, %	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500

INVESTMENTS, M\$

3) BORROWED CAPITAL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4) EQUITY INVESTMENTS	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
5) RISK	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) TOTAL	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5

OIL PHASE

8) GROSS OIL, MB	.5	.4	.2	.1	.0	.1	.4	.3	.3	.5	2.8	3.0	5.7
9) NET OIL, MB	.5	.3	.1	.1	.4	.1	.3	.3	.3	.4	2.4	2.6	5.0
10) OIL REVENUE, M\$	15.5	9.9	4.2	3.6	.2	2.1	7.6	5.8	5.8	8.5	63.3	42.9	106.2
11) OIL PRICE, \$/B	32.95	31.80	29.93	29.35	27.62	24.35	23.80	21.92	20.38	19.89	25.96	16.55	21.11

GAS PHASE

12) GROSS GAS, MCF	81.1	96.8	89.6	72.2	18.7	21.5	94.0	107.1	108.3	111.9	801.1	932.7	1733.8
13) NET GAS, MCF	70.9	84.7	78.4	63.2	16.4	18.8	82.2	93.7	94.8	97.9	701.0	816.1	1517.1
14) GAS REVENUE, M\$	213.0	259.1	251.1	209.6	54.5	63.6	277.9	315.0	241.1	156.1	2041.0	1214.5	3255.5
15) GAS PRICE, \$/MCF	3.003	3.060	3.203	3.317	3.329	3.384	3.380	3.363	2.543	1.594	2.912	1.488	2.146

ECONOMICS, M\$

19) GROSS REV. TO INTR.	228.5	269.0	255.3	213.2	54.7	65.7	285.6	320.9	246.9	164.6	2104.3	1257.4	3361.7
20) - SEV. TAX	18.0	21.2	20.2	16.9	4.3	5.2	22.6	25.4	19.5	13.0	166.3	99.3	265.7
22) - AD VALOREM TAX	2.1	2.5	2.4	2.0	.5	.6	2.6	3.0	2.3	1.5	19.4	11.6	31.0
23) - OPERATING COSTS	94.8	109.4	54.4	46.5	41.8	22.9	19.3	30.6	36.2	46.4	502.4	726.1	1228.5
24) - SWD	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25) - CAPITAL REPAYMENT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26) - INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27) + NPI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28) = NET INCOME	113.6	135.8	178.4	147.8	8.0	37.0	241.1	261.9	188.8	103.7	1416.2	420.3	1836.5
29) - INVESTMENTS & RSK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
30) = BPIT NET	-2298.9	135.8	178.4	147.8	8.0	37.0	241.1	261.9	188.8	103.7	-996.3	420.3	-576.0

PRESENT WORTH @ 10.00 %

31) NET INCOME	113.6	116.2	140.4	106.6	6.0	20.5	130.1	128.1	84.6	41.9	888.0	117.6	1005.6
32) INVESTMENTS & RISK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
33) BPIT NET	-2298.9	116.2	140.4	106.6	6.0	20.5	130.1	128.1	84.6	41.9	-1524.5	117.6	-1406.9
34) CUM BPIT NET	-2298.9	-2182.7	-2042.3	-1935.7	-1929.7	-1909.2	-1779.1	-1651.0	-1566.4	-1524.5	-1406.9	-1406.9	-1406.9

JAMES RANCH UNIT #11  
 LOS MEDANOS (AYOKA)  
 0833102  
 R.R. BIRKELO

DATE : 05/15/95  
 TIME : 09:37:38  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SEQ NUMBER : 224

A P T E R T A X E C O N O M I C S

PERIOD ENDING	AS OF DATE: 6/81										24.8 YR TOTAL		
	5/82	5/83	5/84	5/85	5/86	5/87	5/88	5/89	5/90	5/91		S TOT	AFTER
TAX TREATMENT OF INVESTMENTS, M\$													
1) EXP, RISK & CAP INT	1508.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1508.0	
2) DEPLETABLE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
3) DEPRECIABLE	904.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	904.5	
TAX CALCULATIONS, M\$													
4) GROSS REV. TO INTR.	228.5	269.0	255.3	213.2	54.7	65.7	285.6	320.9	246.9	164.6	2104.3	1257.4	3361.7
5) - SEVERANCE TAX	18.0	21.2	20.2	16.9	4.3	5.2	22.6	25.4	19.5	13.0	166.3	99.3	265.7
6) - WPT TAX NET	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) - OPR. COSTS & AVX	96.9	111.9	56.7	48.5	42.3	23.5	21.9	33.6	38.5	48.0	521.8	737.7	1259.5
8) + NPI OWNRD - PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) - OVERHEAD	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) - EXPENSED INV.	1508.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1508.0
11) - DEPRECIATION	143.5	246.1	175.8	125.5	89.7	89.7	89.7	44.8	.0	.0	1005.0	.0	1005.0
12) = NET	-1537.9	-110.3	2.6	22.3	-81.7	-52.7	151.3	217.1	188.8	103.7	-1096.8	420.3	-676.5
13) - DEPLETION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14) - INTEREST PD & CAP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) = TAXABLE	-1537.9	-110.3	2.6	22.3	-81.7	-52.7	151.3	217.1	188.8	103.7	-1096.8	420.3	-676.5
16) * TAX RATE, %	46.0	46.0	46.0	46.0	46.0	43.5	37.5	34.0	34.0	34.0	52.6	34.7	63.8
17) - TAX CREDIT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18) - WPT REFUND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19) = F.I.T.	-707.4	-50.7	1.2	10.3	-37.6	-22.9	56.7	73.8	64.2	35.3	-577.2	145.7	-431.5
20) REVENUE-SRV-WPT	210.5	247.7	235.1	196.3	50.4	60.5	263.0	295.5	227.3	151.6	1937.9	1158.0	3096.0
21) - OPR. COSTS & AVX	96.9	111.9	56.7	48.5	42.3	23.5	21.9	33.6	38.5	48.0	521.8	737.7	1259.5
22) + NPI OWNRD - PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23) - F.I.T.	-707.4	-50.7	1.2	10.3	-37.6	-22.9	56.7	73.8	64.2	35.3	-577.2	145.7	-431.5
24) = A.F.I.T.	821.1	186.6	177.2	137.6	45.6	59.9	184.3	188.1	124.6	68.4	1993.4	274.6	2268.0
25) - LOAN REPAYMENT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26) - INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27) = NET INCOME	821.1	186.6	177.2	137.6	45.6	59.9	184.3	188.1	124.6	68.4	1993.4	274.6	2268.0
28) - INVESTMENTS & RSK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
29) = A.F.I.T. NET	-1591.4	186.6	177.2	137.6	45.6	59.9	184.3	188.1	124.6	68.4	-419.1	274.6	-144.5
PRESENT WORTH @ 10.00 %													
30) NET INCOME	782.9	161.7	139.6	98.5	29.7	35.5	99.2	92.0	55.4	27.7	1522.3	76.7	1598.9
31) INVESTMENTS & RISK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
32) A.F.I.T. NET	-1629.6	161.7	139.6	98.5	29.7	35.5	99.2	92.0	55.4	27.7	-890.2	76.7	-813.6
33) CUM. A.F.I.T. NET	-1629.6	-1467.9	-1328.3	-1229.8	-1200.1	-1164.6	-1065.4	-973.3	-917.9	-890.2	-890.2	-813.6	-813.6

JAMES RANCH UNIT #11  
 LOS MEDANOS (ATOKA)  
 0833102  
 R.R. BIRKBELO

DATE : 05/15/95  
 TIME : 09:37:38  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SEQ NUMBER : 224

E C O N O M I C I N D I C A T O R S

AS OF DATE: 6/81

B.P.I.T. WORTH M\$-----	A.P.I.T. WORTH M\$-----	A.P.I.T. BONUS M\$-----
-------------------------------	-------------------------------	-------------------------------

PRESENT WORTH PROFILE AND  
 RATE-OF-RETURN VS. BONUS TABLE

0.	-575.975	-144.482	-230.204
2.	-815.516	-330.599	-474.943
4.	-1009.003	-484.157	-648.456
6.	-1167.153	-612.466	-780.519
8.	-1297.824	-720.918	-885.778
10.	-1406.859	-813.553	-972.375
20.	-1750.559	-1125.645	-1251.595
30.	-1922.244	-1303.013	-1406.945
40.	-2019.975	-1418.022	-1507.687
50.	-2081.235	-1499.757	-1579.483
60.	-2122.563	-1561.760	-1634.104
70.	-2152.075	-1611.066	-1677.658
80.	-2174.111	-1651.662	-1713.608
90.	-2191.154	-1685.971	-1744.064
100.	-2204.711	-1715.555	-1770.384

RATE OF RETURN, PCT. .0

UNDISCOUNTED PAYOUT, YRS. 24.75

DISCOUNTED PAYOUT, YRS. 24.75

UNDISCOUNTED NET/INVEST. .94

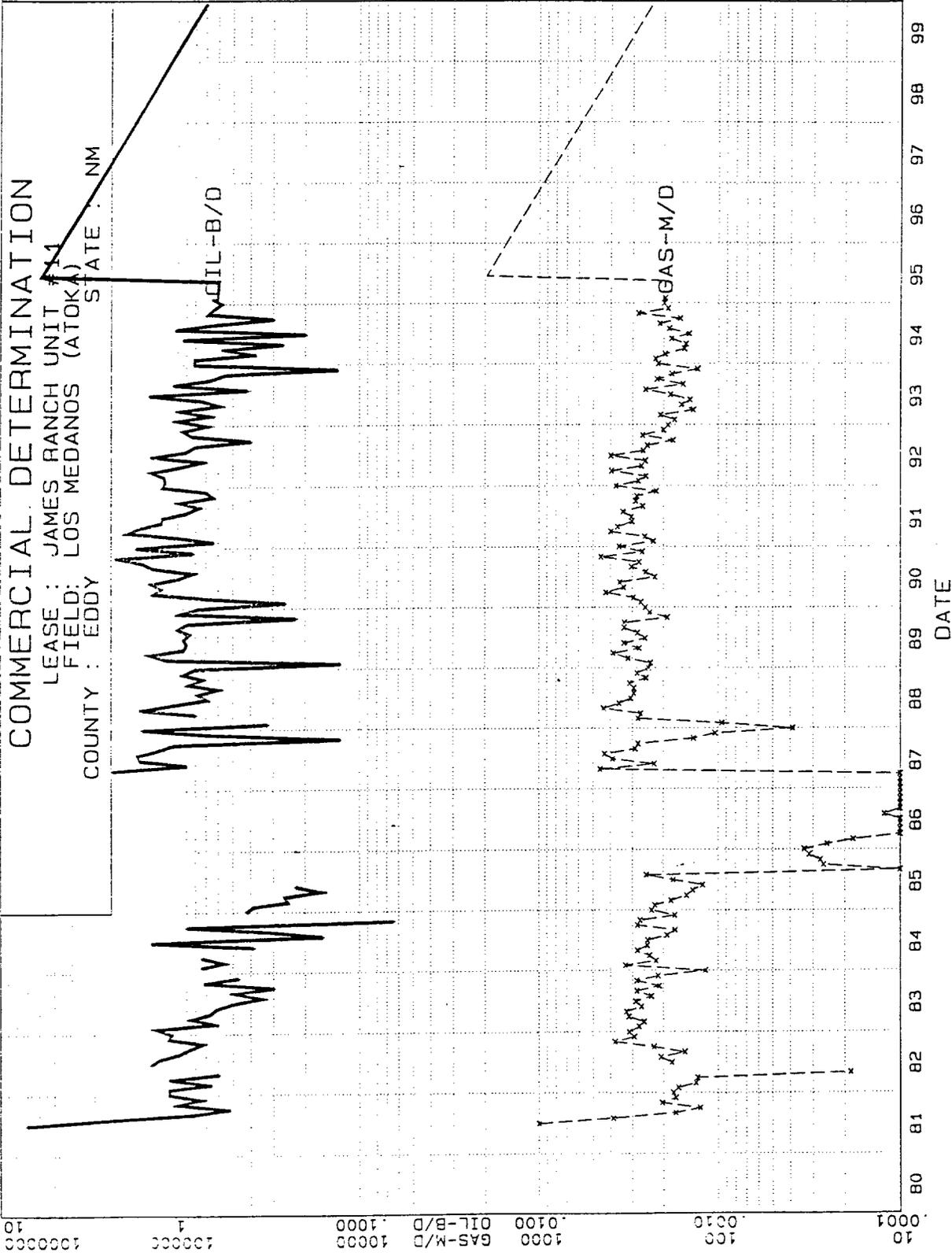
DISCOUNTED NET/INVEST. .66

Hypothetical Case!



**OIL** - ENRON2  
Qa1= 01795  
Cum= 3.827  
Rem= 4.612  
EUR= 8.439  
YCS= 8.247  
Q1= .000  
De= .000  
n= .000  
Qab= .0

**GAS** - ENRON2  
Qa1= 01795  
Cum= 1096.028  
Rem= 1530.518  
EUR= 2626.546  
YCS= 8.247  
Q1= 6165.6  
De= 4.737  
n= .000  
Qab= 1521.6





565 #	4096.00	X	\$/M	1/93	AD	PC	.00	12/92	4096.000	4096.000
566 #	5280.00	X	\$/M	1/94	AD	PC	.00	12/93	5280.000	5280.000
567 #	3903.00	X	\$/M	1/95	AD	PC	.00	12/94	3903.000	3903.000
568 #	4000.00	X	\$/M	TO	LIFE	PC	.00	3/03	4000.000	4000.000
573 STX/OIL	7.08	X	¢	TO	LIFE	PC	.00	3/03	.071	.071
578 STX/GAS	7.93	X	¢	TO	LIFE	PC	.00	3/03	.079	.079
583 ATX	1.00	X	¢	TO	LIFE	PC	.00	3/03	.010	.010
700 NET/WI	100.0000	D	¢	TO	LIFE	FLAT	.00	3/03	1.000	1.000
720 NET/NIC	87.5000	D	¢	TO	LIFE	FLAT	.00	3/03	.875	.875
740 NET/NIG	87.5000	D	¢	TO	LIFE	FLAT	.00	3/03	.875	.875

OVERLAYS	SCHEDULING RATES	SCHEDULE UNTIL	PROCEDURE	ULTIMATE	LAST	BFF. DECL	INIT. RATE	FINAL RATE
905 LOAD	P.GAS GAS 6/81 #			1102.116	1/95			
910 LOAD	P.OIL OIL 6/81 #			3.847	1/95			

INVESTMENT	TANGIBLES & INTANGIBLES	TIME	PROCEDURE	TOTAL T&I	MONTH	RISK INV.	TOT. T&I&R	ESC. T&I&R
800 DRILL	1005.00 1508.00 M\$G	6/81 AD		2513.000	6/81		2513.0	2513.0
801 SALVAGE	-100.50 .00 M\$G	6/81 AD		-100.500	6/81		-100.5	-100.5

RESERVE PARAMETERS

ITEM	ITEM
201 LOSS	NO
205 CUMO, MB	3.83 CUMG, MMF 1096.03 CUML, MB

PROJECT ASSUMPTIONS

BASE DATE : 6/81 TIME FRAMES : 38\*12 1\*600

P.W. DATE : 6/81 PW \$-AGE : 10.0 DISC. FREQUENCY : MO

REPORT DATE : 6/81 PROD QUAL : ENRON2 OWNER QUAL :

OTHER QUAL :

JAMES RANCH UNIT #11  
LOS MEDANOS (ATOKA)  
0833102  
Hypothetical Workover in June 95

DATE : 05/15/95  
TIME : 10:17:34  
DBS FILE : DAILYJ  
SETUP FILE : COMDET  
SEQ NUMBER : 224

R E S E R V E S A N D E C C O N O M I C S

AS OF DATE: 6/81

PERIOD ENDING	5/82	5/83	5/84	5/85	5/86	5/87	5/88	5/89	5/90	5/91	9 TOT	AFTER	20.0 YR TOTAL
---------------	------	------	------	------	------	------	------	------	------	------	-------	-------	------------------

OWNERSHIP

1) WORKING INTEREST, \$	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
2) REVENUE INTEREST, \$	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500	87.500

INVESTMENTS, M\$

3) BORROWED CAPITAL	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4) EQUITY INVESTMENTS	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
5) RISK	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) TOTAL	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5

OIL PHASE

8) GROSS OIL, MB	.5	.4	.2	.1	.0	.1	.4	.3	.3	.5	2.0	5.5	8.3
9) NET OIL, MB	.5	.3	.1	.1	.0	.1	.3	.3	.3	.4	2.4	4.8	7.2
10) OIL REVENUE, M\$	15.5	9.9	4.2	3.6	.2	2.1	7.6	5.8	5.8	8.5	63.3	78.4	141.7
11) OIL PRICE, \$/B	32.95	31.80	29.93	29.35	27.62	24.35	23.80	21.92	20.38	19.89	25.96	16.30	19.55

GAS PHASE

12) GROSS GAS, MMF	81.1	96.8	89.6	72.2	18.7	21.5	94.0	107.1	108.3	111.9	801.1	1774.6	2575.7
13) NET GAS, MMF	70.9	84.7	78.4	63.2	16.4	18.8	82.2	93.7	94.8	97.9	701.0	1552.8	2253.7
14) GAS REVENUE, M\$	213.0	259.1	251.1	209.6	54.5	63.6	277.9	315.0	241.1	156.1	2041.0	2209.0	4250.0
15) GAS PRICE, \$/MCF	3.003	3.060	3.203	3.317	3.329	3.384	3.380	3.363	2.543	1.594	2.912	1.423	1.886

ECONOMICS, M\$

19) GROSS REV. TO INTR.	228.5	269.0	255.3	213.2	54.7	65.7	285.6	320.9	246.9	164.6	2104.3	2287.4	4391.7
20) - SEV. TAX	18.0	21.2	20.2	16.9	4.3	5.2	22.6	25.4	19.5	13.0	166.3	180.7	347.1
22) - AD VALORUM TAX	2.1	2.5	2.4	2.0	.5	.6	2.6	3.0	2.3	1.5	19.4	21.1	40.4
23) - OPERATING COSTS	94.8	109.4	54.4	46.5	41.8	22.9	19.3	30.6	36.2	46.4	502.4	498.1	1000.5
24) - SWD	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
25) - CAPITAL REPAYMENT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26) - INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27) + NPI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
28) = NET INCOME	113.6	135.8	178.4	147.8	8.0	37.0	241.1	261.9	188.8	103.7	1416.2	1587.5	3003.6
29) - INVESTMENTS & RSK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
30) = BPIT NET	-2298.9	135.8	178.4	147.8	8.0	37.0	241.1	261.9	188.8	103.7	-996.3	1587.5	591.1

PRESENT WORTH @ 10.00 %

31) NET INCOME	113.6	116.2	140.4	106.6	6.0	20.5	130.1	128.1	84.6	41.9	888.0	392.3	1280.4
32) INVESTMENTS & RISK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
33) BPIT NET	-2298.9	116.2	140.4	106.6	6.0	20.5	130.1	128.1	84.6	41.9	-1524.5	392.3	-1132.1
34) CUM BPIT NET	-2298.9	-2182.7	-2042.3	-1929.7	-1909.2	-1779.1	-1651.0	-1566.4	-1524.5	-1524.5	-1132.1	-1132.1	-1132.1

JAMES RANCH UNIT #11  
 LOS MEDANOS (ATOKA)  
 0833102

Hypothetical Workover in June 95

DATE : 05/15/95  
 TIME : 10:17:34  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDET  
 SEQ NUMBER : 224

A P T R R T A X R E C O N O M I C S

AS OF DATE: 6/81

PERIOD ENDING	5/82	5/83	5/84	5/85	5/86	5/87	5/88	5/89	5/90	5/91	S TOT	APTR	20.0 YR TOTAL
TAX TREATMENT OF INVESTMENTS, M\$													
1) EXP, RISK & CAP INT	1508.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1508.0	.0	1508.0
2) DEPLETABLE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3) DEPRECIABLE	904.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	904.5	.0	904.5
TAX CALCULATIONS, M\$													
4) GROSS REV. TO INTR.	228.5	269.0	255.3	213.2	54.7	65.7	285.6	320.9	246.9	164.6	2104.3	2287.4	4391.7
5) - SEVERANCE TAX	18.0	21.2	20.2	16.9	4.3	5.2	22.6	25.4	19.5	13.0	166.3	180.7	347.1
6) - WPT TAX NET	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7) - OPR. COSTS & ATX	96.9	111.9	56.7	48.5	42.3	23.5	21.9	33.6	38.5	48.0	521.8	519.2	1040.9
8) + NPI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9) - OVERHEAD	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10) - EXPENSED INV.	1508.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1508.0	.0	1508.0
11) - DEPRECIATION	143.5	246.1	175.8	125.5	89.7	89.7	89.7	44.8	.0	.0	1005.0	.0	1005.0
12) = NET	-1537.9	-110.3	2.6	22.3	-81.7	-52.7	151.3	217.1	188.8	103.7	-1096.8	1587.5	490.6
13) - DEPLETION	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14) - INTEREST PD & CAP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15) = TAXABLE	-1537.9	-110.3	2.6	22.3	-81.7	-52.7	151.3	217.1	188.8	103.7	-1096.8	1587.5	490.6
16) * TAX RATE, %	46.0	46.0	46.0	46.0	46.0	43.5	37.5	34.0	34.0	34.0	52.6	34.9	-4.7
17) - TAX CREDIT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18) - WPT REFUND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19) = F.I.T.	-707.4	-50.7	1.2	10.3	-37.6	-22.9	56.7	73.8	64.2	35.3	-577.2	554.2	-23.0
20) REVENUE-SBV-WPT	210.5	247.7	235.1	196.3	50.4	60.5	263.0	295.5	227.3	151.6	1937.9	2106.7	4044.6
21) - OPR. COSTS & ATX	96.9	111.9	56.7	48.5	42.3	23.5	21.9	33.6	38.5	48.0	521.8	519.2	1040.9
22) + NPI OWNED - PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23) - F.I.T.	-707.4	-50.7	1.2	10.3	-37.6	-22.9	56.7	73.8	64.2	35.3	-577.2	554.2	-23.0
24) = A.F.I.T.	821.1	186.6	177.2	137.6	45.6	59.9	184.3	188.1	124.6	68.4	1993.4	1033.2	3026.6
25) - LOAN REPAYMENT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26) - INTEREST PAID	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
27) = NET INCOME	821.1	186.6	177.2	137.6	45.6	59.9	184.3	188.1	124.6	68.4	1993.4	1033.2	3026.6
28) - INVESTMENTS & RSK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
29) = A.F.I.T. NET	-1591.4	186.6	177.2	137.6	45.6	59.9	184.3	188.1	124.6	68.4	-419.1	1033.2	614.1
PRESENT WORTH @ 10.00 %													
30) NET INCOME	782.9	161.7	139.6	98.5	29.7	35.5	99.2	92.0	55.4	27.7	1522.3	254.3	1776.6
31) INVESTMENTS & RISK	2412.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	2412.5	.0	2412.5
32) A.F.I.T. NET	-1629.6	161.7	139.6	98.5	29.7	35.5	99.2	92.0	55.4	27.7	-890.2	254.3	-635.9
33) CUM. A.F.I.T. NET	-1629.6	-1467.9	-1328.3	-1229.8	-1200.1	-1164.6	-1065.4	-973.3	-917.9	-890.2	-890.2	-635.9	-635.9

JAMBS RANCH UNIT #11  
 LOS MEDANOS (ATOKA)  
 0833102

DATE : 05/15/95  
 TIME : 10:17:34  
 DBS FILE : DAILYJ  
 SETUP FILE : COMDBT  
 SEQ NUMBER : 224

Hypothetical Workover in June 95

E C O N O M I C I N D I C A T O R S

AS OF DATE: 6/81

B.F.I.T.                      A.F.I.T.                      A.F.I.T.  
 WORTH                      WORTH                      BONUS  
 M\$-----                      M\$-----                      M\$-----

PRESENT WORTH PROFILE AND  
 RATE-OF-RETURN VS. BONUS TABLE

0.	591.148	614.148	967.255
2.	48.394	230.361	325.310
4.	-365.711	-66.882	-87.678
6.	-685.374	-300.278	-373.423
8.	-934.995	-486.050	-581.616
10.	-1132.138	-635.902	-739.353
20.	-1676.907	-1078.261	-1167.120
30.	-1900.204	-1288.907	-1360.016
40.	-2012.734	-1413.412	-1473.655
50.	-2078.657	-1498.124	-1551.302
60.	-2121.579	-1561.140	-1609.284
70.	-2151.676	-1610.816	-1655.116
80.	-2173.940	-1651.555	-1692.781
90.	-2191.077	-1685.924	-1724.607
100.	-2204.675	-1715.533	-1752.066

RATE OF RETURN, PCT.                      2.2                      3.5

UNDISCOUNTED PAYOUT, YRS.                      15.39                      14.64

DISCOUNTED PAYOUT, YRS.                      20.00                      20.00

UNDISCOUNTED NET/INVEST.                      1.25                      1.25

DISCOUNTED NET/INVEST.                      .53                      .74

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

August 7, 1995

Commissioner of Public Lands  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Jami Bailey

Attention: Roy Johnson

Re: Commercial Determination  
James Ranch Unit No. 11  
James Ranch Unit  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as Unit Operator of the Poker Lake Unit Agreement, pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the attached commercial determination for the James Ranch Unit No. 11 Well.

It should be noted that the subject well has been evaluated by Bass as a non-commercial producer, and attached hereto is one (1) copy of the BLM's determination of non-commerciality. Please verify your acceptance hereof and the designation of the James Ranch No. 11 as a non-commercial well by executing this letter below and returning one (1) signed copy to the undersigned. Thank you very much for your cooperation in this regard and should you require additional information concerning same, please don't hesitate to contact the undersigned.

Very truly yours,

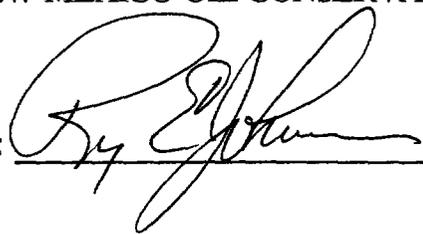
  
J. Wayne Bailey

JWB:ca

ACCEPTED AND AGREED this 14<sup>th</sup> day of August, 1995.

COMMISSIONER OF PUBLIC LANDS NEW MEXICO OIL CONSERVATION DIVISION

By: \_\_\_\_\_

By:   
\_\_\_\_\_

OIL CONSERVATION DIVISION  
RECEIVED

'95 AUG 28 AM 8 52



State of New Mexico  
Commissioner of Public Lands

RAY POWELL, M.S., D.V.M.  
COMMISSIONER

310 OLD SANTA FE TRAIL P.O. BOX 1148

(505) 827-5760  
FAX (505) 827-5766

SANTA FE, NEW MEXICO 87504-1148

August 25, 1995

Bass Enterprises Production Company  
201 Main Street  
Fort Worth, Texas 76102-3121

Attn: Mr. J. Wayne Bailey

Re: Non-Commercial Determination  
James Ranch Unit Well No. 11  
Eddy County, New Mexico

Dear Mr. Bailey:

This office is in receipt of your letter of August 7, 1995 together with the data to support your non-commercial well determination of the James Ranch Unit Well No. 11-E located in Section 35, Township 22 South, Range 30 East.

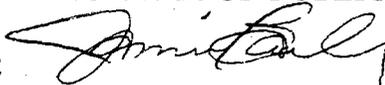
The Bureau of Land Management by their letter of July 27, 1995 has advised this office that the James Ranch Unit Well No. 11 is not capable of producing unitized substances from the Atoka formation in paying quantities.

Pursuant to Article 11 of the James Ranch unit, please be advised that the Commissioner of Public Lands concurs with Bass Enterprises Production Company and the Bureau of Land Management's determination that the James Ranch Unit Well No. 11 is non-commercial in the Atoka formation and production should be reported on a lease basis.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY POWELL, M.S., D.V.M.  
COMMISSIONER OF PUBLIC LANDS

BY:   
JAMI BAILEY, Deputy Director  
Oil, Gas and Minerals Division  
(505) 827-5745

RP/JB/pm

cc: Reader File  
OCD-Santa Fe Attn: Mr. Roy Johnson  
BLM-Roswell Attn: Ms. Alexis Swoboda  
TRD-Santa Fe Attn: Mr. Valdean Severson

*From the desk of*  
**J. WAYNE BAILEY**

Ray - Sorry for the mix up,  
but this should have been  
attached to the letter I  
wrote to you + Pete Martinez  
about the James Ranch  
No. 70. Call me if you have  
any questions 817/390-8671

Wayne Bailey



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201-2019

RECEIVED

SEP 6 1995

W. TEX. / S.E. N.M.  
EXPLORATION DEPT

IN REPLY REFER TO:  
14-08-001558  
3130 (06200)

CERTIFIED MAIL RETURN RECEIPT REQUESTED  
P 392 286 425

AUG 30 1995

Bass Enterprises Production Company  
Attention: George A. Hillis  
First City Bank Tower  
201 Main St.  
Ft. Worth, TX 76102

Re: Commercial Well Determination for the James Ranch Unit No. 70 located  
660'/S & 1980'/E Sec. 12, T. 22 S., R. 30 E., N.M.P.M., Eddy County,  
New Mexico

Gentlemen:

Your letter of July 17, 1995, indicates that as unit operator of the James Ranch Unit No. 70, Eddy County, New Mexico, you have determined that unit well No. 70 is capable of producing unitized substances in paying quantities and is entitled to receive a participating area.

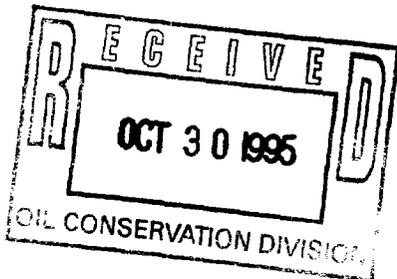
This office concurs with your determination that such well is capable of producing unitized substances in paying quantities from the Atoka formation pursuant to Section 9 of the unit agreement. Therefore, according to Section 11 of the unit agreement, the commercial well is entitled to receive a participating area. Any questions regarding the participating area should be directed to John Simitz at the Division of Minerals.

Should you have any questions regarding this matter, please contact Gary Gourley at the Division of Minerals at 505-627-0249.

Sincerely,

*Tony L. Ferguson*

Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team



X. W. Bailey - F. McCaright  
S. Nense - J. Garve  
Bill Lancaster & S. Henry 9/7.  
John Smitheman.

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

October 26, 1995

Commissioner of Public Lands  
State of New Mexico  
P.O. Box 1148  
Santa Fe, New Mexico 87504-1148

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. Pete Martinez

Attention: Mr. Roy Johnson

RE: Commercial Determination  
James Ranch Unit No. 70  
Initial Atoka "A" Participating Area  
James Ranch Unit  
Eddy County, New Mexico

Dear Mr. Martinez:

Pursuant to our recent conversation concerning the drilling and completion of the James Ranch Unit No. 70 Well, please find attached hereto copies of correspondence submitted to the Bureau of Land Management requesting a commercial determination and initial Atoka "A" Participating Area consisting of the S/2 of Section 12, T22S-R30E, containing 320 acres. Only 200 acres of the 320 acres allocated to the above well are located within the James Ranch Unit boundary, therefore the attached Exhibit "B" defines only 200 acres as participating acreage. Also, it should be noted that all acreage allocated to the well consists of Federal Leases identified on Exhibit "B".

Although the James Ranch Unit No. 70 Well has been shut-in for gas marketing purposes since August 1, 1995, prior performance as indicated its capability of production in commercial quantities. Therefore, Bass respectfully requests your verification of the James Ranch Unit No. 70 Well as a commercial producer. Upon our further discussions with the Bureau of Land Management concerning the initial Participating Area, you will be advised accordingly. In the event your office concurs that the James Ranch Unit No. 70 Well is a commercial producer, please so signify in the space provided below and return one (1) original to the undersigned at your earliest convenience. If you have any questions or comments in the above regard, please advise.

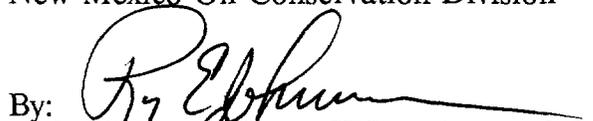
Very truly yours,

  
J. Wayne Bailey

Commissioner Of Public Lands

New Mexico Oil Conservation Division

By: \_\_\_\_\_

By:  \_\_\_\_\_



State of New Mexico  
Commissioner of Public Lands

RAY POWELL, M.S., D.V.M.  
COMMISSIONER

310 OLD SANTA FE TRAIL P.O. BOX 1148

(505) 827-5760  
FAX (505) 827-5766

December 19, 1995

SANTA FE, NEW MEXICO 87504-1148

DEC 21 1995

Bass Enterprises Production Company  
201 Main Street, 1st City Bank Tower  
Ft. Worth, Texas 76102

Attn: Mr. J. Wayne Bailey

Re: James Ranch Unit--Commercial Determinations, Atoka Formation Well No. 70  
Eddy County, New Mexico

Dear Mr. Bailey:

We received your letters of July 17, 1995, and October 26, 1995, together with data that supports your commercial determinations regarding the James Ranch Unit Well No. 70.

By their letter of August 30, 1995, the Bureau of Land Management advised this office that they concur with your determination that the James Ranch Unit Well No. 70 is capable of producing unitized substances in paying quantities from the Atoka Formation.

The Commissioner of Public Lands concurs with Bass Enterprises Production Company's and the Bureau of Land Management's determinations that the James Ranch Unit Well No. 70 is commercial in the Atoka Formation, and entitled to participate in the Atoka Participating Area.

Your application for the Initial Atoka "A" Participating Area is on hold, pending approval by the Bureau of Land Management.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY POWELL, M.S., D.V.M.  
COMMISSIONER OF PUBLIC LANDS

BY:   
LARRY KEHOE, Director  
Oil, Gas and Minerals Division  
(505) 827-5744

RP/LK/cpm  
cc: Reader File

BLM

OCD

TRD

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

February 2, 1996

**CERTIFIED MAIL/  
Return Receipt Requested**

Bureau of Land Management  
P. O. Box 1397  
Roswell, New Mexico 88201

Attention: Mr. Tony Ferguson

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Mr. Jami Bailey

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico

Attention: Mr. William LeMay

Re: 1996 Plan of Development  
James Ranch Unit  
Eddy County, New Mexico

Gentlemen:

In accordance with Section 10 of the James Ranch Unit Agreement dated April 22, 1952, Bass Enterprises Production Co., Operator of the referenced unit, hereby submits a Plan of Development for the James Ranch Unit for the year 1996.

**HISTORY OF PAST DEVELOPMENT**

We refer to our previous Plans of Development for a detailed description of the operations conducted in this Unit in prior years.

RECEIVED

FEB 7 1996

Oil Conservation Division

### 1995 ACTIVITY

James Ranch Unit Well No. 16 - This well was drilled at a location of 1,980' FNL & 330' FEL in Section 36, T22S-R30E, Eddy County, New Mexico. The well was drilled to a total depth of 11,250', and is presently being tested in the Wolfcamp Formation.

James Ranch Unit Well No. 70 - This well was drilled at a location 660' FSL and 1,980' FEL in Section 12, T22S-R30E, Eddy County, New Mexico. The well was completed in the Atoka Formation as a gas well in the interval 12,748' - 12,756'. This well will be submitted during the calendar year 1996, for commercial determination and inclusion into a participating area.

### PARTICIPATING AREAS

Bass Enterprises Production has submitted all wells drilled to date where adequate information is available for commercial determination and participating areas. In the event you have not received commercial determinations for the wells that have been drilled and completed and are currently producing, please advise at your convenience and we will submit same to you.

### FUTURE DEVELOPMENT

James Ranch Unit Well No. 65 - This well will be drilled at a location being 330' FNL & 2,310' FEL in Section 6, T23S-R31E, Eddy County, New Mexico to a proposed depth of 11,500' to test the Wolfcamp formation.

James Ranch Unit Well No. 66 - This well will be drilled at a location being 990' FWL & 660' FSL in Section 36, T22S-R30E, Eddy County, New Mexico to a proposed depth of 7,750' to test the Brushy Canyon formation.

James Ranch Unit Well No. 67 - This well will be drilled at a location being 900' FWL & 1,980' FSL in Section 36, T22S-R30E, Eddy County, New Mexico to a proposed depth of 11,225' to test the Wolfcamp formation.

James Ranch Unit Well No. 73 - This well will be drilled at a location being 330' FNL & 1,980' FWL in Section 6, T23S-R31E, Eddy County, New Mexico to a proposed depth of 11,500' to test the Wolfcamp formation.

**OFFSET OBLIGATIONS**

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands within the James Ranch Unit area or pursuant to applicable regulations.

**MODIFICATIONS**

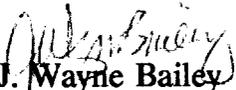
In accordance with the terms and provisions of the James Ranch Unit Agreement, this Plan of Development may be modified from time to time as a result of changing conditions.

**EFFECTIVE DATE**

This Plan of Development shall become effective on January 1, 1996.

If this Plan of Development meets with your approval, please so indicate by signing in the appropriate space provided below and return one (1) signed original to the undersigned for our records.

Very truly yours,

  
J. Wayne Bailey  
Division Landman

JWB:ca

ACCEPTED AND AGREED this 7<sup>th</sup> day of Feb., 1996.

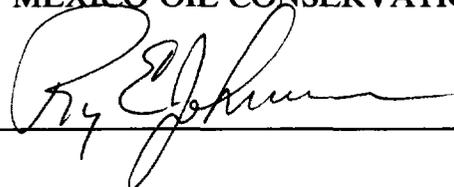
BUREAU OF LAND MANAGEMENT

By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION DIVISION

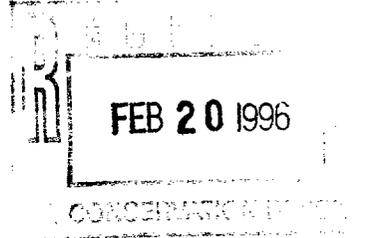
By:  \_\_\_\_\_

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

February 8, 1996

Bureau of Land Management  
P. O. Box 1397  
Roswell, New Mexico 88201



Attention: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. William LeMay

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Ms. Jami Bailey

Re: Application for Approval of the Fourth Revision of the  
Initial Atoka Participating Area  
James Ranch Unit, No. 14-08-001-558  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as unit operator of the James Ranch Unit Agreement pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the selection of the following described lands to constitute the fourth revision to the Initial Atoka Participating Area. The revised participating area consists of 2,844.50 acres to be comprised of the lands indicated on the plat attached hereto and further described as follows:

SW/4 NW/4 Section 7, T22S-R31E  
N/2 SE/4, SW/4 SE/4, S/2 SW/4 Section 12, T22S-R30E  
E/2 Section 35, S/2 Section 36, T22S-R30E  
S/2 Section 31, T22S-R31E  
E/2, NE/4 NW/4 Section 1, T23S-R30E  
W/2 W/2 Section 5, Section 6, W/2 Section 8, SW/4 Section 17, T23S-R31E

All in Eddy County, New Mexico and containing exactly 2,844.50 acres of land.

In support of this application, the following numbered items are attached hereto and made a part hereof:

1. An ownership map (Exhibit "A") depicting the boundaries of the proposed fourth revision to the Initial Atoka Participating Area.
2. A schedule (Exhibit "B") identifying the lands entitled to participation in the revised participating area with the percentage of participation of each lease or tract indicated thereon.
3. A geological report with accompanying geological maps supporting and justifying the proposed selection of the revised area based on the results obtained from the Mitchell Energy-Apache Federal 13 No. 1.

This proposed fourth revision to the Initial Atoka Participating Area is predicated upon the knowledge and information first obtained from the Mitchell Energy-Apache Federal 13 No. 1 located in SE/4 NE/4 Section 13, T22S-R30E in July, 1993. According to Section 11 of the Unit Agreement, the effective date of the subject revision should be the first of the month in which the above information was obtained or July 1, 1993. Therefore, Bass respectfully requests your approval of the hereinabove described 2,844.50 acres of land to constitute the fourth revision of the Initial Atoka Participating Area, to be effective July 1, 1993.

Thank you very much for your cooperation in this regard and should you have any questions or comments concerning same, please do not hesitate to contact the undersigned.

Very truly yours,

  
J. Wayne Bailey  
Division Landman

JWB/WWC:sd

ACCEPTED AND AGREED this 22<sup>nd</sup> day of Feb., 1996.

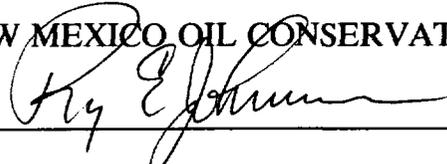
BUREAU OF LAND MANAGEMENT

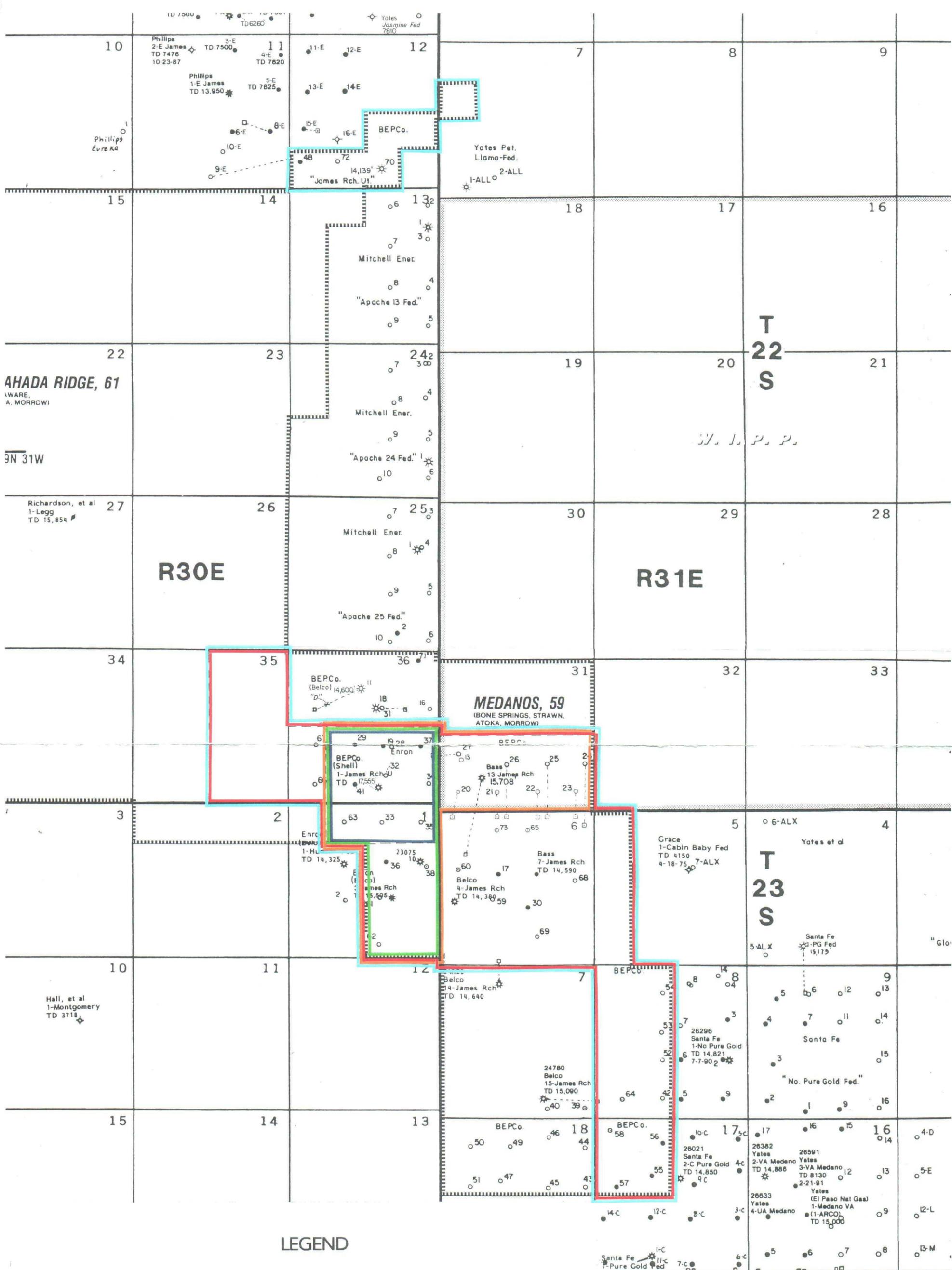
By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION DIVISION

By:  \_\_\_\_\_



**LEGEND**

- Initial Atoka Participating Area - (5-5-58): 360.54 Acres
- 1st Rev. to Initial Atoka Participating Area - (5-1-80): 600.54 Acres
- 2nd Rev. to Initial Atoka Participating Area - (9-1-82): 921.52 Acres
- 3rd Rev. to Initial Atoka Participating Area - (12-1-82): 2604.65 Acres
- 4th Rev. to Initial Atoka Participating Area - (7-1-93): 2844.50 Acres
- James Ranch Unit Outline

**Bass Enterprises Production Co.**

**JAMES RANCH UNIT**  
Eddy County, New Mexico

**EXHIBIT "A"**

2/96

SCALE IN FT. 0 3000 6000

**EXHIBIT "B"**  
**Fourth Revision to Initial Atoka Participating Area**  
**James Ranch Unit**  
**Eddy County, New Mexico**

<u>Tract Lease No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
1	NM 0300 Section 12, T22S-R30E; N/2SE/4, SW/4 SE/4, S/2 SW/4	200.00	7.0311	Bass Enterprises Production Co. - 100%
2	NM 02883-A Section 5, T23S-R31E; SW/4 NW/4, W/2 SW/4	120.00	4.2187	Bass Enterprises Production Co. - 100%
3	NM 02884-A Section 1, T23S-R30E; Lot 3	40.30	1.4168	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
3-A	NM 02884-B Section 1, T-23S-R30E; Lots 1&2, S/2 NE/4, SE/4	320.24	11.2582	Bass Enterprises Production Co. - 37.5093% Enron Oil & Gas Co. - 62.4906%
4	NM 02887-A Section 6, T23S-R31E; Lots 1&2,S/2 NE/4, NE/4 SE/4	199.92	7.0283	Bass Enterprises Production Co. - 74.9937% Enron Oil & Gas Co. - 25.0063%
4	NM 02887-D Section 6, T23S-R31E; Lots 3, 4, 5, SE/4 NW/4	161.08	5.6629	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
4-A	NM 02887-B Section 5, T23S-R31E; Lot 4	39.98	1.4055	Bass Enterprises Production Co. - 100%
6	NM 02952-C Section 35, T22S-R30E; NE/4	160.00	5.6249	Bass Enterprises Production Co. - 100%

**EXHIBIT "B"**  
**Fourth Revision to Initial Atoka Participating Area**  
 Page 2

<u>Tract Lease No.</u>	<u>No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
6-A	NM 02952-A	Section 35, T22S-R30E; SE/4	160.00	5.6249	Bass Enterprises Production Co. - 100%
7	NM 02953-C	Section 31, T22S-R31E; S/2	320.98	11.2842	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
8	NM 04473	Section 6, T23S-R31E; Lots 6, 7, E/2 SW/4, W/2 SE/4, SE/4 SE/4	282.15	9.9191	Bass Enterprises Production Co. - 51.0554% Enron Oil & Gas Co. - 48.9445%
18	NM 69509	Section 7, T22S-R31E; SW/4 NW/4	39.85	1.4009	Bass Enterprises Production Co. - 100%
20	LC 071988-B	Section 8, T23S-R31E; W/2 Section 17, T23S-R31E; NW/4	480.00	16.8747	Bass Enterprises Production Co. - 100%
21	E-5229-1	Section 36, T22S-R30E; SW/4	160.00	5.6249	Bass Enterprises Production Co. - 75% Enron Oil & Gas Co. - 25%
21	E-5229-2	Section 36, T22S-R30E; SE/4	160.00	5.6249	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
<b>TOTALS:</b>			2844.50	100%	
Total Federal Lands:		2524.50 Acres			
Total State Lands:		320.00 Acres			
Total Fee Lands:		<u>0.00</u> Acres			
Total:		2844.50 Acres			

# **BASS ENTERPRISES PRODUCTION COMPANY**

## ***ATOKA PARTICIPATING AREA***

### **JAMES RANCH UNIT, EDDY CO., NM**

#### ***PROPOSED P.A. REVISION***

Based upon BEPCo's commercial completion of the James Ranch Unit No. 70 (12-T22S-R30E) in the Atoka Sand within Livingston Ridge N.E. Field, it is recognized by BEPCo that this well, although on non-continuous acreage, should be included in the existing P.A. located  $\pm$  4 miles to the south and currently inclusive of Atoka Sand completions in the J.R.U. No. 1 (1958), the J.R.U. No. 10 (1980) and the J.R.U. No. 13 (1982) of the Los Medanos Field. Also in light of additional data identified earlier from wells located south and southeast of the existing P.A., BEPCo recommends that the existing P.A. be enlarged to include acreage adjacent to the west and southeast of the current defined P.A. area. The attached porosity-H maps for the Atoka Sand (no porosity cut-off, 7% porosity cut-off and 10% porosity cut-off) illustrate BEPCo's interpretation of the reservoir, and reflect the pressure communication existing between the Livingston Ridge N.E. and Los Medanos Fields. Furthermore, they reflect the pressure communication between the existing P.A. with both unit and non-unit wells to the southeast in Sections 6 & 17, T23S- R31E, specifically the J.R.U. No. 7 (1974) and the Pure Gold "C" No. 1 (1982).

The recommended enlargement of the existing P.A. will most accurately reflect the area of commercial production from this unique reservoir

#### ***AREA OF REVISED P.A.***

A review of BEPCo's geological study and petrophysical analysis for the wells in the Atoka Sand reservoir demonstrates that based on well character and performance along the sand fairway one needs to have some footage  $\geq$  10% porosity at the wellbore to at least have a chance of making a commercial well. Gas is contained in sand with  $<$  10% porosity but if not at the wellbore, commerciality cannot be attained. Examination of the porosity-H maps shows that a well needs to be "inside" the 0.5 (porosity-H, no cut-off) and/or the 0.4 (7% porosity cut-off) contours level to have a chance of being commercial. Based on this and utilization of the fact that  $\geq$  50% of a 320 acre proration unit must be within the area of commerciality, the following unit acreage (from north to south) is recommended for inclusion in the revised participating area. This acreage is also illustrated on each of the porosity-H maps. It is recommended that the acreage in the southern area (3 thru 10 below) is included in a 12/82 revision date, with the acreage in the northern area (1 thru 2) being included in a later revision date of 7/93.

1. SW/4 of NW/4, Section 7, T22S-R31E (39.85 acres)
2. N/2 and SW/4 of SE/4, S/2 of SW/4, Section 12-T22S-R30E (200 acres).
3. E/2, Section 35, T22S-R30E (320 acres)
4. S/2, Section 36, T22S-R30E (320 acres) - note that the eastern 240 acres of this area is within the current P.A.
5. E/2, Section 1, and NE of NW/4, Section 1, T23S-R30E (360.54 acres) - note that all of this area is within the current P.A. However in order to adapt to proper P.A. guidelines, the NE of the NW/4 (Sec. 1) probably should be excluded.
6. S/2, Section 31, T22S-R31E (320.98 acres) - note that all of this area is within the current P.A.
7. Section 6, T23S-R31E (643.15 acres)
8. W/2 of W/2, Section 5, T23S-R31E (159.98 acres)
9. W/2 of Section 8, T23S-R31E (320 acres)
10. NW/4 of Section 17, T23S-R31E (160 acres).

This revised P.A. would thus encompass 2,844.50 acres of unit acreage. Areas not recommended for inclusion but adjacent to the proposed boundary are discussed as follows:

- a) Unit acreage within Sections 13 and 24 of T22S-R30E—in both instances, less than 50% of the 320 (W/2) acre proration unit is commercial.
- b) N/2 Section 36, T22S-R30E—less than 50% of the 320 acre proration unit is commercial. This tract contains two tests, the J.R.U. 11 and 18, both judged as non-commercial in the Atoka Sand. The J.R.U. No. 11 although it has some footage greater than 10% porosity is located within a “sweet” spot with very limited areal extent. The well averaged around 1 MMCFPD during the first month of production (7/81) and then, due to “blow-down” of the sweet spot, production fell dramatically to below 200 MCFPD. During the period 1982-present, the No. 11 has flowed at rates of 150-400 MCFPD. In 1/95 the average flow rate was 196 MCFPD. It also must be stressed that the No. 11 was drilled at a time when commercial rates could have been attained in the Atoka Sand if the well was in a commercial location within the reservoir. Therefore, the No. 11 is not non-commercial due to drainage. This is well exemplified by the fact that the J.R.U. No. 13 was also completed around this time (1982), and in spite of reservoir pressure at that time was able to accomplish commerciality. The J.R.U. No. 10 in 1980 also demonstrated this fact. When the P.A. was revised for the Nos. 10 and 13 in 1982 it was correct for the B.L.M. to exclude the J.R.U. No. 11. This is further supported by geological mapping of the reservoir and confirmed by the B.L.M.’s 1995 recognition of the No. 11 being a non-commercial well. Production records (attached) for the Nos. 1, 10, & 13 also support this in the context that the No. 11 coming on line in the fall of ‘81, did not influence production from these wells. The decline in production noted by the B.L.M. from the Hudson Federal (W/2 Sec. 1, T23S-R30E) is in fact not related to the J.R.U. No. 11 coming on line. Rather the production decline from the Hudson Federal in 1981 was due to the fact that the Atoka Bank, productive since 1974, watered out. The dramatic decline in production (graph attached) is actually the plugging back from the Atoka Bank to the Atoka Sand in 6/81. Since the re-completion to the Sand in mid-’81 until a re-completion to the Brushy Canyon in 1993, the Atoka

Sand could only make 4-5 MCFPD. This is 0.3% of the flow rates during that period from the Nos. 1, 10, & 13, illustrating the Hudson Federal was not in communication with those wells (reference-attachment No. 8, 7/95 data base to B.L.M.). It is of interest to also note that when the No. 11 came on line, the flow rate for the first two years was only 10-12% of the rates from the Nos. 1 & 10. Moreover, no skin damage exists in the No. 11. In conclusion neither the Hudson Federal nor the No. 11, by geology and production records, are in commercial communication with the Atoka Sand reservoir.

Finally, the other well in the N/2 Sec. 36, the J.R.U. No. 18, when drilled in 1993 supported the fact that the No. 11 had been drilled in a "sweet" spot with limited areal extent. The No. 18 log profile shows that commercial flow could not be achieved (avg. porosity = 6.6%) and shows that the porosity at the J.R.U. No. 11 wellbore does not go very far at all.

- c) E/2, Section 7, T23S-R31E—less than 50% of the 320 acre proration unit is commercial. Neither well in Section 7, the J.R.U. 14 or 15, is judged commercial in the Atoka Sand by electric logs and mudlogs.

## **DATES OF REVISION**

### **1. Southern Enlargement**

The most recent revision of the current Atoka P.A. was the second revision which was effective 9/1/82 (921.52 ac.). Production from the J.R.U. No. 1 totaled approximately 23.0 BCF at the time of the revision in 1982 for the J.R.U. No 13. This production volume alone shows that the above revision should have been significantly enlarged at that time. Supporting evidence was the reverse drilling break encountered in 1974 by the J.R.U. 7 (E/2, Sec. 6, T23S-R31E)--see attachment #6 and related log/mudlog enclosures previously submitted. Subsequently, the DST taken in 6/82 on the Pure Gold C #1 (SW/4, Sec. 17, T23S-R31E) supported BEPCO's mapping of late 1982 in that the reduced pressure on the Atoka Sand test confirmed the regional extent of the reservoir. On this basis we recommend that this proposed revision be effective back to 12/1982.

Of interest, the pressure data on the Pure Gold C #1 was further confirmed in 10/89 on a drill stem test in the Pure Gold C #2 (NE/4, Sec. 17, T23S-R31E). Not only was the pressure again reduced from virgin, the FSIP was 403 psi less than the 1982 FSIP on the Pure Gold C #1. Then again in 4/90, a drill stem test on the Pure Gold 8 #1 (E/2, Sec. 8, T23S-R31E), found a FSIP 379 psi less than that measured in the C #2, and 782 psi less than that recorded in the C #1.

### **2. Northern Enlargement**

The reservoir extension to the north was not recognized until 7/93 when the Mitchell 13 #1 (13-22S-30E) was drill stem tested. The unit acreage to the north involved in the overall proposed revision covers only 8.4% of the area of revision, but to be

correct, BEPCo acknowledges this sector should not be included in a 1982 revision. Rather, the southern area should have a revision date of 12/82, with a further revision date of 7/93 to include the acreage in the north part of the reservoir. As such the area involved in the revision to the west and south of the original P.A. makes up the significant percentage of the revision and thus a revision date referenced to 12/1982 is proper.

### **THE ATOKA BANK**

As we all agree, the Atoka Sand reservoir at James Ranch Unit is extremely unique. So unique in fact that one doubts if we will ever again see a thin reservoir like this productive over such a large area. Although the Atoka Bank, in the southern part of the proposed Atoka P.A., essentially follows a similar fairway to the sand, it can however be clearly demonstrated that the Atoka Bank in the J.R.U. 70 is not in communication with the Bank to the south. Thus when the time comes to re-complete the J.R.U. 70 to the Atoka Bank (the Bank in the No. 70 is actually a clastic facies stratigraphically equivalent to but disconnected from the "carbonate" Bank to the south) it is recommended that J.R.U. No. 70 be removed from the Atoka P.A.

BEPCo realizes this has been a long process for P.A. revision and acknowledges the B.L.M. for their patience and understanding. It is, as we both agree, a unique case and thus it is important to "get it right." If there are any additional questions or data needed please feel free to call me.

George A. Hillis

817/390-8661

**COMPANY: Bass Enterprises Production Company**

**WELL: James Ranch Unit #70**

**FIELD: Livingston Ridge North East Field**

**COUNTY: Eddy STATE: New Mexico**

COUNTY: Eddy  
 Field: Livingston Ridge North East Field  
 Location: 660' FSL and 1980' FEL  
 Well: James Ranch Unit #70  
 Company: Bass Enterprises Production Co

<b>Schlumberger</b>		<b>Litho Density Compensated Neutron</b>	
		660' FSL and 1980' FEL	Elev.: K.B. 3358.7 F G.L. 3331.1 F D.F. 3356.7 F
Permanent Datum: <u>Ground Level</u>		Elev.: <u>3331.1 F</u>	
Log Measured From: <u>Kelly Bushing</u>		27.6 F above Perm. Datum	
Drilling Measured From: <u>Kelly Bushing</u>			
API Serial No. N/A	SECTION 12	TOWNSHIP 22-S	RANGE 30-E

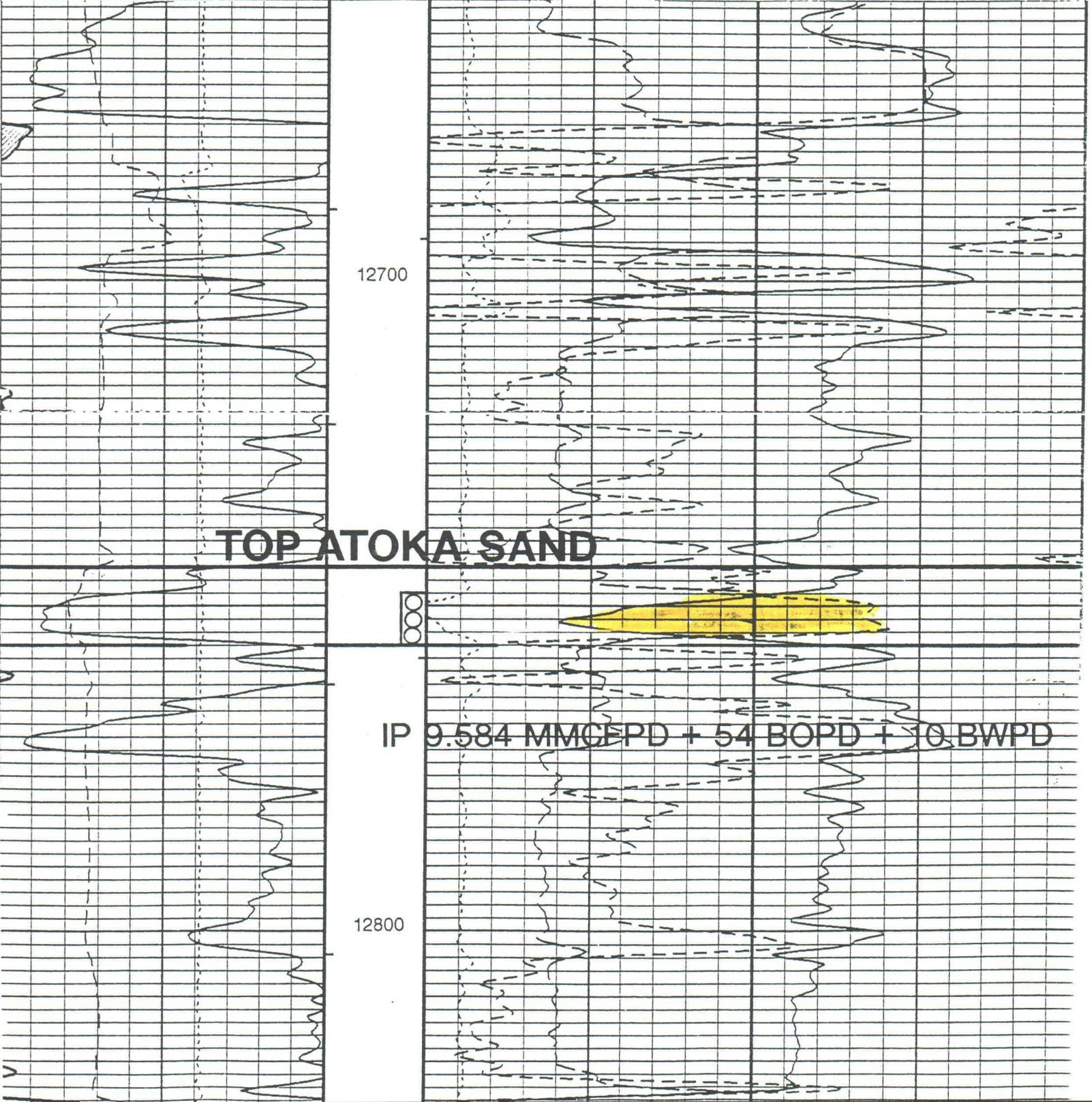
Logging Date	December 9, 1994		
Run Number	Three		
Depth Driller	14139 F		
Schlumberger Depth	14139 F		
Bottom Log Interval	14136 F		
Top Log Interval	11800 F		
Casing Driller Size @ Depth	7.625 IN	@ 12000 F	@
Casing Schlumberger	11998 F		
Bit Size	6.500 IN		
Type Fluid In Hole	PAC/KCL		
Density	Viscosity	10 LB/G	32 S
Fluid Loss	PH	7.2 C3	10.5
Source Of Sample	Shaker		
RM @ Measured Temperature	0.053 OHMM	@ 79 DEGF	@
RMF @ Measured Temperature	0.049 OHMM	@ 79 DEGF	@
RMC @ Measured Temperature		@	@
Source RMF	RMC	Measured	
RM @ MRT	RMF @ MRT	0.023 @ 191	0.021 @ 191 @ @
Maximum Recorded Temperatures	191 DEGF		
Circulation Stopped	Time	12-9-1994	04:30
Logger On Bottom	Time	12-9-1994	
Unit Number	Location	3015	Roswell
Recorded By	Mark Lieberenz		
Witnessed By	G. Hillis		

Logging Date
Run Number
Depth Driller
Schlumberger Depth
Bottom Log Interval
Top Log Interval
Casing Driller Size @ Depth
Casing Schlumberger
Bit Size
Type Fluid In Hole
Density
Viscosity
Fluid Loss
PH
Source Of Sample
RM @ Measured Temperature
RMF @ Measured Temperature
RMC @ Measured Temperature
Source RMF
RMC
RM @ MRT
RMF @ MRT
Maximum Recorded Temperature
Circulation Stopped
Logger On Bottom
Unit Number
Location
Recorded By
Witnessed By

Caliper (CALI) (IN)	14
Gamma Ray (GR) (GAPI)	100
Tension (TENS) (LBF)	0
Gamma Ray 1 (GR) (GAPI)	200

Bulk Density Correction (DRHO) (G/C3)	0.45
Density Porosity (DPHI) (V/V)	-0.1
Neutron Porosity (NPHI) (V/V)	-0.1
PhotoElectric Factor (PEF) (----)	10

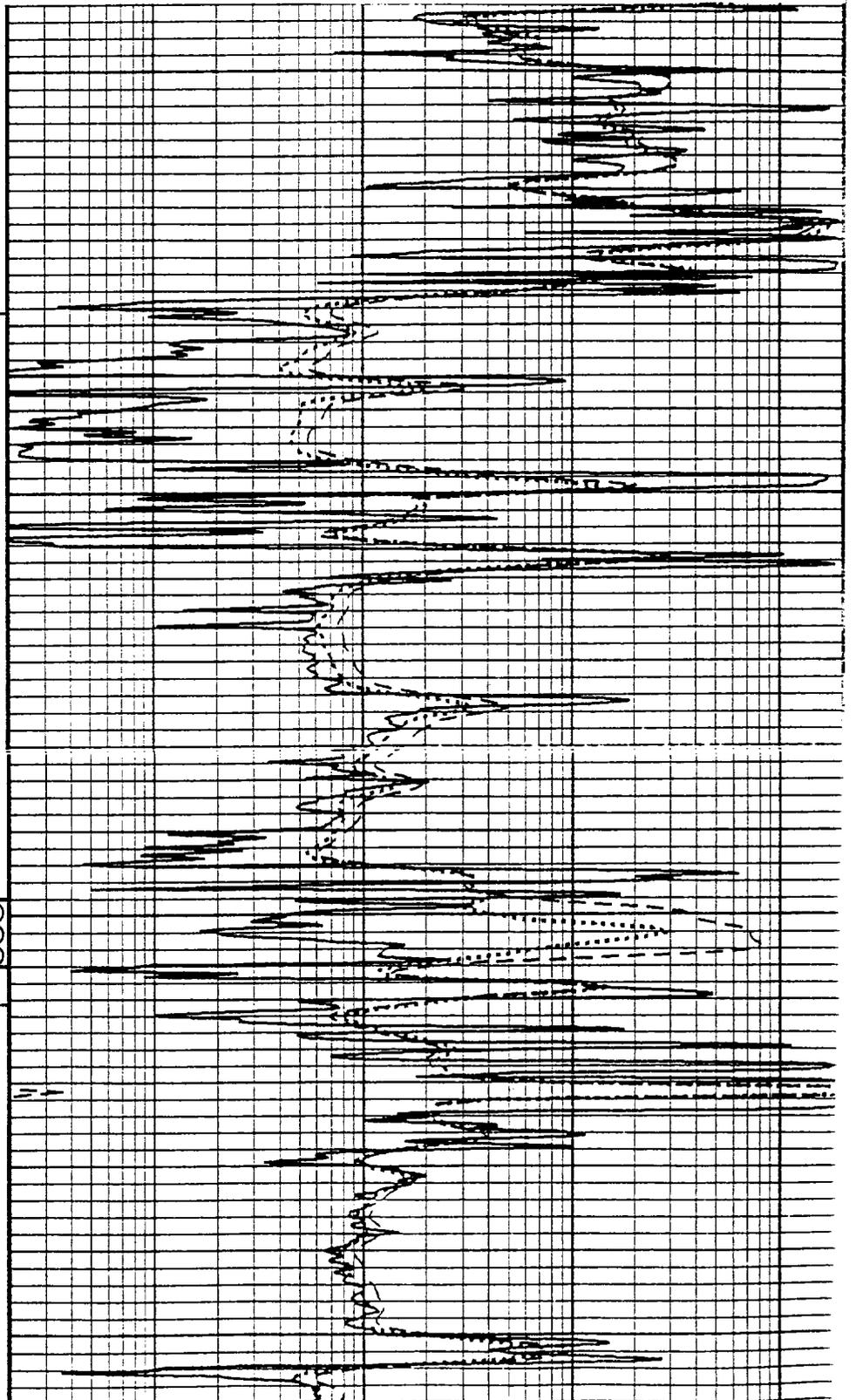
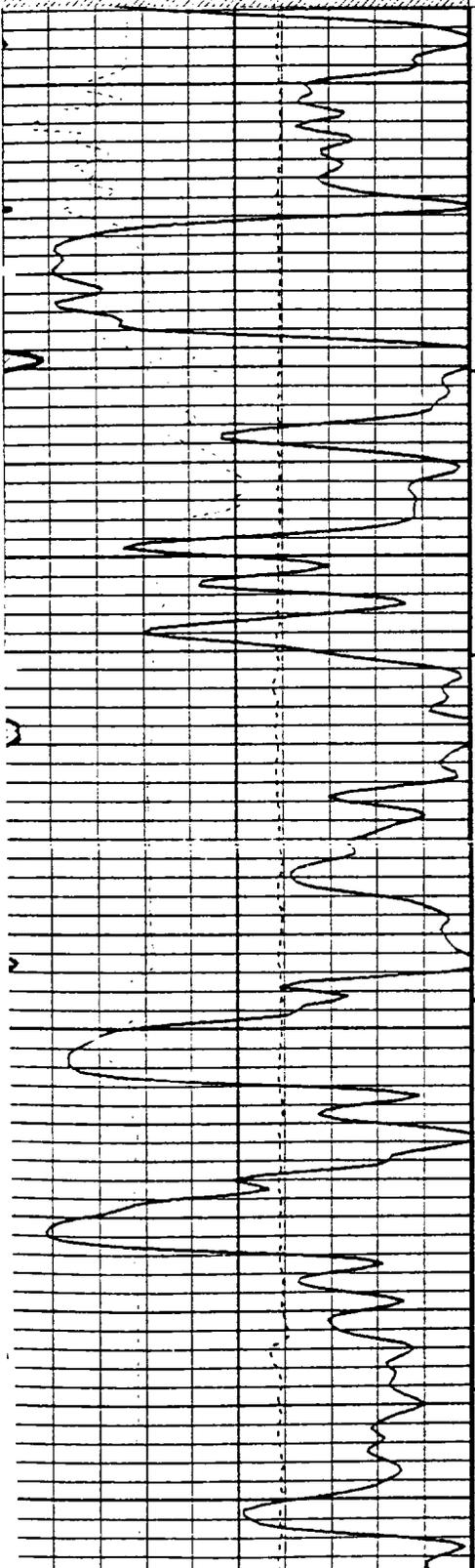
GR BACKUP  
From T1 to GR1



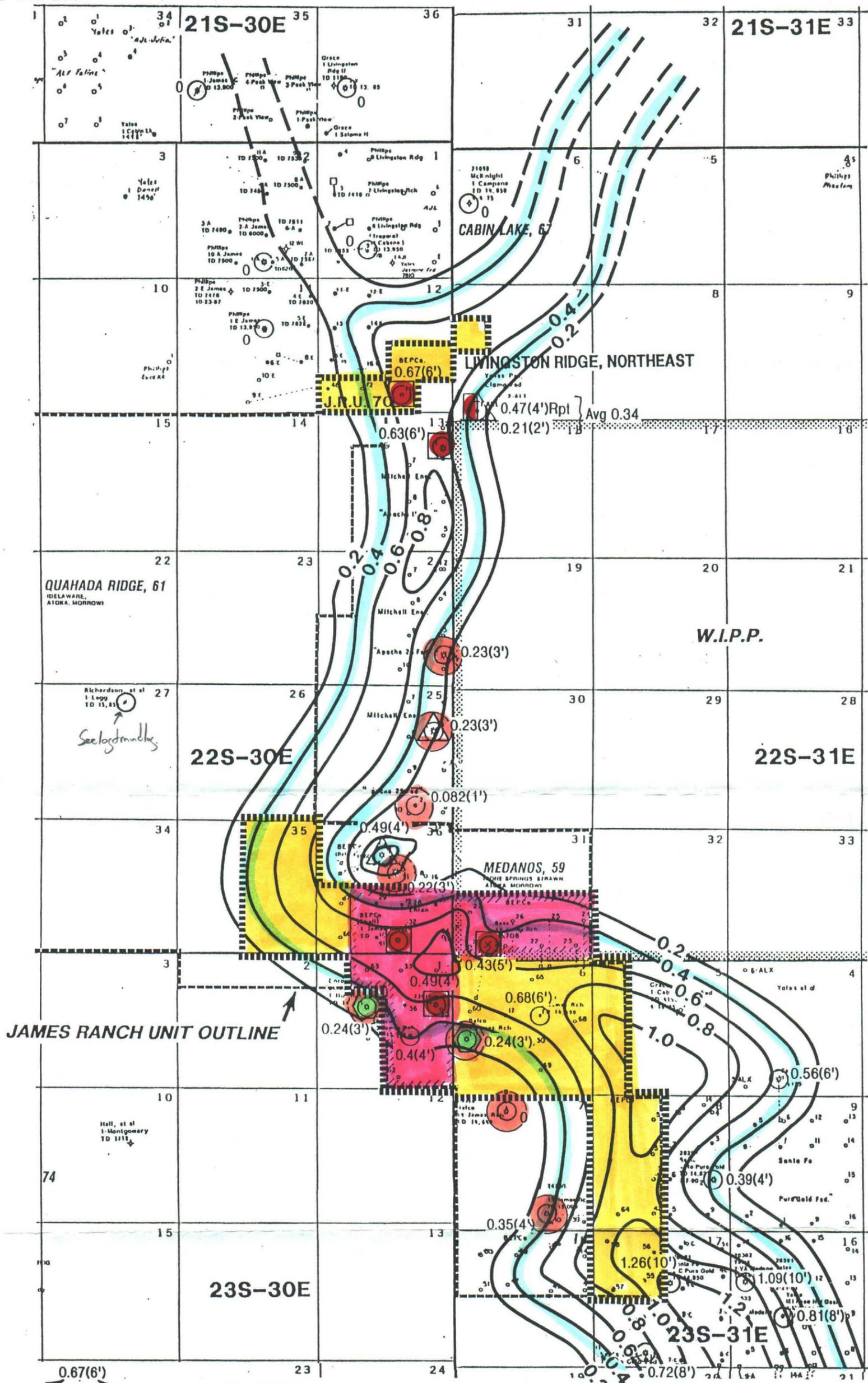
Caliper (CALS) (IN)	14
Gamma Ray (GR) (GAPI)	100
Tension (TENS) (LBF)	0
Gamma Ray 1 (GR) (GAPI)	200

Laterolog Deep Resistivity (LLD) (OHMM)	2000
Laterolog Shallow Resistivity (LLS) (OHMM)	2000
Micro SFL Resistivity (MSFL) (OHMM)	2000

GR BACKUP  
From T1 to GR1







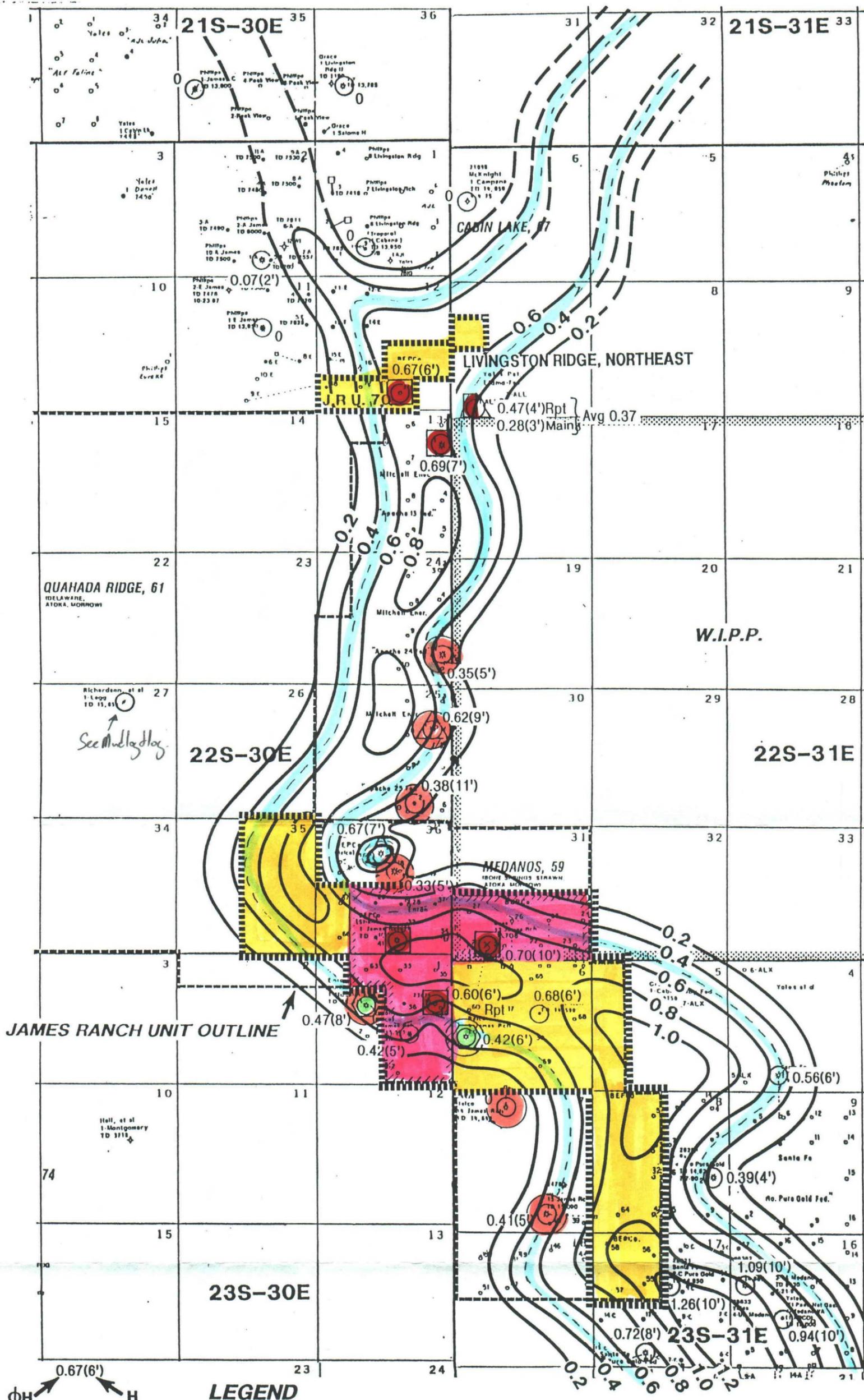
$\phi_H$   $\swarrow$   $\nwarrow$   $H \geq 7\%$

**LEGEND**

- **ATOKA SAND PRODUCER-COMMERCIAL**
- △ **ATOKA SAND PRODUCER-NON COMMERCIAL**
- ⬡ **ATOKA SAND TESTED NON COMMERCIAL RATES THRU PERFORATIONS DURING WELL COMPLETION**
- **ATOKA SAND APPARENTLY NON COMMERCIAL BY LOGS**
- PROPOSED PARTICIPATING AREA REVISION**

**Bass Enterprises Production Co.**  
**LIVINGSTON RIDGE, N.E.-**  
**LOS MEDANOS FIELDS**  
 Eddy Co., New Mexico  
**ATOKA SAND**  
**Porosity-H Isopach**  
**(for porosity  $\geq 7\%$ )**

Scale: 1"=4000' C.I. = 0.2

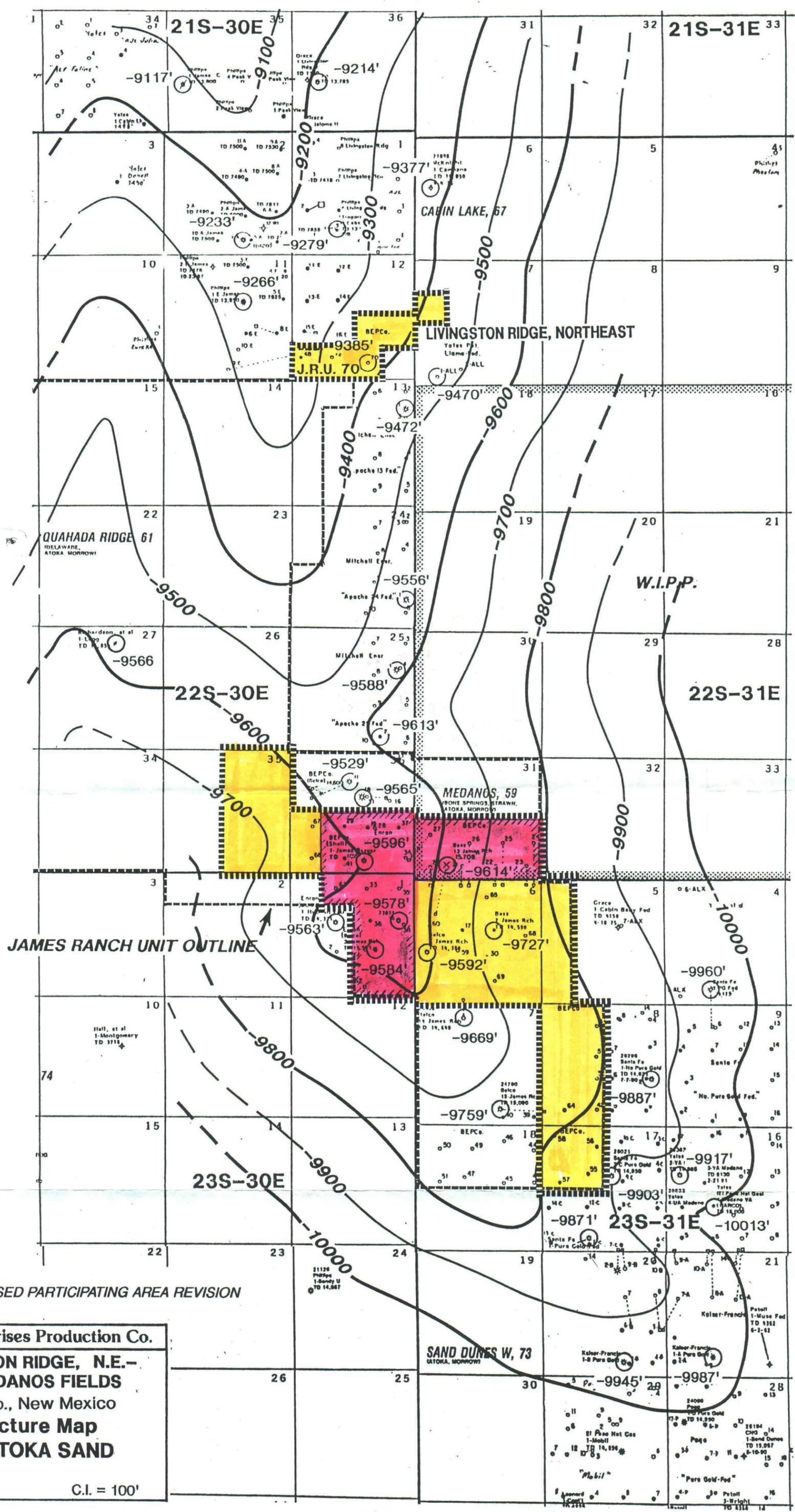


$\phi_H$  ← H

**LEGEND**

- ATOKA SAND PRODUCER-COMMERCIAL**
- ATOKA SAND PRODUCER-NON COMMERCIAL**
- ATOKA SAND TESTED NON COMMERCIAL RATES THRU PERFORATIONS DURING WELL COMPLETION**
- ATOKA SAND APPARENTLY NON COMMERCIAL BY LOGS**
- PROPOSED PARTICIPATING AREA REVISION**

**Bass Enterprises Production Co.**  
**LIVINGSTON RIDGE, N.E.-**  
**LOS MEDANOS FIELDS**  
 Eddy Co., New Mexico  
**ATOKA SAND**  
**Porosity-H Isopach**  
**(no porosity cut-off)**  
 Scale: 1"=4000'      C.I. = 0.2



PROPOSED PARTICIPATING AREA REVISION

**Bass Enterprises Production Co.**  
**LIVINGSTON RIDGE, N.E.—**  
**LOS MEDANOS FIELDS**  
 Eddy Co., New Mexico  
**Structure Map**  
**TOP ATOKA SAND**

Scale: 1"=4000'      C.I. = 100'



**SAND DUNES W, 73**  
 ATOKA, MORROW

**23S-31E**

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

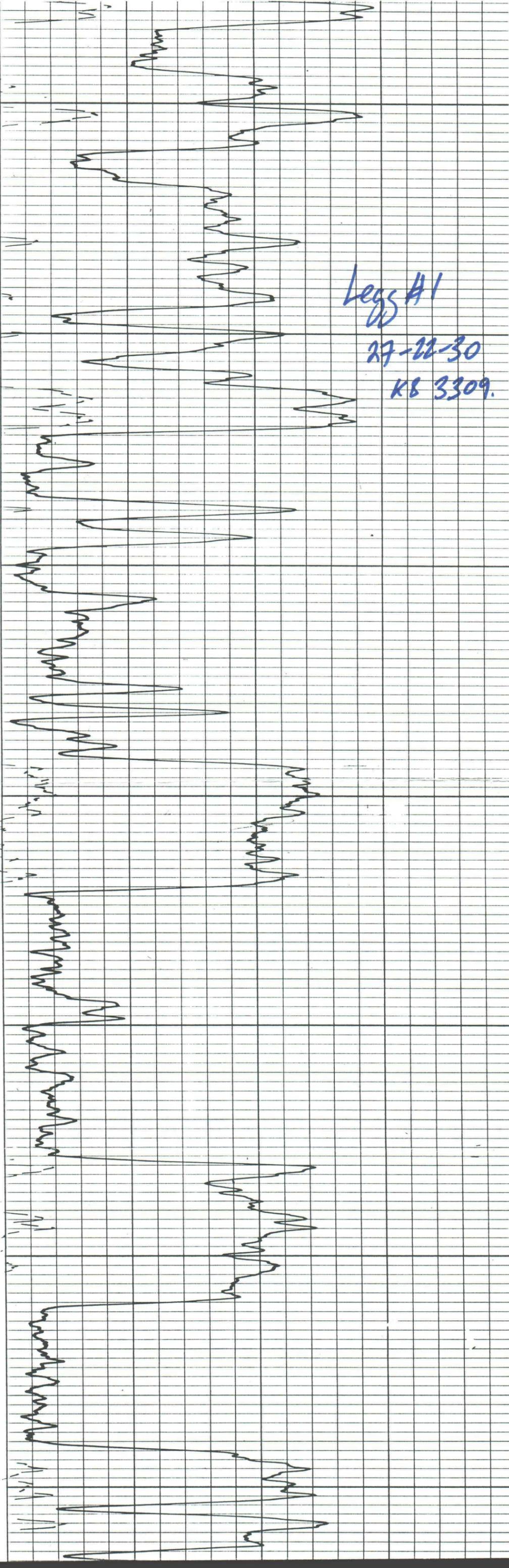
-9871'    -9903'    -9917'    -10013'

-9871'    -9903'    -9917'    -10013'

Legs #1

27-22-30

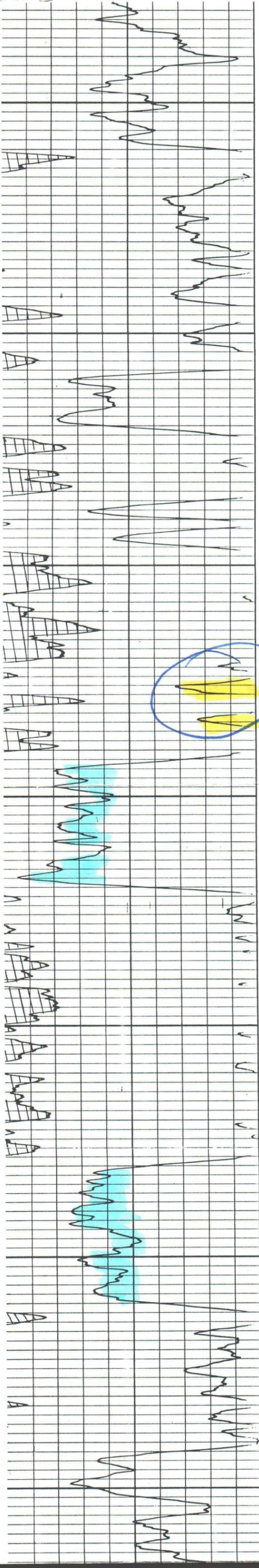
KB 3309.

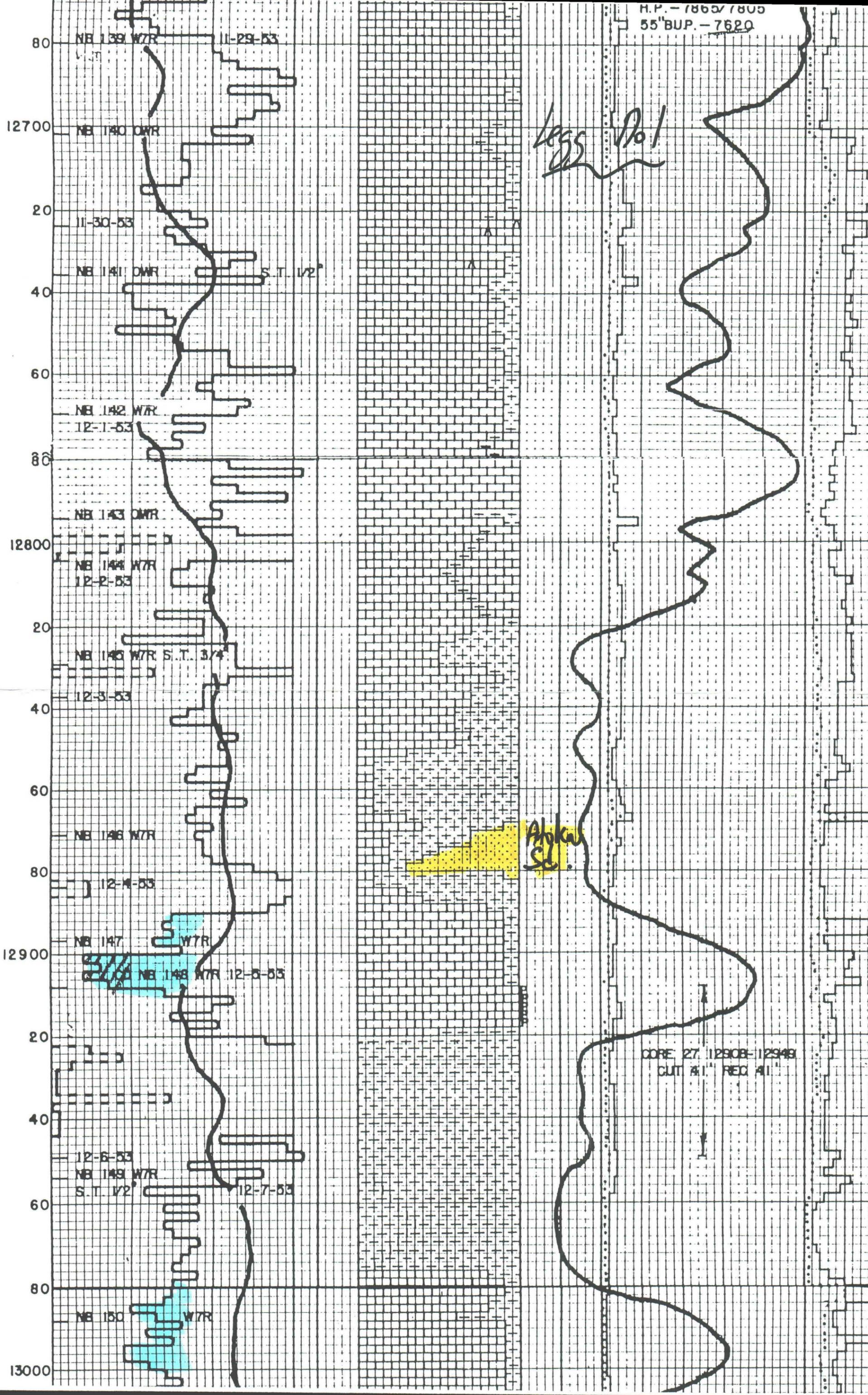


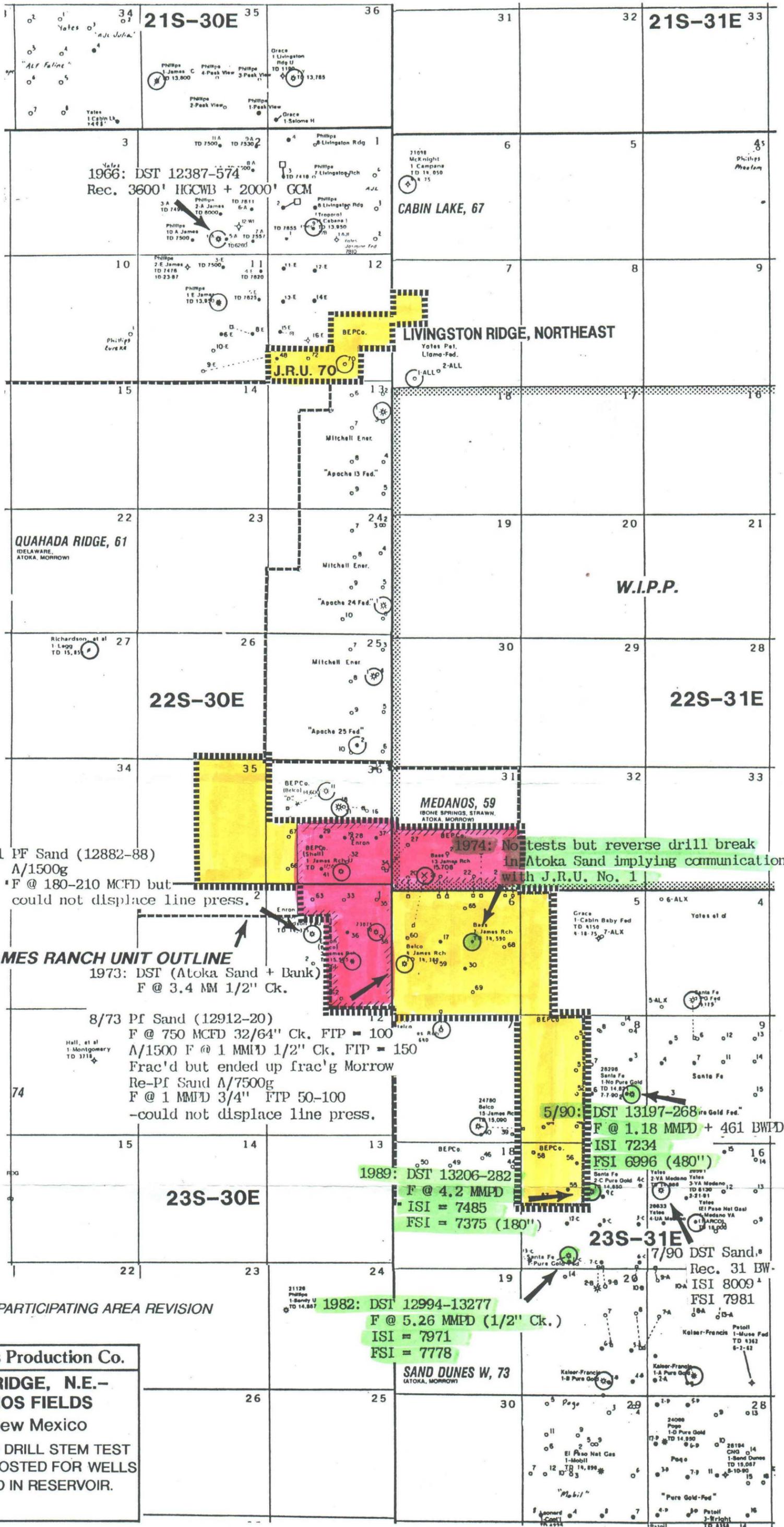
12800

12900

13000







6/81 PF Sand (12882-88)  
 A/1500g  
 \* F @ 180-210 MCFD but  
 could not displace line press.

**JAMES RANCH UNIT OUTLINE**  
 1973: DST (Atoka Sand + Bank)  
 F @ 3.4 MM 1/2" Ck.

8/73 PF Sand (12912-20)  
 F @ 750 MCFD 32/64" Ck. FIP = 100  
 A/1500 F @ 1 MM/D 1/2" Ck. FIP = 150  
 Frac'd but ended up frac'g Morrow  
 Re-Pf Sand A/7500g  
 F @ 1 MM/D 3/4" FIP 50-100  
 -could not displace line press.

1974: No tests but reverse drill break  
 in Atoka Sand implying communication  
 with J.R.U. No. 1

5/90: DST 13197-268  
 F @ 1.18 MMPD + 461 BWPD  
 ISI 7234  
 FSI 6996 (480")

1989: DST 13206-282  
 F @ 4.2 MMPD  
 ISI = 7485  
 FSI = 7375 (180")

1982: DST 12994-13277  
 F @ 5.26 MMPD (1/2" Ck.)  
 ISI = 7971  
 FSI = 7778



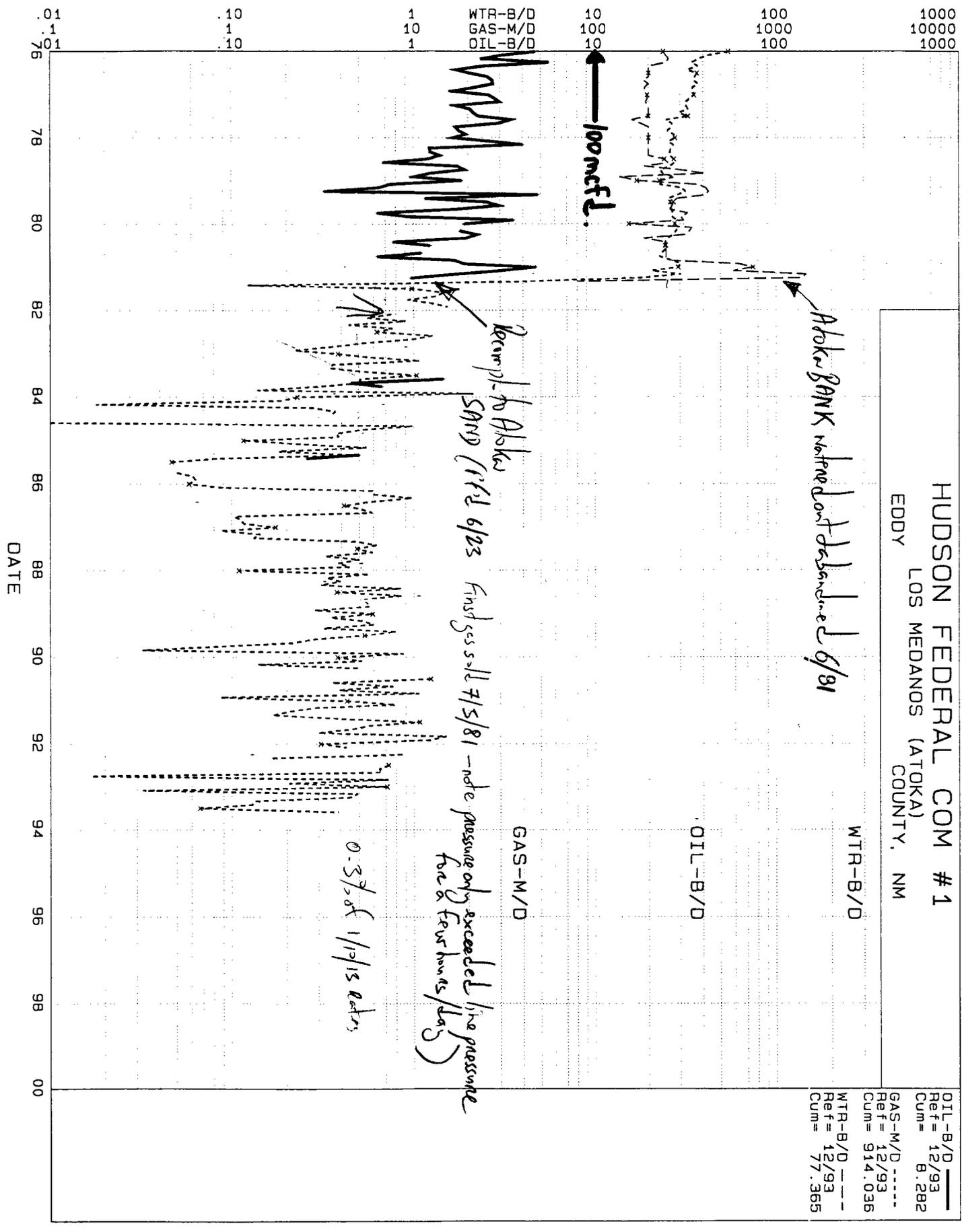
PROPOSED PARTICIPATING AREA REVISION

**Bass Enterprises Production Co.**  
**LIVINGSTON RIDGE, N.E. -**  
**LOS MEDANOS FIELDS**  
 Eddy Co., New Mexico  
 PERFORATION AND DRILL STEM TEST  
 DATA: ATOKA SAND: POSTED FOR WELLS  
 NOT COMPLETED IN RESERVOIR.  
 Scale: 1" = 4000'

Attachment No 6

HUDSON FEDERAL COM #1  
 LOS MEDANOS (ATOKA)  
 EDDY COUNTY, NM

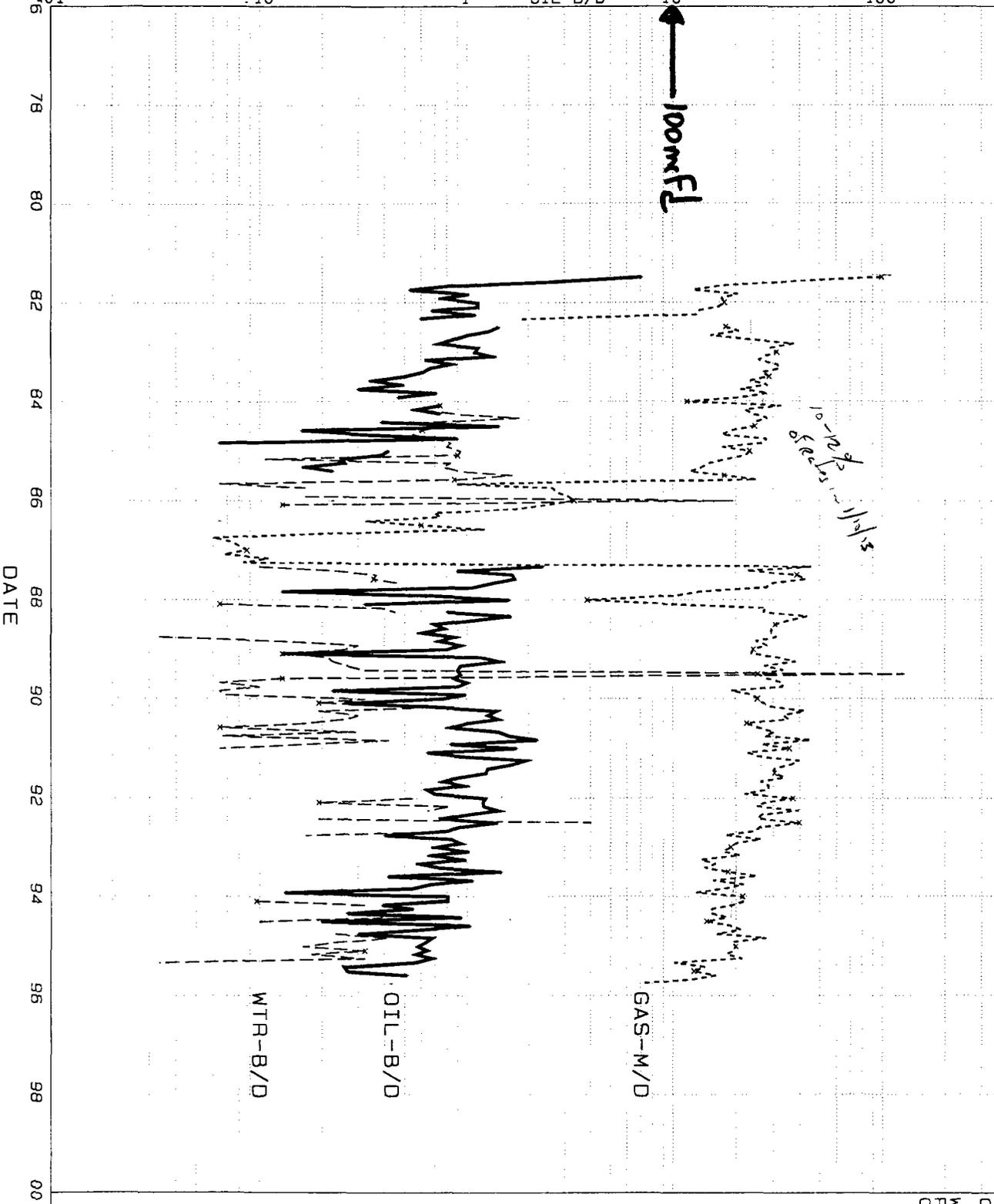
OIL-B/D ---  
 Ref = 12/93  
 Cum = 8.282  
 GAS-M/D -----  
 Ref = 12/93  
 Cum = 914.036  
 WTR-B/D -----  
 Ref = 12/93  
 Cum = 77.365



JAMES RANCH UNIT # 11  
 LOS MEDANOS (ATOKA)  
 COUNTY, NM

OIL-B/D ---  
 Ref = 09/95  
 Cum = 3.946  
 GAS-M/D -----  
 Ref = 09/95  
 Cum = 1136.015  
 WTR-B/D ---  
 Ref = 09/95  
 Cum = 5.595

.01	.10	1	WTR-B/D	10	100	1000
.1	1	10	GAS-M/D	100	1000	10000
.01	.10	1	OIL-B/D	10	100	1000

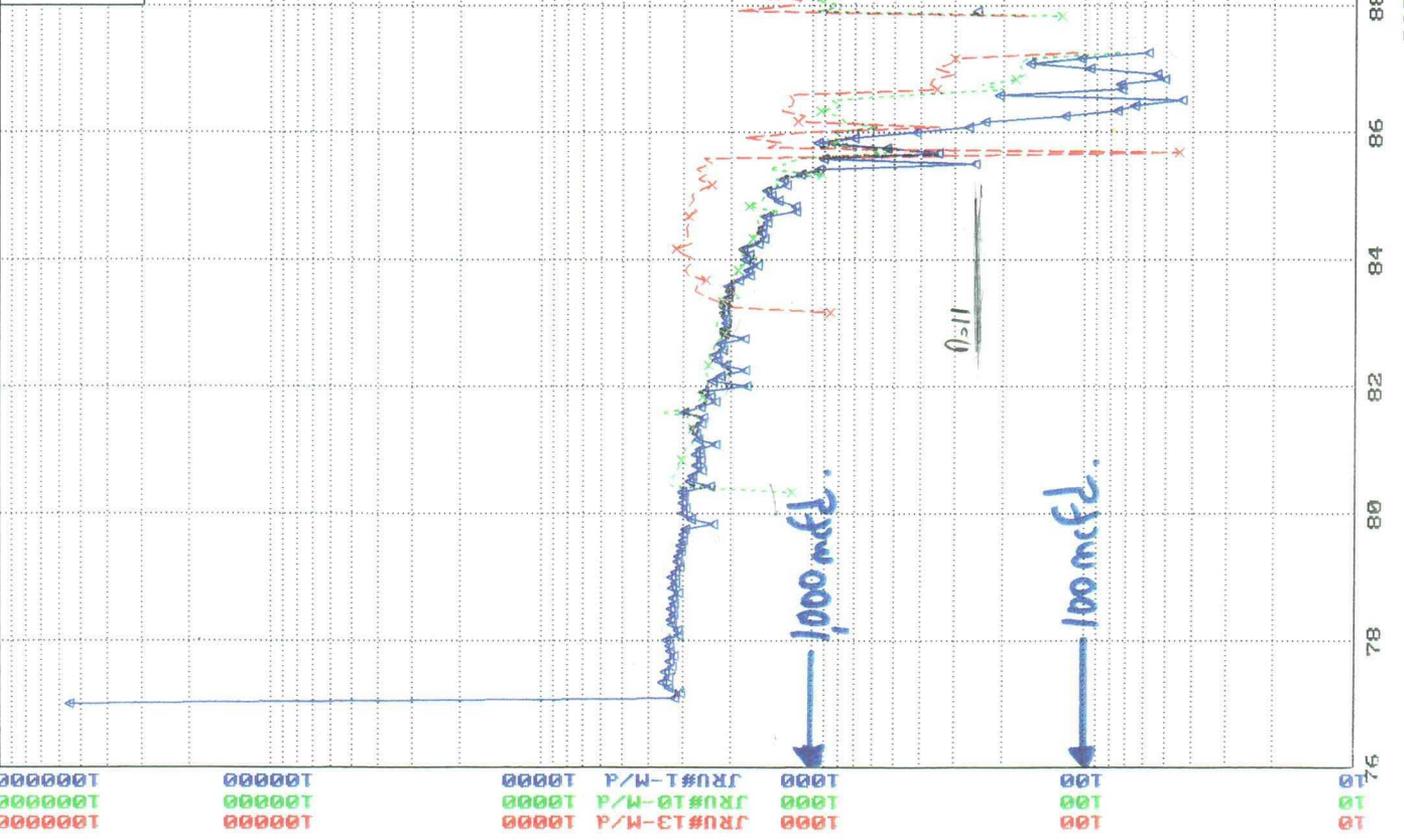


DATE

75 76 79 80 82 84 86 88 90 92 94 96 98 00

JRU #1   
 Ref = 09/95   
 Cum = 25184   
 JRU #10   
 Ref = 09/95   
 Cum = 6214.274   
 JRU #13   
 Ref = 09/95   
 Cum = 6140.214

BASS ENTERPRISES  
 JAMES RANCH UNIT #1, 10, 13  
 RESERVOIR: ATOKA  
 EDDY COUNTY, NM



DATE

Anderson Feb 1

Anderson Feb 1

75

76

78

80

82

84

86

88

90

92

94

96

98

00



#1  
~  
~

<b>Schlumberger</b>		<b>COMPENSATED NEUTRON-FORMATION DENSITY</b>	
COUNTY <u>EDDY</u> FIELD or LOCATION <u>WILDCAT</u> WELL <u>JAMES "C" #1</u> COMPANY <u>PHILLIPS PETR. CO.</u>	COMPANY <u>PHILLIPS PETROLEUM COMPANY</u> WELL <u>JAMES "C" #1</u> FIELD <u>WILDCAT</u> COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>		
Location: API Serial No. <u>30-015-20879</u> <u>1980' FSL &amp; 660' FWL</u> Sec. <u>35</u> Twp. <u>21-S</u> Rge. <u>30-E</u>		Other Services <u>DLI, BHC, MLL, CALIPER</u>	
Permanent Datum: <u>G.I.</u> Elev.: <u>3196</u> Log Measured From <u>K.B.</u> <u>22</u> Ft. Above Perm. Datum Drilling Measured From <u>K.B.</u>		Elev.: <u>K.B. 3218</u> <u>D.F. 3217</u> <u>G.I. 3196</u>	
Date	<u>10-4-73</u>		
Run No.	<u>ONE</u>		
Depth-Driller	<u>13800</u>		
Depth-Logger	<u>13801</u>		
Bit Log Interval	<u>13800</u>		
Top Log Interval	<u>11292</u>		
Casing-Driller	<u>7 7/8 @ 11294</u>	@	@
Casing-Logger	<u>11292</u>		
Bit Size	<u>6 3/4</u>		
Type Fluid in Hole	<u>SALT MUD</u>		
Fluid Level	<u>FULL</u>		
Dens. Visc.	<u>10 34</u>		
pH Fluid Los	<u>6 4.4 ml</u>	ml	ml
Source of Sample	<u>CIRC</u>		
R <sub>wt</sub> @ Meas. Temp.	<u>.0466 @ 75 °F</u>	@ °F	@ °F
R <sub>mf</sub> @ Meas. Temp.	<u>.048 @ 70 °F</u>	@ °F	@ °F
R <sub>mc</sub> @ Meas. Temp.	<u>@ °F</u>	@ °F	@ °F
Source: R <sub>mf</sub> R <sub>mc</sub>	<u>M</u>		
R <sub>m</sub> @ BHT	<u>.0195 @ 193 °F</u>	@ °F	@ °F
Time Since Circ.	<u>6 HOURS</u>		
Max. Rec. Temp.	<u>193 °F</u>	°F	°F
Equip. Location	<u>7645 HOBBS</u>		
Recorded By	<u>J.R. WILSON</u>		
Witnessed By	<u>PORTER</u>		

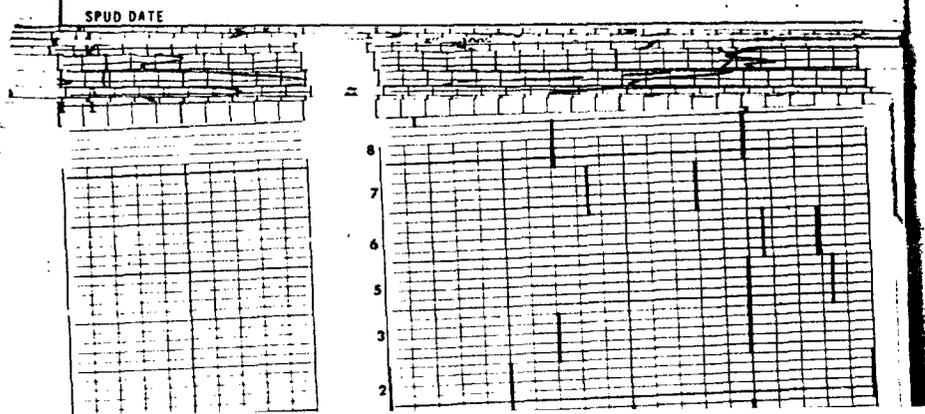
The well name, location and borehole reference data were furnished by the customer.

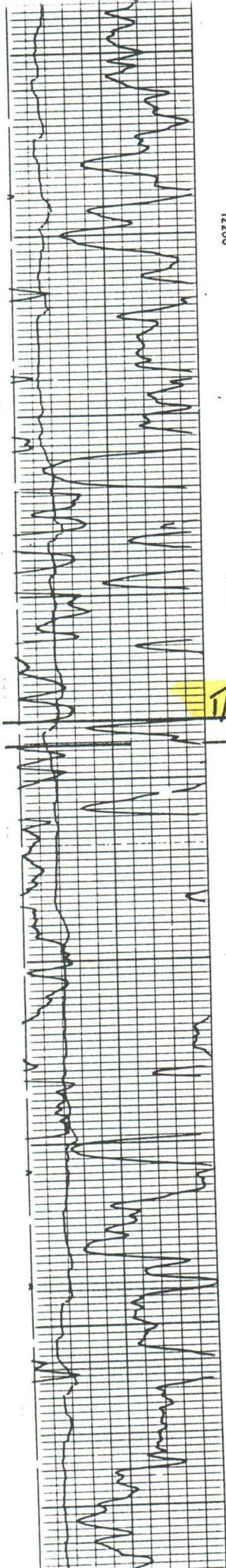
Reproduced By  
*Electrical Log Services*  
 MIDLAND, TEXAS 79701

REFERENCE W 8702F



★ COMPLETION RECORD





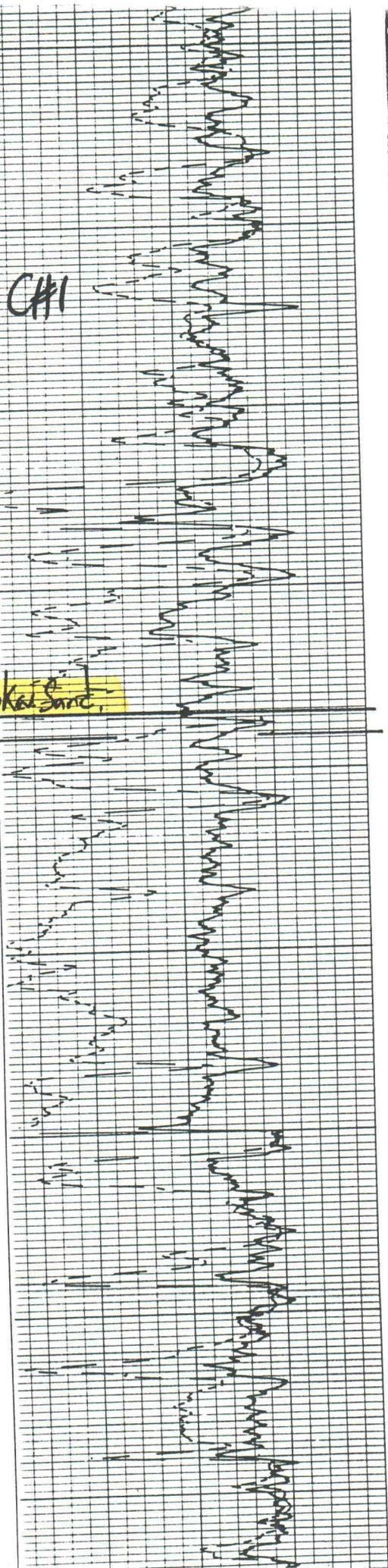
12200

12300

1/A to Kai Sand

12400

12500



C#1

#2  
21

L 36-21-30

**Dresser Atlas**  
*Acoustilog*

**BHC**

COMPANY: CORINNE GRACE  
WELL: LIVINGSTON RIDGE NO. 1  
FIELD: UNDESIGNATED  
COUNTY: EDGY STATE: NEW MEXICO  
LOCATION: 1980 FSL & 990 FWL  
SEC: 36 TWP: 21-S RGE: 30-E  
Other Services: CON/CDL/GR  
L/L  
K 36256

Permanent Datum: GROUND LEVEL Elev: 3238.7  
Log Measured from: F, B Elev: 3255.2  
Drilling Measured from: F, B Elev: 3238.7

Date	Run No.	Depth - Driver	Depth - Logger	Bottom Logged Interval	Top Logged Interval	Carriage - Driver	Carriage - Logger	Tool Bits	Type Fluid in Hole
5-26-75	5-14-75	11533	13770	11565	13785	11562	13778	SEE REMARKS	WATER
		11533	13770	11565	13785	11562	13778	FRESH	WATER
		11533	13770	11565	13785	11562	13778	FRESH	WATER
		11533	13770	11565	13785	11562	13778	FRESH	WATER

REMARKS: PIT SIZE - RIN 1-12" TO 7500 & 3" TO T.O.

Series No.	Run No.	Tool No.	Elec. No.	Panel No.
626	422	101E	26490	27050
1603	31E	21E	12810	5179
1305	31E	21E	15287	26540
1603	31E	21E	15287	26540
1603	31E	21E	15287	26540

Scale Changes	Scale Up Hole	Scale Down Hole

Run No.	Tool Type	Pad Type	Tool Position	Other
ONE	SEE ABOVE		CENTRALIZED	
TWO	SEE ABOVE		CENTRALIZED	

S.P. or G/R & Caliper

DEPTH: BASS ACOUSTILOG T<sub>1</sub>, S, R<sub>1</sub>, 2, R<sub>2</sub>, T<sub>2</sub>

Millivolts: 10 API/CD

0 API API UNITS 100 API

HOLE SIZE - INCHES: 7 9 11 13 15

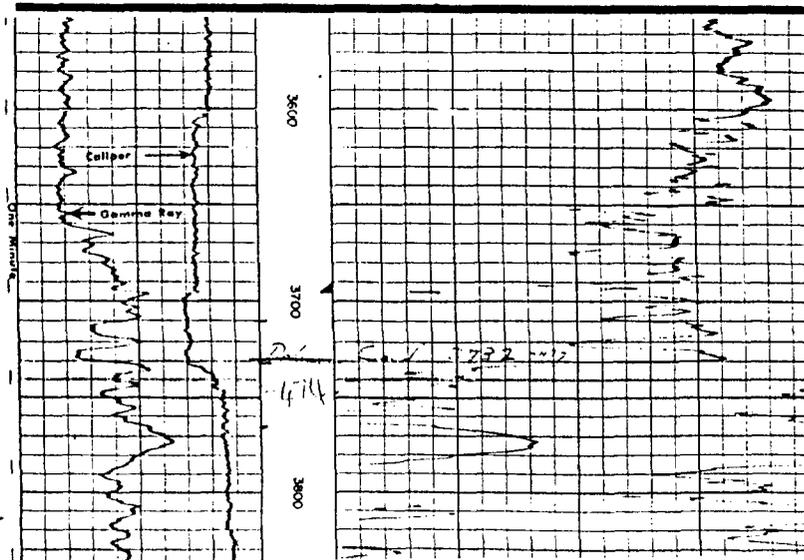
F.W. OFFICE

SPECIFIC ACOUSTIC TIME

Micro Seconds Per Foot

100 85 70 55 40

3595'



L. Ridge 1-9

12400

Arboka Sand (Fermiv)

12500

100

DT

40

12600

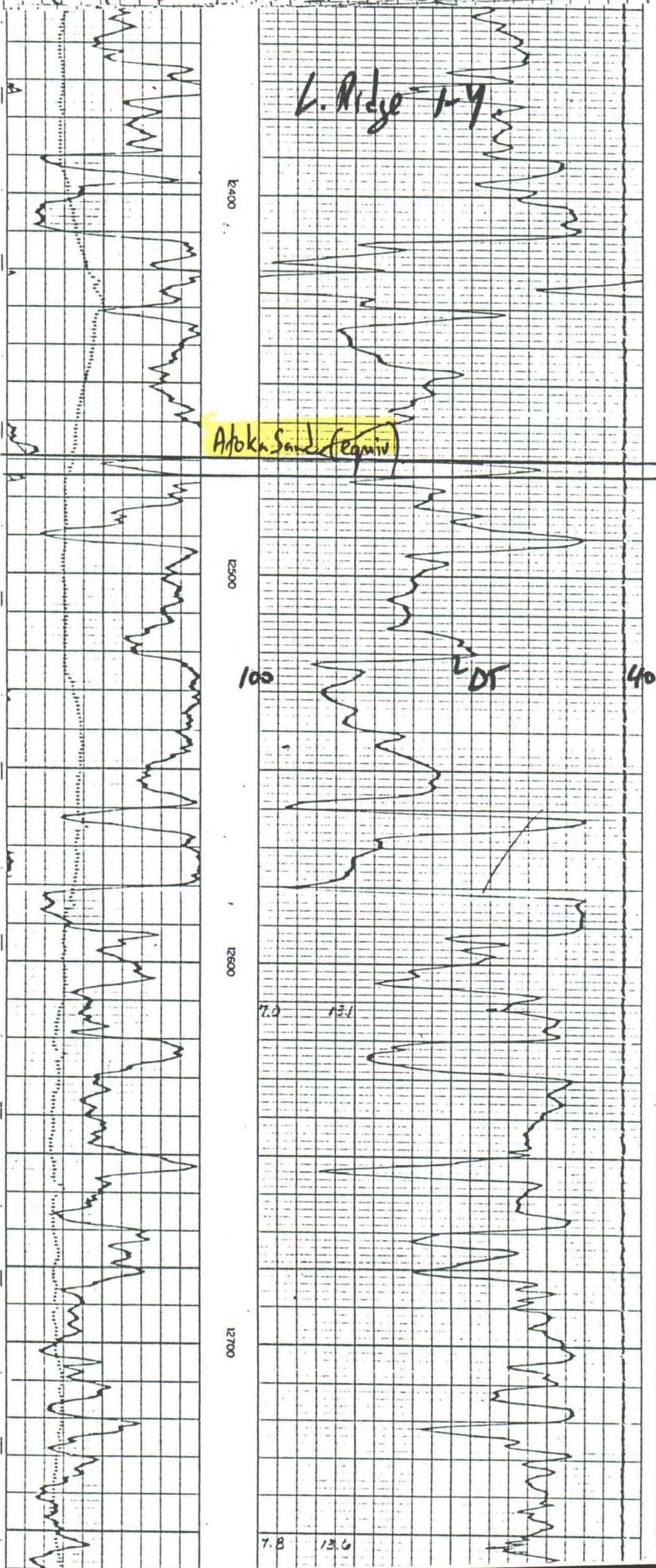
7.0

13.1

12700

7.8

13.6



#3

**Schlumberger** COMPENSATED NEUTRON FORMATION DENSITY

COMPANY Byron McKnight  
Exp. Oil & Gas Co.  
 WELL Campana #1  
 FIELD Cabin Lake  
 COUNTY Eddy STATE N. Mex.

LOG LOCATION: 1990' FAL  
660' FAL  
 OTHER SERVICES: XL/R+0  
HDT

Permanent Datum: G.L. Elev. 3358.5  
 Log Measured From: KB 11 ft. Above Perm. Datum Elev.: K.B. 3375.5  
 Drilling Measured From: KB D.F. 3374  
G.L. 3358.5

Date	<u>10-13-74</u>				
Run No.	<u>TW0</u>				
Depth-Driller	<u>13998</u>				
Depth-Logger	<u>13994</u>				
Strat. Log Interval	<u>13993</u>				
Top Log Interval	<u>11403</u>				
Casing-Driller	<u>756 @ 10900</u>	@	@	@	@
Casing-Logger					
Bit Size	<u>6 1/2</u>				
Type Fluid in Hole	<u>Self Mud</u>				
Dens.	<u>9.6</u>	<u>3.0</u>			
Visc.					
pH					
Fluid Loss	<u>2.8</u>	<u>5.4 ml</u>			
Source of Sample	<u>CIRC</u>				
Rm @ Meas. Temp.	<u>0.53 @ 67 F</u>	@	@	@	@
Rml @ Meas. Temp.	<u>0.51 @ 67 F</u>	@	@	@	@
Rmc @ Meas. Temp.	<u>0</u>	@	@	@	@
Source: Rat					
Rmc	<u>0.20 @ 200'</u>	@	@	@	@
Rm @ BHT					
Circulation Stopped	<u>10-11 @ 2100</u>				
Logger on Bottom	<u>10-12 @ 9700</u>				
Max. Rec. Temp.	<u>100</u>				
Equip. Location	<u>7679 Halls</u>				
Recorded by	<u>WALLS</u>				
Witnessed by	<u>McKnight</u>				

The well name, location and borehole reference data were furnished by the customer.

Reproduced By  
**Electrical Log Service**  
 Mesquite, Texas 79701

REFERENCE W 1136X 

**13** COMPLETION RECORD

SPUD DATE \_\_\_\_\_

COMP DATE \_\_\_\_\_

DST RECORD \_\_\_\_\_

API NO. \_\_\_\_\_

CASING RECORD \_\_\_\_\_

PERFORATING RECORD \_\_\_\_\_

ACID FRAC SHOT \_\_\_\_\_

A-10 Rev  
12346

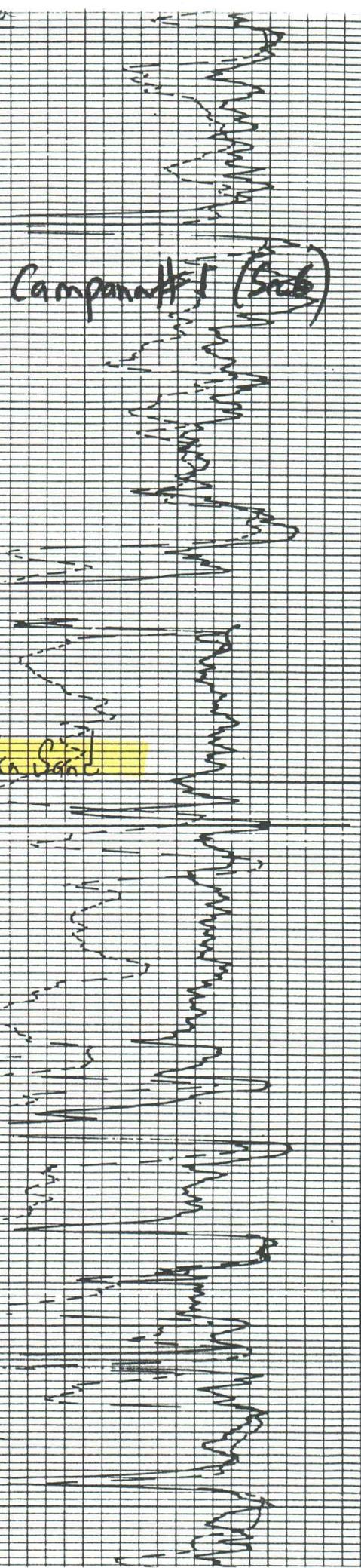


2800

2700

2800

2800



Campana I (Soc)

T/Atoka Saini

#4  
~

# BASS F.W. OFFICE

**Junumberger**

COMPOSITE - BORTHOE COMPENSATED  
SONIC LOG - GAMMA RAY, COMPEN-  
SATED NEUTRON-FORMATION DENSITY

COUNTY FIELD or LOCATION WELL COMPANY	COMPANY <u>TROPORO OIL &amp; GAS COMPANY</u> WELL <u>CABANA #1</u> FIELD _____ COUNTY <u>EDDY</u> STATE <u>NEW MEX (CO)</u> LOCATION <u>990' PSL. &amp; 1980' FWL.</u> Sec. <u>1</u> Twp. <u>22-S</u> Rge. <u>30-E</u> Other Services <u>DLL, MLL</u>
---	---

Permanent Datum: <u>C.L.</u> Elev. <u>3337</u>	Elev. <u>X.B. 3357</u>
Log Measured From <u>K.B.</u> <u>20</u> Ft. Above Perm. Datum	D.F. <u>3356</u>
Drilling Measured From <u>K.B.</u>	G.L. <u>3337</u>

Date	5-4-74	6-10-11-74	6-12-74
Run No.	ONE (BIC)	TWO (CNL/IDC)	THREE (CNL/IDC)
Depth - Driller	10250	13892	13950
Depth - Logger	10256	13881	13940
Bit. Log Interval	10253	13880	13939
Top Log Interval	3355	10253	13880
Casing - Driller	10 3/4 @ 3748	7 @ 0350	7 @ 0350
Casing - Logger	8756	10346	10346
Bit Size	9 1/2	6 1/2	6 1/2
Type Fluid in Hole	WATER	SALT MOD	SALT MOD
Dens. Visc.	8.6 28	10.3 30	10.3 30
pH Fluid Loss	10.5 NA ml	10.0 3.5 ml	10.3 3.6 ml
Source of Sample	PFT	CIRC.	CIRC.
R <sub>10</sub> @ Meas. Temp.	.16 @ 70 °F	.041 @ 85 °F	.037 @ 94 °F
R <sub>100</sub> @ Meas. Temp.	.02	.038 @ 80 °F	.035 @ 94 °F
R <sub>1000</sub> @ Meas. Temp.	.02	.06 @ 85 °F	.058 @ 94 °F
Source: Reef Ring		M E	M IC
R <sub>m</sub> @ BHT	.08 @ 143 °F	.019 @ 184 °F	.018 @ 190 °F
W Circulation Stopped	5 HOURS	6 HOURS	6 HOURS
Logger on Bottom			
Max. Rec. Temp	143 °F	184 °F	190 °F
Equip. Location	7679 HORBS	7645 HORBS	7645 HORBS
Recorded By	CLEMENT	J R WILSON	J R WILSON
Witnessed By	MCKNIGHT	MCKNIGHT	MCKNIGHT

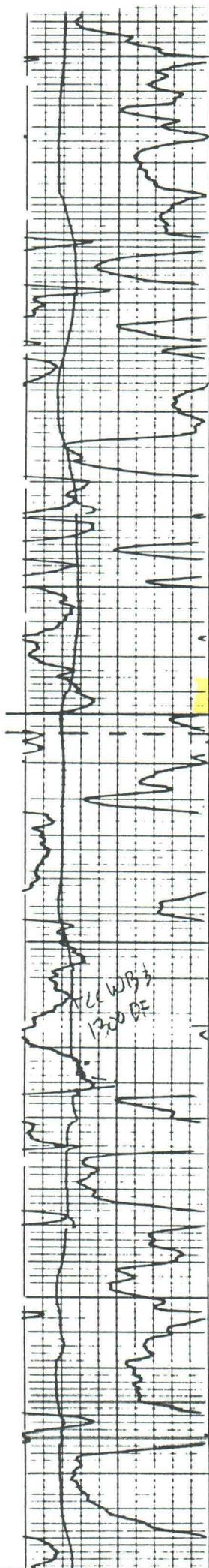
Reproduced By  
*Electrical Log Services*  
Midland, Texas 79701

REFERENCE W 754X



50 COMPLETION RECORD

SPUD DATE
COMP DATE
DST RECORD
API NO.
CASING RECORD
PERFORATING RECORD

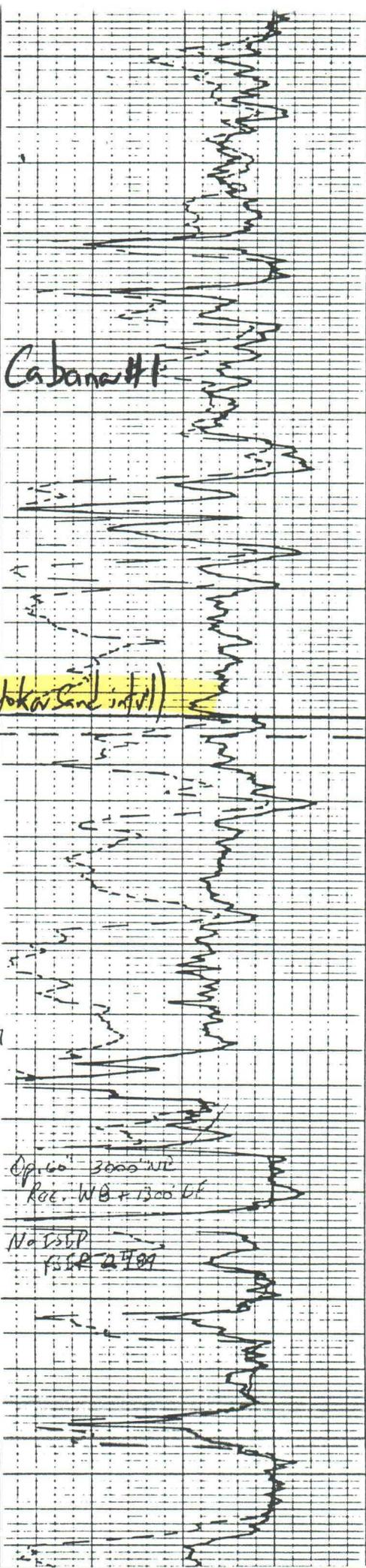


12500

12800

12700

12800



Cabanett

T/CANOKAN SAND INTVL

CE WPB  
1300 DE

-936

Op. Co. 3000' W  
Rec. WB + 1300' DE

No VSP  
BSR 2409

#5

**SCHLUMBERGER** BOREHOLE COMPENSATED SONIC LOG - GAMMA RAY

EDDY COUNTY FIELD LOCATION WELL COMPANY	WILDCAT	WELL	JAMES "A" #1	COMPANY	PHILLIPS PETROLEUM COMPANY	
	WILDCAT	FIELD	WILDCAT			
	EDDY	COUNTY	EDDY	STATE	NEW MEXICO	
	2006' FROM E/L 665' FROM S/L	LOCATION	2006' FROM E/L 665' FROM S/L	Other Services	M.L., C.D., C.L., COMP. R.S., ML	
	Sec. 2	Twp. 22S	Rge. 30E			
Permanent Datum: CHF		Elev. 3169		Elev.: K.B. 3193		
Log Measured From: KB		24 Ft. Above Perm. Datum		D.F. 3191		
Drilling Measured From: KB				G.I. 3175		
Date	6-14-66	7-1-66	7-11-66	8-26-66	10-23-66	11-18-66
Run No.	ONE	TWO	THREE	FOUR	FIVE	SIX
Depth - Driller	405	3657	7490	12,205	14,259	14,924
Depth - Logger	399	3657	7501	12,204	14,258	14,919
Blm. Log Interval	394	3652	7492	12,195	14,250	14,914
Top Log Interval	0	334	3652	4,380	12,162	14,250
Casing - Driller	@ -	20" @ 406	13 3/8 @ 3657	13 3/8 @ 3657	7 3/8 @ 12,202	5 1/2 @ 14,572
Casing - Logger	-	-	-	3655	-	-
Bit Size	22" SURF-313	7"	9 7/8	9 7/8	6 1/2	5 1/2
Type Fluid in Hole	FRESH WTR.	BRINE	BRINE	GAUSTIC	CHEM. GAUSTIC	CHEM. GEI
Dens. Visc.	-	-	9.0	11.9	14.4	12.8
pH Fluid Loss	-	10.7	-	9	4.8	9
Source of Sample	-	-	-	11.5	18.8	10.5
Temp. @ Meas. Temp.	47 @ 88 °F	0.17 @ 80 °F	0.05 @ 81 °F	0.47 @ 68 °F	0.47 @ 68 °F	0.41 @ 65 °F
Temp. @ Meas. Temp.	@ - °F	0.17 @ 80 °F	0.05 @ 81 °F	0.37 @ 74 °F	0.24 @ 75 °F	0.35 @ 65 °F
Temp. @ Meas. Temp.	@ - °F	@ - °F	@ - °F	0.85 @ 74 °F	@ - °F	0.62 @ 65 °F
Source of Fluid	-	-	MEAS. I -	MEAS. INCLAS. MEAS. I -	-	MEAS. INCLAS.
Time Since Circ.	1 HOUR	3 HOURS	3 HOURS	4 HOURS	-	4 HOURS
Max. Rec. Temp.	7100 °F	7100 °F	7120 °F	7176 °F	7190 °F	7212 °F
Equip. Location	3518   HOBBS	3701   HOBBS	3722   HOBBS	3720   HOBBS	3722   HOBBS	3720   HOBBS
Recorded By	CARNAHAN	WILSON	LEFLER	TILLY	WILSON, FALTMAN	TILLY
Witnessed By	MR. BROWN**	MR. STRINGER	MR. STRINGER	MR. MUELLER	MR. MUELLER	**MR. MUELLER

Reproduced By  
West Texas Electrical Log Service  
McKINNEY, TEXAS 76701

REFERENCE W9100G



36 COMPLETION RECORD

SPUD DATE \_\_\_\_\_

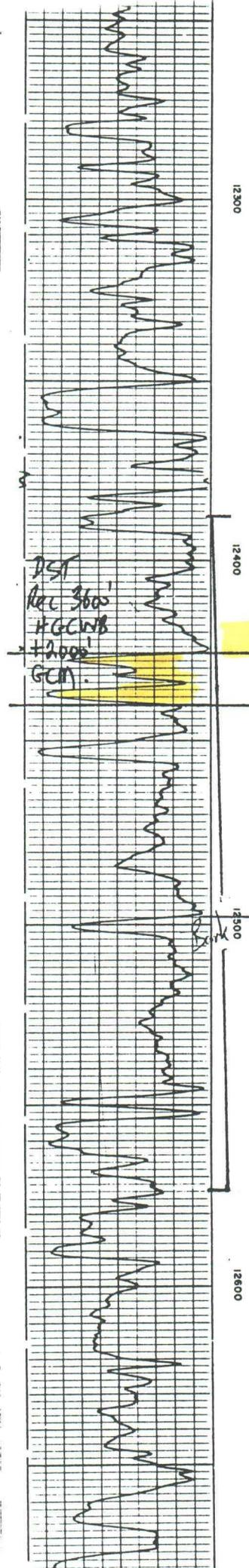
COMP DATE \_\_\_\_\_

DST RECORD \_\_\_\_\_

CASING RECORD \_\_\_\_\_

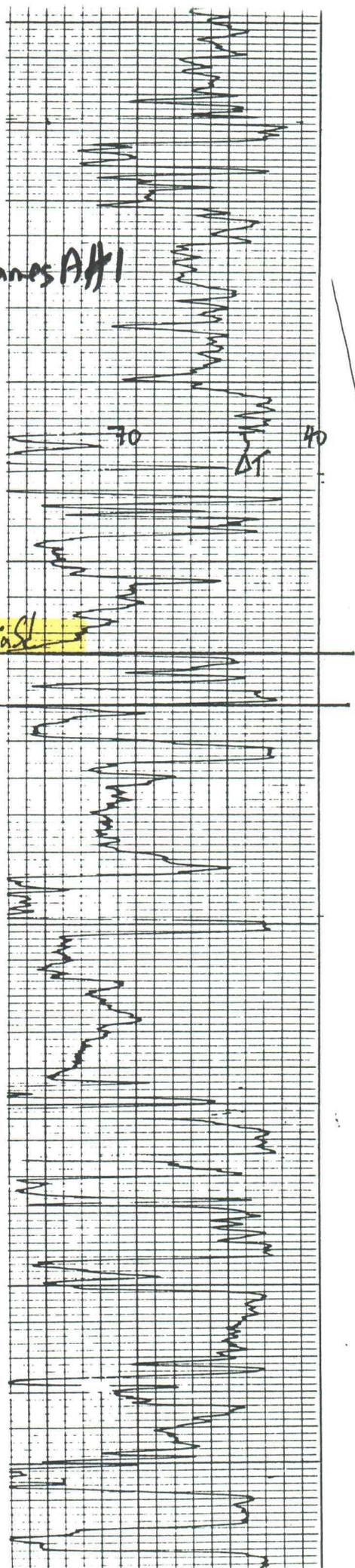
PERFORATING RECORD \_\_\_\_\_

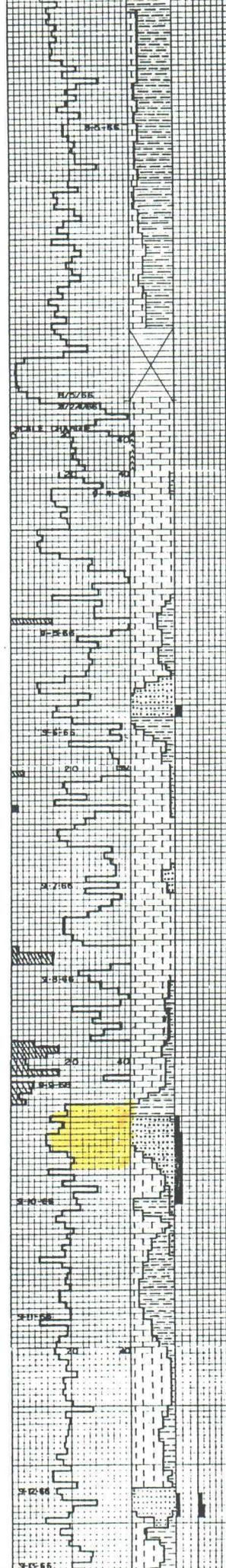
ACID. FRAC SHOT \_\_\_\_\_



James AH1

T/Ahoka!





LS-GRY-BRN MOTT VPK  
V ARGIL

SH-DK GRY-BLK SMOOTH  
TO SILTY TEX. BLOCKY  
TO PLATY

LS-TN-DK BRN VFG SL  
FOSS ARGIL. A W/FEY  
MED SIZED WELL RND  
SD GRS INCL  
SH AS ABOVE

NOT ENOUGH CUTTINGS  
FOR GAS ANALYSIS

SH-DK GY-BLK SMOOTH TO  
SILTY TEX. BLOCKY TO  
PLATEY W/TR PYT

LS-DK GY BRN BLK VEG  
ARGIL DNS

SPLS. LOST DUE TO GAS  
KICK - STUCK PIPE -  
WASHING OVER  
8/5 TO 8/24/66.

MUDDER UP 8/10/66  
12.48 .88 1/32 R.S  
LS-DK GY BRN VE-F.G DNS  
FOSS SM CHKY

CHT-GY-BRN SPECK TRANS  
TO OPO

13.4 53 11.2 2/32 9 8300  
LS-GY-GY BRN F-M/GR  
CHRTY. SL FOSS W/SM  
GY WHT CHKY LS

TR BLK DNS CALC SH

LS-BRN-BUFF F/GR DNS  
CHRTY. SM CHKY

SH-BLK DNS BLOCKY CALC  
LS-DRK GRY-BLK F/GR DNS  
ARGIL

SH AS ABOVE

SO-GRY VF/GR ANG TO SUB  
RND TITE CALC

SO-WHT-TAN VF-F/GR SUB  
ANG TO RND CALC W/SL  
TR GLAUC

SH-LT GY-TN SPLINTERY  
LS-TN-GRY BRN VE-F/GR V  
FOSS ARGIL

13.6 52 10. 2/32 9 8300  
LS-BLK-WHT MOTT F/GR  
DNS V FOSS SILIC TO  
ARGIL

LS-DRK GY TO GY BRN VFG  
FOSS GLAUC CHRTY

SO-DRK GY VFG SUB-ANG  
WELL CMTD GLAUC

LS-LT GY TO TAN F/GR SL  
SILIC FOSS CHKY IN  
PART

SH-DRK GY TO BLK SMOOTH  
TO SILTY TEX PYRITIC  
LS-GY TO BLK VE/F GR FOSS  
DOLITIC W/SM PYRITE

SH-DRK GY TO BLK SMOOTH  
TO SILTY TEX PYRITIC  
13.8 52 8.6 2/32 10.5 10000

LS-DRK GY BRN VF-F/GR SDY  
ARGIL, SILIC, W/SOME  
GLAUC, PYRITE, & FOSS  
FRAG INCL

SO-WHT-GY VF-F/GR WELL  
CMTD SILIC, TR GLAUC

SO-TN-BRN VF-F/GR SILIC  
NOT SO-TITE AS ABOVE

LS-TN-BRN VE-MED/GR W/  
SOME LRQ SEC., FOSS,  
SDY, CHKY TO ARGIL

SH-DRK GY-BLK SPLINTERY  
CARB, SDY

LS-DRK GY F-M/GR SL FOSS  
ARGIL TO CHKY

SH-BLK SILTY BLOCKY DNS  
W/TR PYRITE

LS-DRK GY F-M/GR ARGIL  
LS-TN-BRN F-M/GR ARGIL  
SDY

13.9 44 78 2/32 10.5 10000  
LS-BRN F-M/GR FOSS ARGIL  
SL SDY W/TR GLAUC,  
SH-DRK GY-BLK CARB, SILTY,  
DNS, SPLINTERY

LS-TN-BRN-GY F-M/GR V FOSS  
ARGIL TO SILIC, TR PYRITE

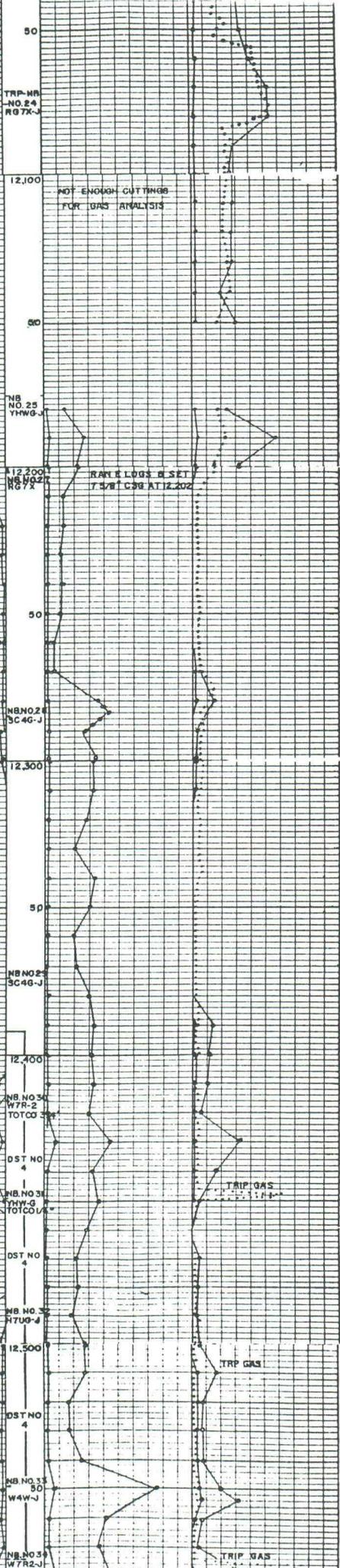
SH-AS ABOVE  
LS-TN TO DRK BRN GY VF-F  
GR ARGIL TO SILIC

SO-WHT F-M/GR SUB-ANG  
QTZ, SL CALC V TITE  
SL TR POR, FLOUR, & CUT  
LS & SH AS ABOVE

LS-TN-BRN VF-F/GR SL FOSS  
DNS

SH-DRK GY TO BLK PLATY,  
SPLINTERY CARB

*James A.H.I.*



TRIP NR  
NO. 24  
R97X-J

12,100

NOT ENOUGH CUTTINGS  
FOR GAS ANALYSIS

80

NS  
NO. 25  
YHWG-J

12,200  
NS NO. 24  
R97X-J

TRIP LOGS RESET  
7.5/81 CSR AT 12,202

50

NS NO. 24  
SC4G-J

12,300

50

NS NO. 25  
SC4G-J

50

NS NO. 25  
SC4G-J

12,400

NS NO. 24  
W7R-2  
TOTCO

DST NO  
4

NS NO. 31  
YHW-G  
TOTCO

DST NO  
4

NS NO. 32  
W7UQ-4

12,500

NS NO. 33  
W4W-J

DST NO  
4

NS NO. 33  
W4W-J

DST NO  
4

NS NO. 33  
W7R2-J

TRIP GAS

TRIP GAS

TRIP GAS

DST NO. 4 12,382-12,474  
TOI-6 MIN. 181-60 MIN  
OPEN - BITIN FINAL  
WHEN PKR FAILED  
NO FINAL FLOW OR  
SHUT-IN PRESS - F HD  
8667 - 1400 8878 SL  
8005 - 1400 884 - 17.173  
REC 3600 GCWB + 2000  
CDM

#6  
~

1 copy

<b>Schlumberger</b>		<b>COMPENSATED NEUTRON-FORMATION DENSITY</b>	
COUNTY <u>EDDY</u> FIELD or LOCATION <u>CABIN LAKE</u> WELL <u>JAMES "E" #1</u> COMPANY <u>PHILLIPS PETR. CO.</u>	COMPANY <u>PHILLIPS PETROLEUM COMPANY</u>		
	WELL <u>JAMES "E" #1</u>		
	FIELD <u>CABIN LAKE (MORROW)</u>		
	COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>		
Location: <u>1980' FNL &amp; 1980' FEL, SEC 11, TWP 22-S, RGE 30-E</u>		Other Services: <u>BHC, DLL, MLL-MLL/ML</u>	
Permanent Datum <u>G.L.</u>	Elev. <u>3198</u>	Elev. <u>K.B. 3221</u>	
Log Measured From <u>R.K.B.</u>	<u>23</u> Ft. Above Perm. Datum	D.F. <u>3220</u>	
Drilling Measured From <u>R.K.B.</u>		G.L. <u>3198</u>	
Date	<u>1-9-74</u>		
Run No.	<u>ONE</u>		
Depth-Driller	<u>13875</u>		
Depth-Logger	<u>13875</u>		
Blm. Log Interval	<u>13874</u>		
Top Log Interval	<u>11404</u>		
Casing-Driller	<u>7 5/8 @ 11405</u>	@	@
Casing-Logger	<u>11404</u>		
Bit Size	<u>6 3/4</u>		
Type Fluid in Hole	<u>SALT GEL</u>		
Fluid Level			
Dens.	<u>10.6</u>	<u>37</u>	
Visc.	<u>6</u>	<u>3</u>	ml
pH			ml
Fluid Loss			ml
Source of Sample	<u>PIT</u>		
R <sub>mf</sub> @ Meas. Temp.	<u>.062 @ 77 F</u>	(a) F	(a) F
R <sub>ml</sub> @ Meas. Temp.	<u>.057 @ 77 F</u>	(a) F	(a) F
R <sub>mc</sub> @ Meas. Temp.	(a) F	(a) F	(a) F
Source: R <sub>mf</sub> R <sub>ml</sub> R <sub>mc</sub>	<u>M</u>		
R <sub>m</sub> @ BHT	<u>.026 @ 187 F</u>	(a) F	(a) F
Time Since Circ.	<u>20 HOURS</u>		
Max. Rec. Temp.	<u>182</u>	F	F
Equip. Location	<u>7627 HOBBS</u>		
Recorded By	<u>BIRKHEAD</u>		

The well name, location and borehole reference data were furnished by the customer.

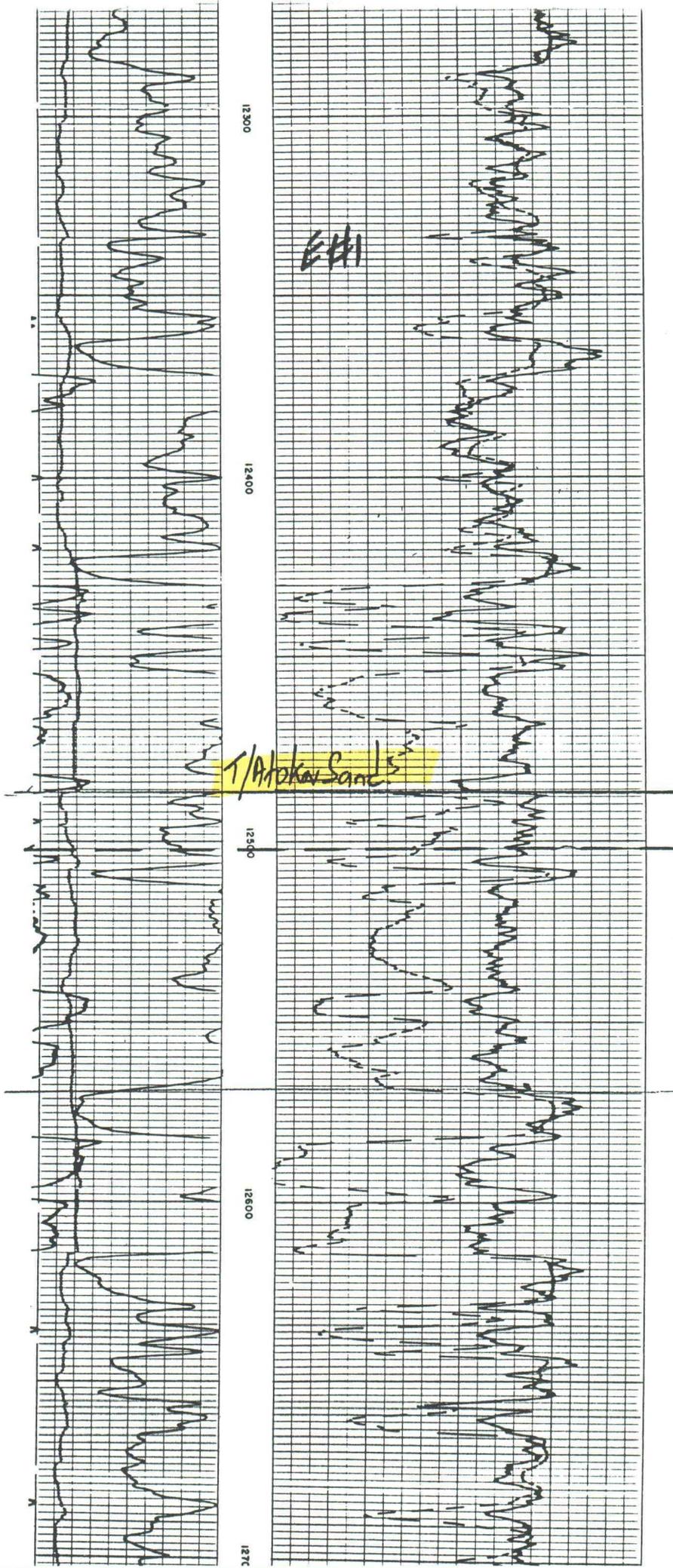
Reproduced By  
*Electrical Log Services*  
MCKEAN, TEXAS 78701

REFERENCE W 8848P



12 COMPLETION RECORD

SPUD DATE	
COMP DATE	
DST RECORD	
API NO.	30-015-20996
CASING RECORD	
PERFORATING RECORD	
ACID. FRAC SHOT	



12300  
12400  
12500  
12600  
12700

T/Alaska Sands

EHI

#7

# ATTACHMENT ONE

**COMPANY: Bass Enterprises Production Company**  
**WELL: James Ranch Unit #70**  
**FIELD: Livingston Ridge North East Field**  
**COUNTY: Eddy STATE: New Mexico**

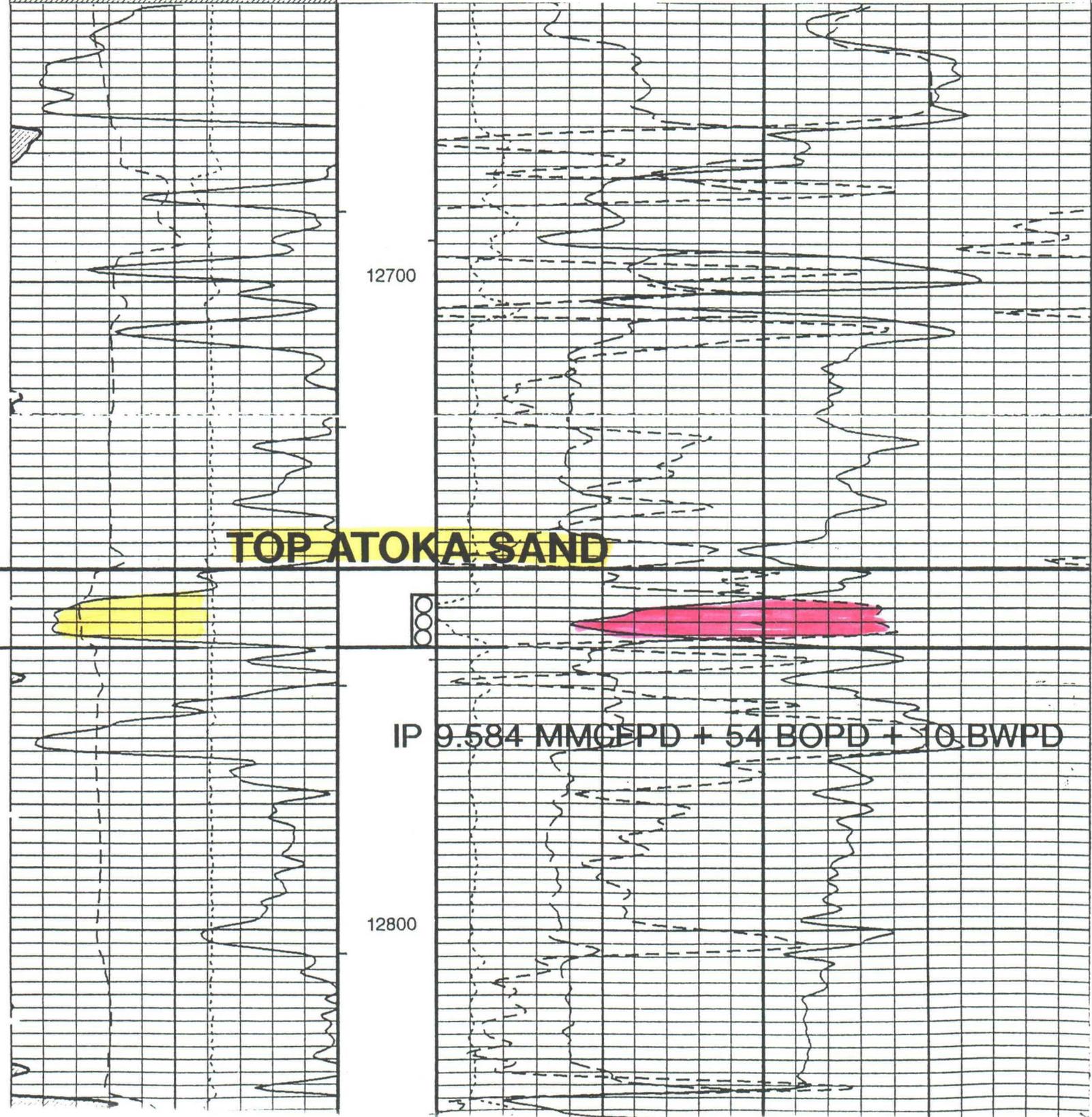
COUNTY: Eddy Field: Livingston Ridge North East Field Location: 660' FSL and 1980' FEL Well: James Ranch Unit #70 Company: Bass Enterprises Production Co	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>Schlumberger</b> </div>	<b>Litho Density Compensated Neutron</b>		
	660' FSL and 1980' FEL		Elev.: K.B. 3358.7 F G.L. 3331.1 F D.F. 3356.7 F	
	Permanent Datum: <u>Ground Level</u>		Elev.: <u>3331.1 F</u>	
	Log Measured From: <u>Kelly Bushing</u>		27.6 F above Perm. Datum	
Drilling Measured From: <u>Kelly Bushing</u>				
API Serial No. N/A		SECTION 12	TOWNSHIP 22-S	RANGE 30-E

Logging Date		December 9, 1994				Logging Date			
Run Number		Three				Run Number			
Depth Driller		14139 F				Depth Driller			
Schlumberger Depth		14139 F				Schlumberger Depth			
Bottom Log Interval		14136 F				Bottom Log Interval			
Top Log Interval		11800 F				Top Log Interval			
Casing Driller Size @ Depth		7.625 IN @ 12000 F				Casing Driller Size @ De			
Casing Schlumberger		11998 F				Casing Schlumberger			
Bit Size		6.500 IN				Bit Size			
Type Fluid In Hole		PAC/KCL				Type Fluid In Hole			
MUD	Density	Viscosity	10 LB/G	32 S			MUD	Density	Viscos
	Fluid Loss	PH	7.2 C3	10.5				Fluid Loss	PH
Source Of Sample		Shaker				Source Of Sample			
RM @ Measured Temperature		0.053 OHMM @ 79 DEGF				RM @ Measured Temper			
RMF @ Measured Temperature		0.049 OHMM @ 79 DEGF				RMF @ Measured Tempe			
RMC @ Measured Temperature		@				RMC @ Measured Temp			
Source RMF	RMC	Measured				Source RMF	RMC		
RM @ MRT	RMF @ MRT	0.023 @ 191	0.021 @ 191	@	@	RM @ MRT	RMF (		
Maximum Recorded Temperatures		191 DEGF				Maximum Recorded Tem			
Circulation Stopped		Time	12-9-1994	04:30		Circulation Stopped			
Logger On Bottom		Time	12-9-1994			Logger On Bottom			
Unit Number	Location	3015	Roswell			Unit Number	Lo		
Recorded By		Mark Lieberenz				Recorded By			
Witnessed By		G. Hillis				Witnessed By			

4	Caliper (CALI)	14
	(IN)	
0	Gamma Ray (GR)	100
	(GAPI)	
10000	Tension (TENS)	0
	(LBF)	
100	Gamma Ray 1 (GR)	200
	(GAPI)	

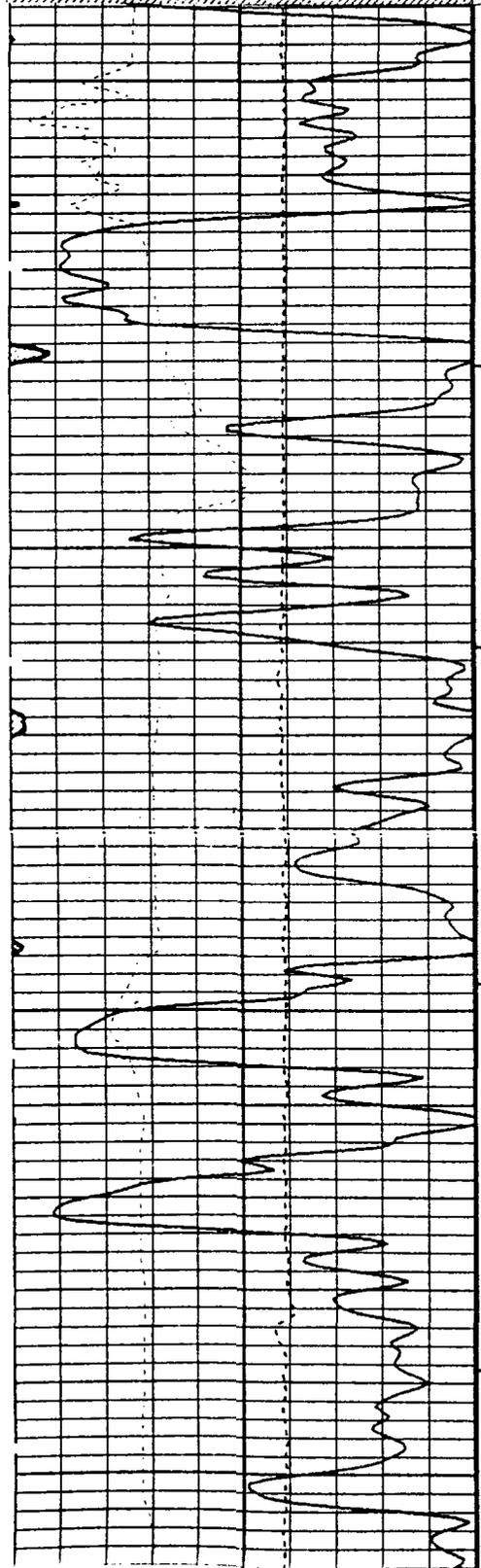
-0.05	Bulk Density Correction (DRHO)	0.45
	(G/C3)	
0.3	Density Porosity (DPHI)	-0.1
	(V/V)	
0.3	Neutron Porosity (NPHI)	-0.1
	(V/V)	
0	PhotoElectric Factor (PEF)	10
	(----)	

GR BACKUP  
From T1 to GR1



Caliper (CALS)		
4	(IN)	14
Gamma Ray (GR)		
0	(GAPI)	100
Tension (TENS)		
10000	(LBF)	0
Gamma Ray 1 (GR)		
100	(GAPI)	200

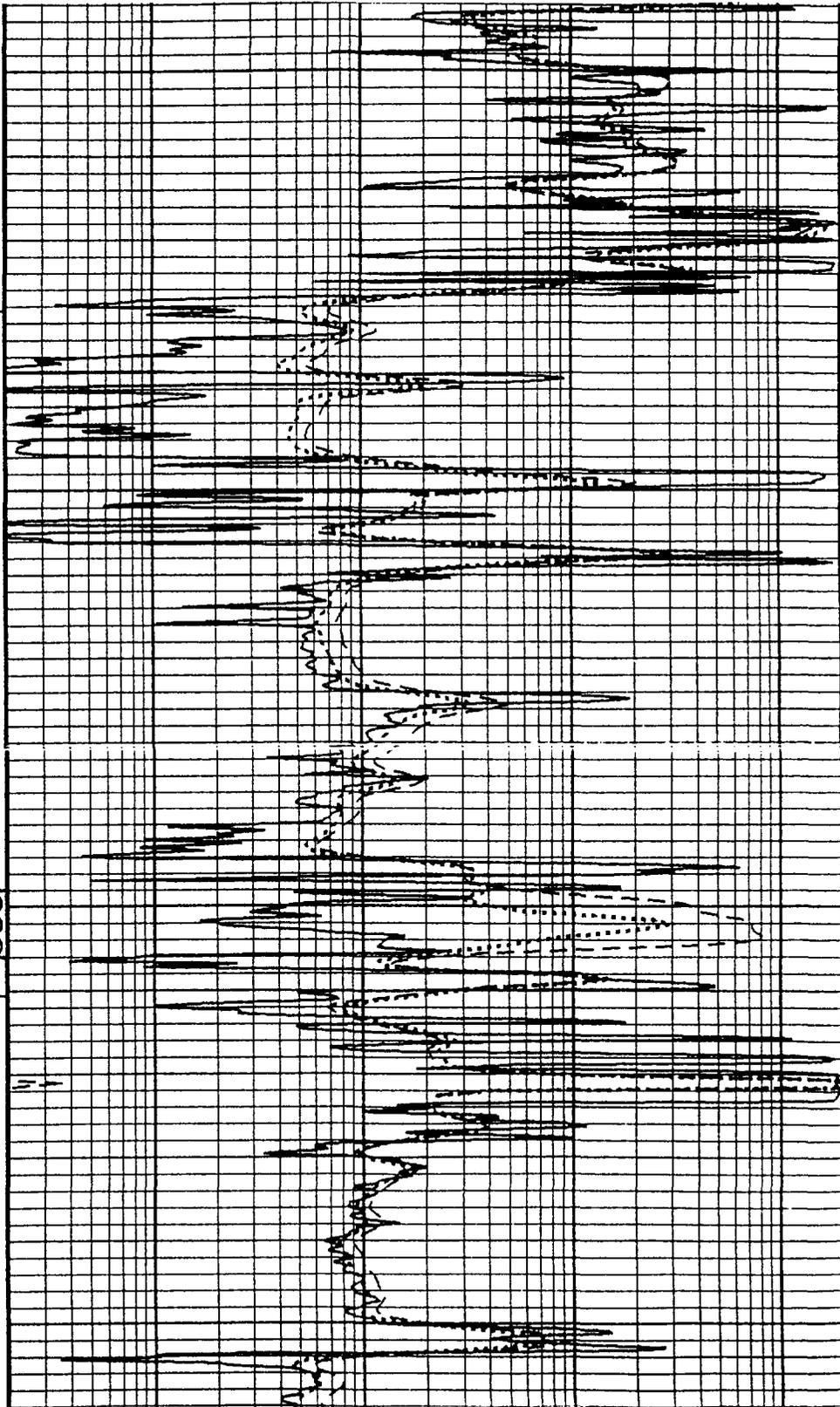
GR BACKUP  
From T1 to GR1



Laterolog Deep Resistivity (LLD)		
0.2	(OHMM)	2000
Laterolog Shallow Resistivity (LLS)		
0.2	(OHMM)	2000
Micro SFL Resistivity (MSFL)		
0.2	(OHMM)	2000

12700

12800



#8

**COMPANY: Yates Petroleum Corporation**

**WELL: Llama 'All' Federal #1**

**FIELD: Wildcat**

**COUNTY: Eddy**

**STATE: New Mexico**

COUNTY: Eddy  
 Field: Wildcat  
 Location: 330' FSL and 950' FWL  
 Well: Llama 'All' Federal #1  
 Company: Yates Petroleum Corporation

LOCATION	<b>Schlumberger</b>		<b>Litho Density Compensated Neutron</b>	
	330' FSL and 950' FWL		Elev.:	K.B. 3378.3 F G.L. 3351 F D.F. 3377.3 F
	Permanent Datum:	Ground Level	Elev.:	3351 F
	Log Measured From:	Kelly Bushing	27.3 F above Perm. Datum	
	Drilling Measured From:	Kelly Bushing		
	API Serial No. N/A	SECTION 7	TOWNSHIP 22-S	RANGE 31-E

Logging Date	October 31, 1994		
Run Number	Two		
Depth Driller	14300 F		
Schlumberger Depth	14298 F		
Bottom Log Interval	14265 F		
Top Log Interval	11249 F		
Casing Driller Size @ Depth	7.000 IN	@	11252 F
Casing Schlumberger	11249 F		
Bit Size	6.125 IN		
Type Fluid In Hole	Brine XC		
Density	Viscosity	10.9 LB/G	36 S
Fluid Loss	PH	14 C3	10
Source Of Sample	Flowline		
RM @ Measured Temperature	0.061 OHMM	@	58 DEGF
RMF @ Measured Temperature	0.053 OHMM	@	58 DEGF
RMC @ Measured Temperature		@	
Source RMF	RMC	Measured	
RM @ MRT	RMF @ MRT	0.021 @ 182	0.018 @ 182
Maximum Recorded Temperatures	182 DEGF		
Circulation Stopped	Time	10-30-1994	2230
Logger On Bottom	Time	10-31-1994	0800
Unit Number	Location	3015	Roswell
Recorded By	Ken Morgan		
Witnessed By	Brent May		

Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth		@	
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
Density	Viscosity		
Fluid Loss	PH		
Source Of Sample			
RM @ Measured Temperature		@	
RMF @ Measured Temperature		@	
RMC @ Measured Temperature		@	
Source RMF	RMC		
RM @ MRT	RMF @ MRT	@	@
Maximum Recorded Temperatures			
Circulation Stopped	Time		
Logger On Bottom	Time		
Unit Number	Location		
Recorded By			
Witnessed By			

Llama Feed

Note: Higher  $\phi$  on repeat run. Resist. log profile is more in support of  $\phi$  on main run.

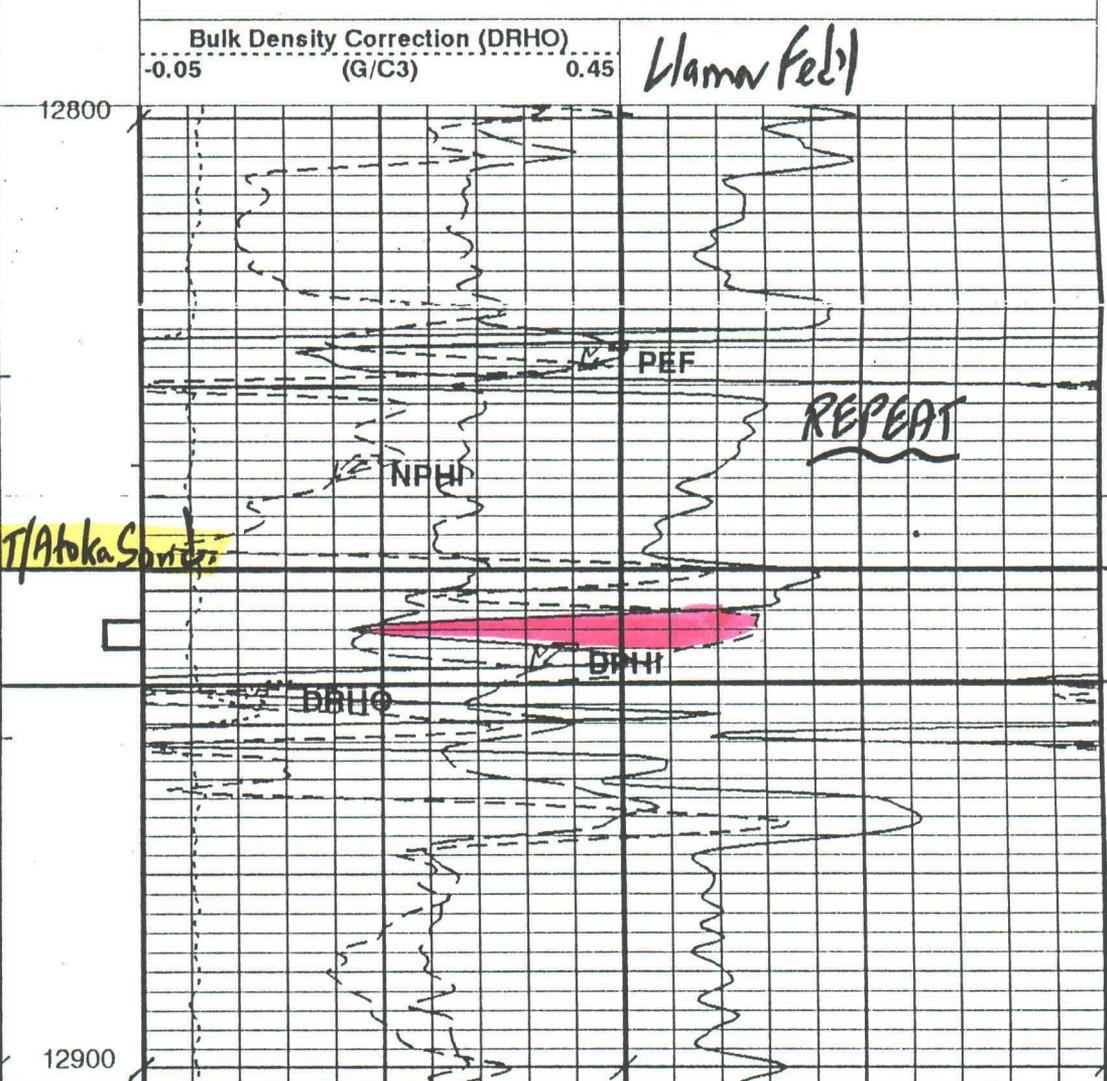
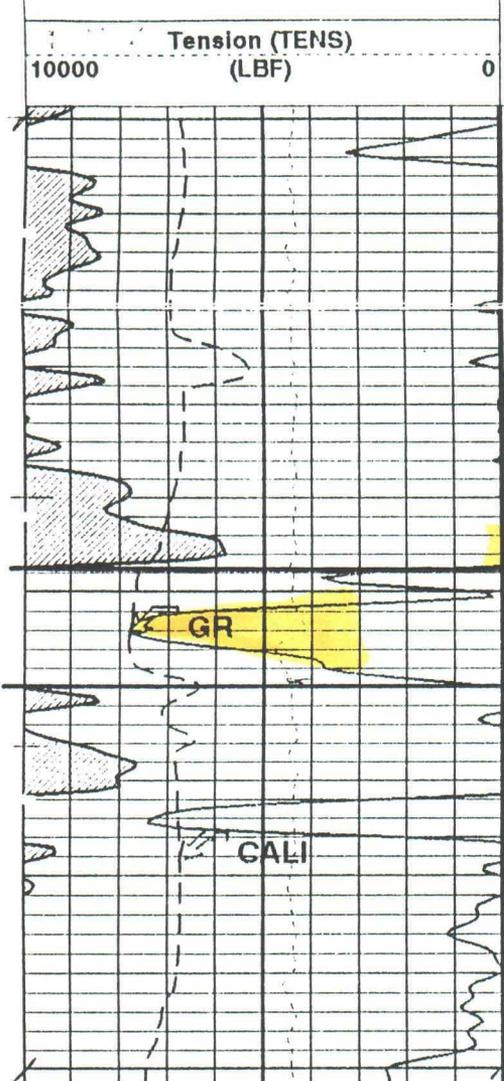
12800

A/1000 g. 7 1/2%  
FW/31,000 g foam  
+ 30,000 # 20/40  
IP 1.77 mm  
32"  
64

T/Atoka Sand

MAIN RUN

12900



Tension (TENS) (LBF)	0
Caliper (CALI) (IN)	14
Gamma Ray (GR) (GAPI)	100
Gamma Ray 1 (GR) (GAPI)	200
GR Backup From T1 to G11	

Bulk Density Correction (DRHO) (G/C3)	0.45
Density Porosity (DPHI) (V/V)	-0.1
Neutron Porosity (NPHI) (V/V)	-0.1
PhotoElectric Factor (PEF) (---)	10
UPPER REPEAT SECTION	

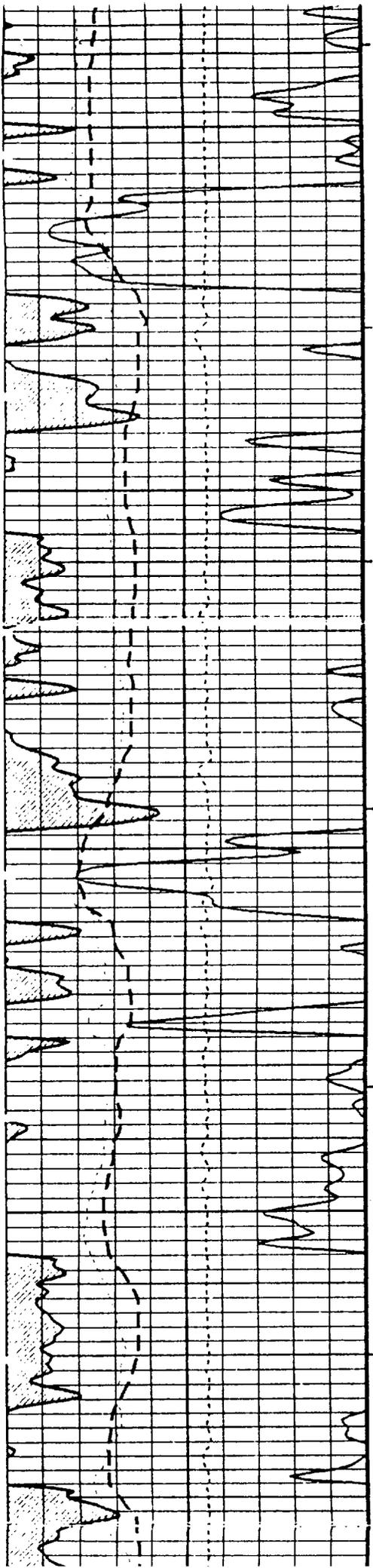
**PIP SUMMARY**

- ┌ Integrated Hole Volume Minor Pip Every 10 F3
- ┌ Integrated Hole Volume Major Pip Every 100 F3
  - └ Integrated Cement Volume Minor Pip Every 10 F3
  - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

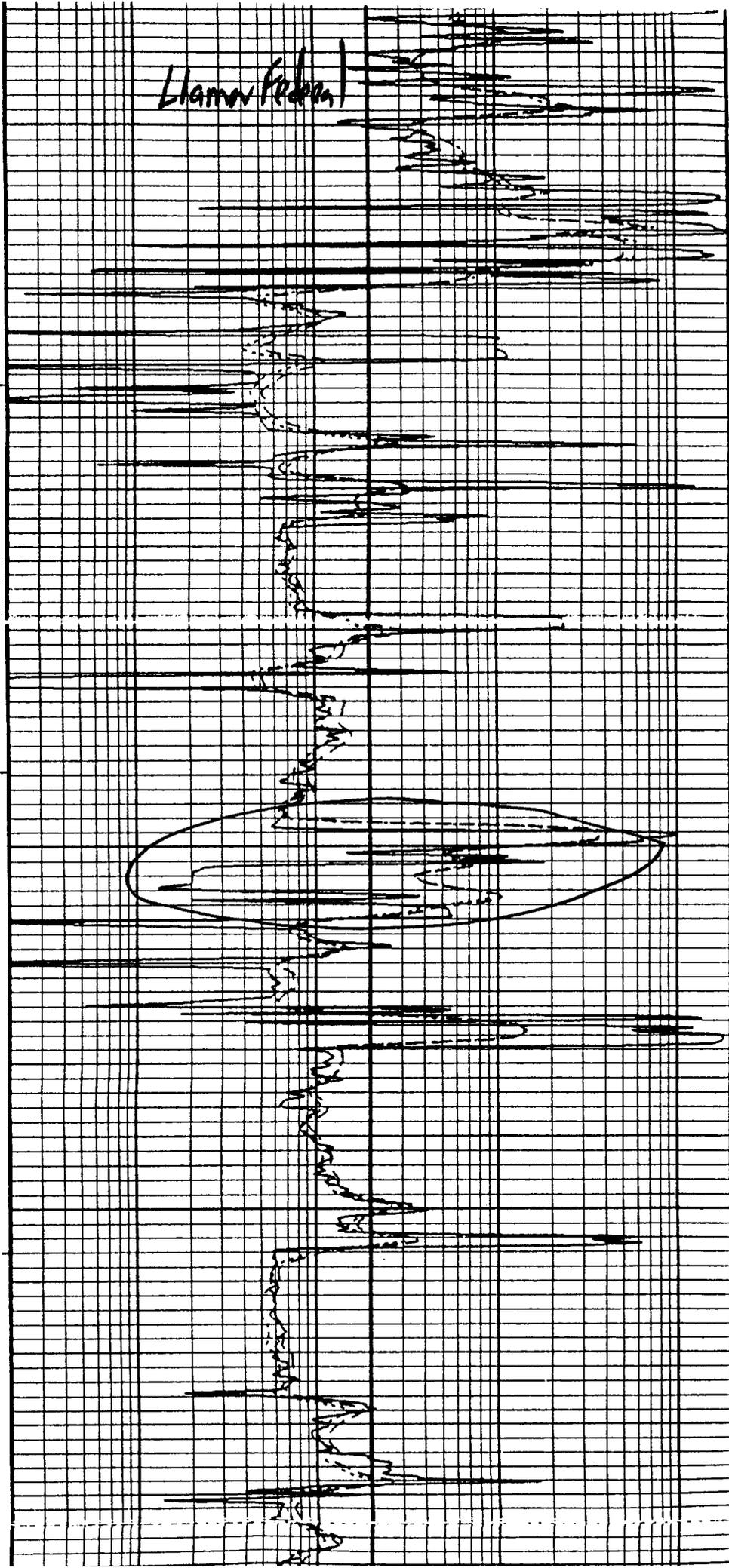
**Parameters**

DLIS Name	Description	Value
BFM	Borehole Fluid Medium	LIQUID
BHS	Bore Hole Status	OPEN
BS	Bit Size	6.125 IN
DHC	Density Hole Correction	BS
DO	Depth Offset	0.0 FT
DPPM	Density Porosity Processing Mode	HIRS
FD	Fluid Density	1.1 G/C3
CCSE	Generalized Caliper Selection	CALI



12800

12900



Llano Redon

#9

EDDY COUNTY, NEW MEXICO  
**Schlumberger**  
**FINAL COMPOSITE**  
 COMPENSATED NEUTRON

Company: MITCHELL ENERGY CORPORATION  
 Well: APACHE "13" FEDERAL #1  
 Field: WILDCAT  
 County: EDDY State: NEW MEXICO

RECEIVED  
 OCT 18 1993  
 O. L. D.

County: EDDY Field: WILDCAT Location: 1330 FNL & 330 FEL Well: APACHE "13" FEDERAL #1 Company: MITCHELL ENERGY CORP	LOCATION	1330 FNL & 330 FEL E-2, NE/4	Other Services: AIT/DLL/MSFL ML MSCT		
	API SERIAL NO.	SECTION	TOWNSHIP	RANGE	
		13	22-S	30-E	

Permanent Datum G.L. Elevation: 3342 F  
 Log Measured From RKB 18.5 Ft. above Perm. Datum  
 Drilling Measured From RKB

Elevations:  
 KB: 3380.5 F **3360**  
 DF: 3358.5 F  
 GL: 3342 F

	28-MAY-83	22-JUL-83
Date	28-MAY-83	22-JUL-83
Run No.	1	2
Depth-Driller	7790.1	14181
Depth-Logger	7793	14174
Blow Log Interval	7790	14171
Top Log Interval	180	7400
Casing-Driller	8.623 @ 3818	7 @ 11936
Casing-Logger	3813	11928
Bit Size	8.75	6
Fluid Type	FRESH	BRINE
Dens. Visc.	8.8 LB/G / 34 S	10.1 LB/G / 43 S
pH - Fluid Loss	10 / 15 C3	10.5 / 6 C3
Source of Sample	FLOWLINE	STEEL TANK
Rmf @ Meas Temp	1.07 @ 116	.054 @ 78
Rmf @ Meas Temp		.041 @ 78
Rmc @ Meas Temp		
Source: Rmf Rmc		MEAS /
Rmf @ BHT	.982 @ 127	.023 @ 190
Time Circ. Stopped	0900 5-29	2030 7-21
Logger on Blw.	1956 5-29	0859 7-22
Max. Rec. Temp.	127	190
Equip. Location	2033 / HOBBS	2033 / HOBBS
Recorded By:	HOLT	DAVIS
Witnessed By:	GAWLOSKI	GAWLOSKI

Output DLS Sites

30-MAY-1993 00:51 FIELD 1110 .051

Integrated Hole/Cement Volume Summary

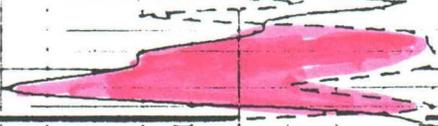
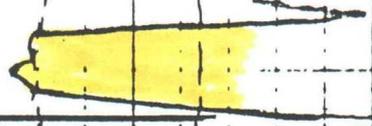
13#1

DST F29.5mm

12800

T/Atoka Sand

peak  
slow



9/93 SPY 4.343mm

0.21  
64

12900

#10

# LITHO DENSITY/ COMPENSATED NEUTRON

Schlumberger  
MINAL COMPOSITE

WILDCAT  
Location: 1200' FSL & 330' FEL  
Well: APACHE '24' FEDERAL #1  
Company: MITCHELL ENERGY CORP

Company: MITCHELL ENERGY CORPORATION

Well: APACHE '24' FEDERAL #1

Field: WILDCAT

County : EDDY

State: NEW MEXICO

LOCATION 1200' FSL & 330' FEL

Other Services:

DLL/MSFL  
BHC  
MSCT

SERIAL NO.

SECTION

TOWNSHIP

RANGE

24

22-S

30-E

Perm. Datum

G.L.

Elevation: 3407 F

Elevations:

Measured From

RKB

18.4 Ft above Perm. Datum

KB: 3425.4 F

Measured From

RKB

DF: 3424.4 F

GL: 3407 F

	15-AUG-1993	29-AUG-1993	04-OCT-1993
Log Interval	7847	12391	14499
Log Interval	210	7500	12200
Log-Driller	9.625 @ 3840	9.625 @ 3840	7.0 @ 12400
Log-Logger	3817	3837	12374
Log Size	8.75	8.75	6.0
Log Type	XH/PAC	XH/PAC	R.T.M.-MF55
Log Sp. Visc.	8.4 LB/G / 33 S	10 LB/G / 33 S	12 LB/G / 43 S
Log Fluid Loss	10 / 15 C3	9.5 / 12 C3	10 / 11 C3
Log Type of Sample	CIRC	MUD PIT	CIRC
Log @ Meas Temp	2.260 @ 81	0.047 @ 92	0.024 @ 80
Log @ Meas Temp	1.680 @ 81	0.043 @ 79	0.018 @ 80
Log @ Meas Temp			
Log Source: Rmf/Rmc	MEAS /	PRESS /	MEAS /
Log @ BHT	1.494 @ 126	0.027 @ 168	0.010 @ 198
Log Time Circ. Stopped	0730 8/15	1100 8/29	1300 10/4
Log Time on Btm.	1749 8/15	1932 8/29	0518 10/4
Log Max. Rec. Temp.	126	168	198
Log Well / Location	2033 / HOBBS	2033 / HOBBS	2033 / HOBBS
Log Recorded By:	DAVIS	HOLT	DAVIS
Log Checked By:	PETRAITIS	GAWLOSKI	STEWART

The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on interferences from electrical log measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Run No. 1 2 3  
Service Order No. 632405 632318 632419  
Customer Variation 5CO-423 5CO-423 5CO-423

24#1

T/Atoka Sand



13000

Atoka Bk  
13055

Completed 11/10/94  
IPF 1.983 MMPD  
IBHP = 2465 psi  
producing from  
Sand



13084

13100

#11  
~

**COMPANY: MITCHELL ENERGY CORPORATION**  
**WELL: APACHE #25 FED. #1**  
**FIELD: WILDCAT**  
**COUNTY: EDDY STATE: NEW MEXICO**

COUNTY: EDDY Field: WILDCAT Location: 1730' FNL & 860' FEL Well: APACHE #25 FED. #1 Company: MITCHELL ENERGY CORPORA	<b>COMPENSATED NEUTRON LITHOLOGY DENSITY GAMMA RAY</b>			
	LOCATION 1730' FNL & 860' FEL S25, T22-S, R30-E		Elev.: K.B. 3391 F G.L. 3366 F D.F. 3390 F	
	Permanent Datum: <u>GROUND LEVEL</u> Log Measured From: <u>KELLY BUSHING</u> Drilling Measured From: <u>KELLY BUSHING</u>		Elev.: 3366 F 25.0 F above Perm. Datum	
	API Serial No. N/A		SECTION 25	TOWNSHIP 22-S
Logging Date		29-JUN-1993		
Run Number		THREE		
Depth Driller		14500 F		
Schlumberger Depth		14494 F		
Bottom Log Interval		14491 F		
Top Log interval		11775 F		
Casing Driller Size @ Depth		7.000 IN @ 12310 F @		
Casing Schlumberger		12308 F		
Bit Size		6.000 IN		
Type Fluid In Hole		XCD/DRISPAC/KCL		
MUD	Density	Viscosity	10.1 LB/G 42 S	
	Fluid Loss	PH	6.5 C3 9	
	Source Of Sample		FLOWLINE	
RM @ Measured Temperature		0.044 OHMM @ 85 DEGF @		
RMF @ Measured Temperature		0.047 OHMM @ 76 DEGF @		
RMC @ Measured Temperature		@ @		
Source RMF	RMC	PRESS	N/A	
RM @ BHT	RMF @ BHT	0.018 @ 223	0.017 @ 223	@ @
Maximum Recorded BHT		223 DEGF		
Circulation Stopped	Time	29-JUN-1993 02:30		
Logger On Bottom	Time	29-JUN-1993 16:27		
Unit Number	Location	2033	HOBBS	
Recorded By		GERALD HOLT		
Witnessed By		TED GALOWSKI		

25H1

DST # 12910-13068

Well 2392 #  
Well 2409 #

WTS 80" FO 2.4mm  
Res. 1000' total fluid  
10' Free Oil  
1000' WB  
Spl. Chamber  
3.69 Cfg.

12900

FO 2.4mm

DSDP 2392 #  
DSDP 2409 #

THATOKSL

9588

13000

A/2500g

P/W 15,000  
+ 7,000

FO 1.9mm  
BHSDE 1589  
(0-12)

#12  
2

**Schlumberger**  
**FINAL COMPOSITE**

**LITHO DENSITY/  
COMPENSATED NEUTRON**

County: EDDY Field: WILDCAT Location: 660' FSL & 1310' FEL Well: APACHE '25' FEDERAL COM #2 Company: MITCHELL ENERGY CORP	Company: MITCHELL ENERGY CORPORATION			
	Well: APACHE '25' FEDERAL COM #2			
	Field: WILDCAT			
	County : EDDY		State: NEW MEXICO	
LOCATION 660' FSL & 1310' FEL			Other Services: AIT/DLL/MSFL BHC.FMI MSCT	
API SERIAL NO.	SECTION 25	TOWNSHIP 22-S	RANGE 30-E	
Permanent Datum	G.L.	Elevation:	3336 F	
Log Measured From	RKB	26 Ft. above Perm. Datum		Elevations:
Drilling Measured From	RKB			KB: 3362 F DF: 3361 F GL: 3336 F
Date	02-SEPT-1993	17-SEPT-1993	12-OCT-1993	
Run No.	1	2	3	
Depth-Driller	7825	12418	14568	
Depth-Logger	7825	12411	14560	
Btm. Log Interval	7822	12408	14558	
Top Log Interval	200	7650	12404	
Casing-Driller	9.625 @ 3869	9.625 @ 3869	7.000 @ 12408	
Casing-Logger	3870	3870	12404	
Bit Size	8.750	8.750	6.0	
Fluid Type	MF/AQUA PAC/GEL	SALT GEL/STARCH	XCD-AQUA PAC-MF	
Dens. / Visc.	8.7 LB/G / 32 S	10.3 LB/G / 50 S	10.4 LB/G / 44S	
pH / Fluid Loss	9 / 14.4 C3	10 / 10.4 C3	10 / 8 C3	
Source of Sample	FLOWLINE	FLOWLINE	FLOWLINE	
Rm @ Meas Temp	0.467 @ 76	0.056 @ 82	0.041 @ 88	
Rmf @ Meas Temp	0.406 2.76	0.048 @ 82	0.038 @ 88	
Rmc @ Meas Temp			0.110 @ 88	
Source: Rmf/Rmc	MEAS /	MEAS /	MEAS / PRESS	
Rm @ BHT	0.291 @ 126	0.028 @ 168	0.019 @ 199	
Time Circ. Stopped	0100 9.3	1400 9.17	0600 10/12	
Logger on Btm.	0013 9.4	0232 9.18	1927 10/12	
Max. Rec. Temp.	126	168	199	
Equip. / Location	2020 / ROSWELL	2020 / ROSWELL	2020 / ROSWELL	
Recorded By:	CAWLEY	LIEBERENZ	SULLIVAN	
Witnessed By:	STEWART	FEDRO	FEDRO	

The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee

FOLD HERE

12900

25-2

See resis. log

→ Vytite w/ poss 1/4  
@ very top w/ some perm.

←/SL. -9613

-9613

13000

1/Atokan Bank

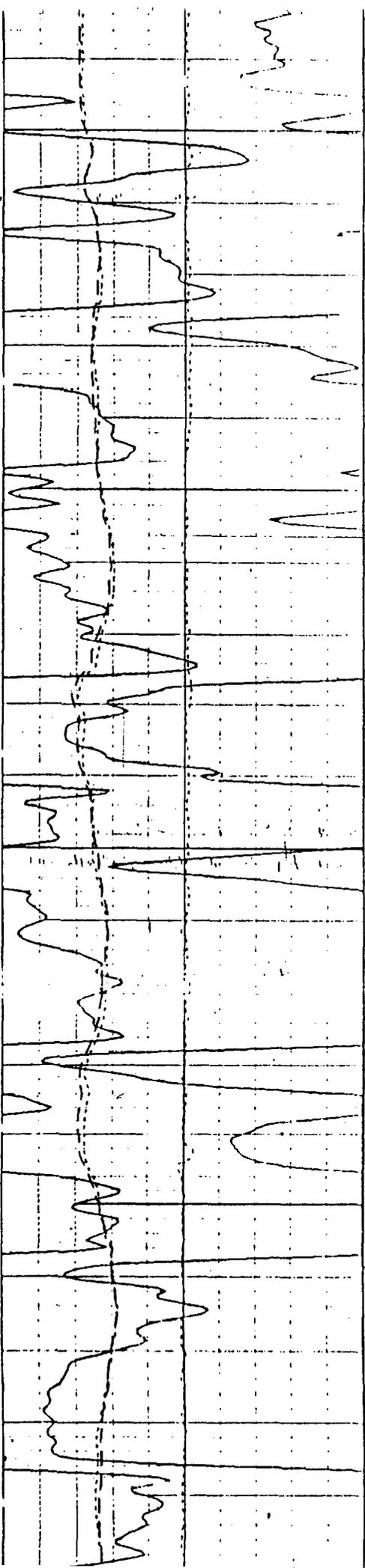
13057

-9695

13086

13100

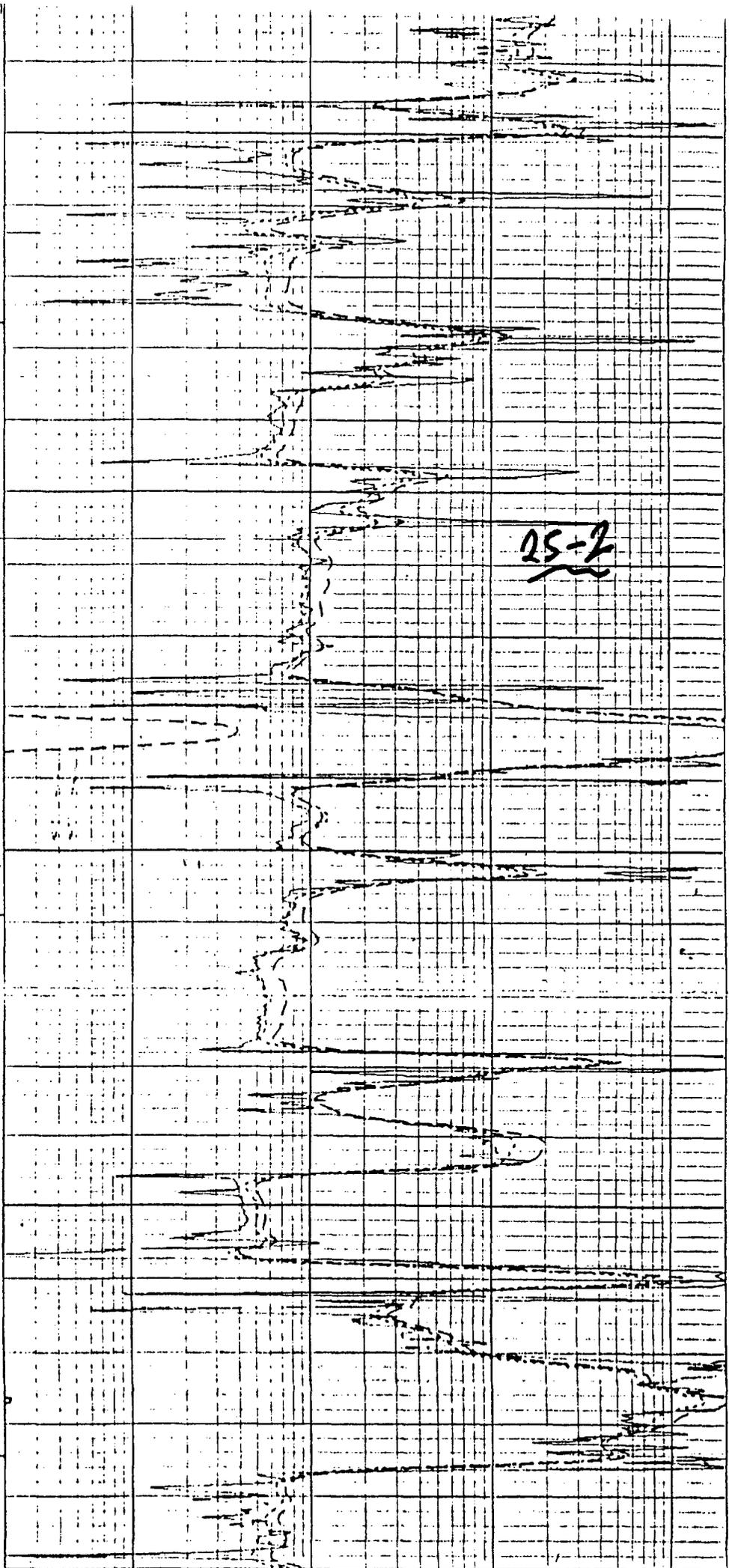
Stipitradia  
of limited  
resis. log



12900

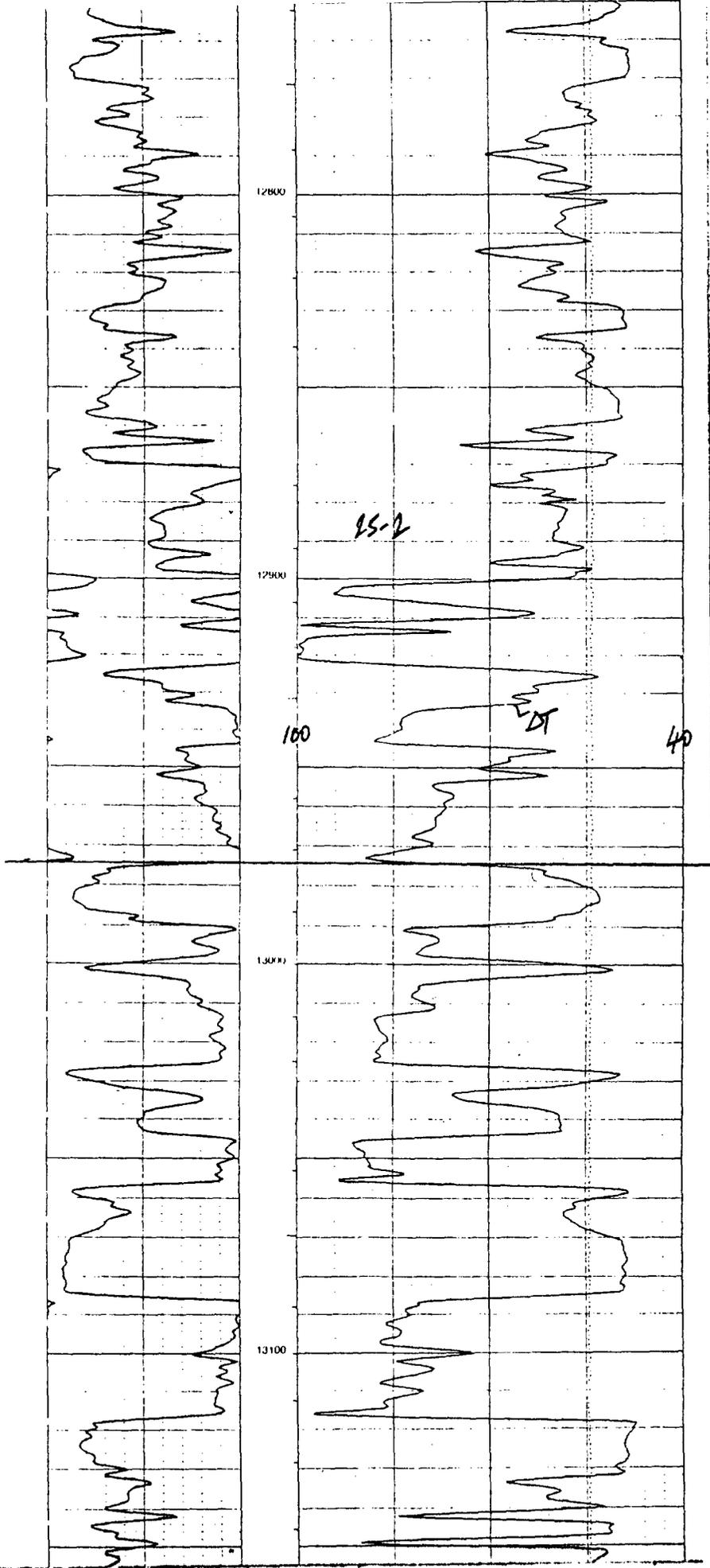
13000

13100



25-2





#13  
2

Schlumberger

SIMULTANEOUS  
COMPENSATED NEUTRON-  
FORMATION DENSITY

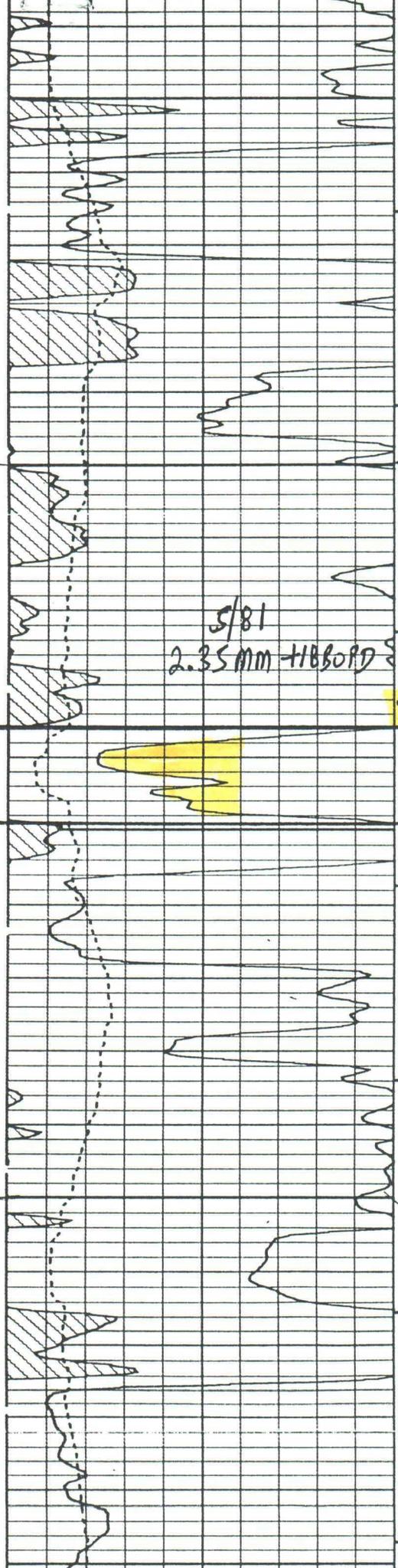
COUNTY	EDDY	COMPANY	BELCO PETRO. CO.
FIELD	LOS MEDANOS	WELL	JAMES RANCH #11
LOCATION		FIELD	LOS MEDANOS
WELL		COUNTY	EDDY
		STATE	NEW MEXICO
LOCATION		920' FWL & 1980' FNL,	
API SERIAL NO.		SEC.	TWP.
		36	22-S
		RANGE 30-E	
			Other Services: CALIPER DLL

Permanent Datum:	G. L.	Elev.:	3300
Log Measured From	K. B.	18 Ft. Above Perm. Datum	Elev.: K.B. 3324
Drilling Measured From	K. B.		D.F. _____ G.L. 3306

Date	9-26-80	2-2-80	2-7-81	
Run No.	ONE (GR-N)	TWO	THREE	
Depth-Driller	3840	11932	14600	
Depth-Logger	3840	11935	14601	
Btm. Log Interval	3838	11934	14599	
Top Log Interval	SURF	3838	11802	
Casing-Driller	@	10 3/4 @ 3839	7 7/8 @ 11933	@
Casing-Logger		3838	11930	
Bit Size		9 7/8	6 1/2	
Type Fluid in Hole	BRINE	::	BRINE	
Dens.	Visc.			
		10.9	47	12.8
pH	Fluid Loss	ml	9	20 ml
			9.3	5 ml
Source of Sample		PIT	MUD PIT	
Rm @ Meas. Temp.	@ °F	.071 @ 70 °F	.120 @ 60 °F	@ °F
Rmf @ Meas. Temp.	@ °F	.053 @ 68 °F	.067 @ 60 °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	.407 @ 60 °F	@ °F
Source: Rmf	Rmc	M	M	M
Rm @ BHT	@ °F	.030 @ 168 °F	.039 @ 124 °F	@ °F
TIME	Circulation Stopped	1600	12-1	0500
	Logger on Bottom	0630	12-2	2030
Max. Rec. Temp.	°F	168	°F	124
Equip.	Location	8185	HOBBS	8042
		8042	HOBBS	8045
Recorded By		CAMPAIGN	MOBARAK	FIALA/WAGNER
Witnessed By		HENDERSON	PARROTT	PARROTT

The well name, location and borehole reference data were furnished by the customer.

ONE (GR-N) TWO THREE  
DIN NC



JRU 11

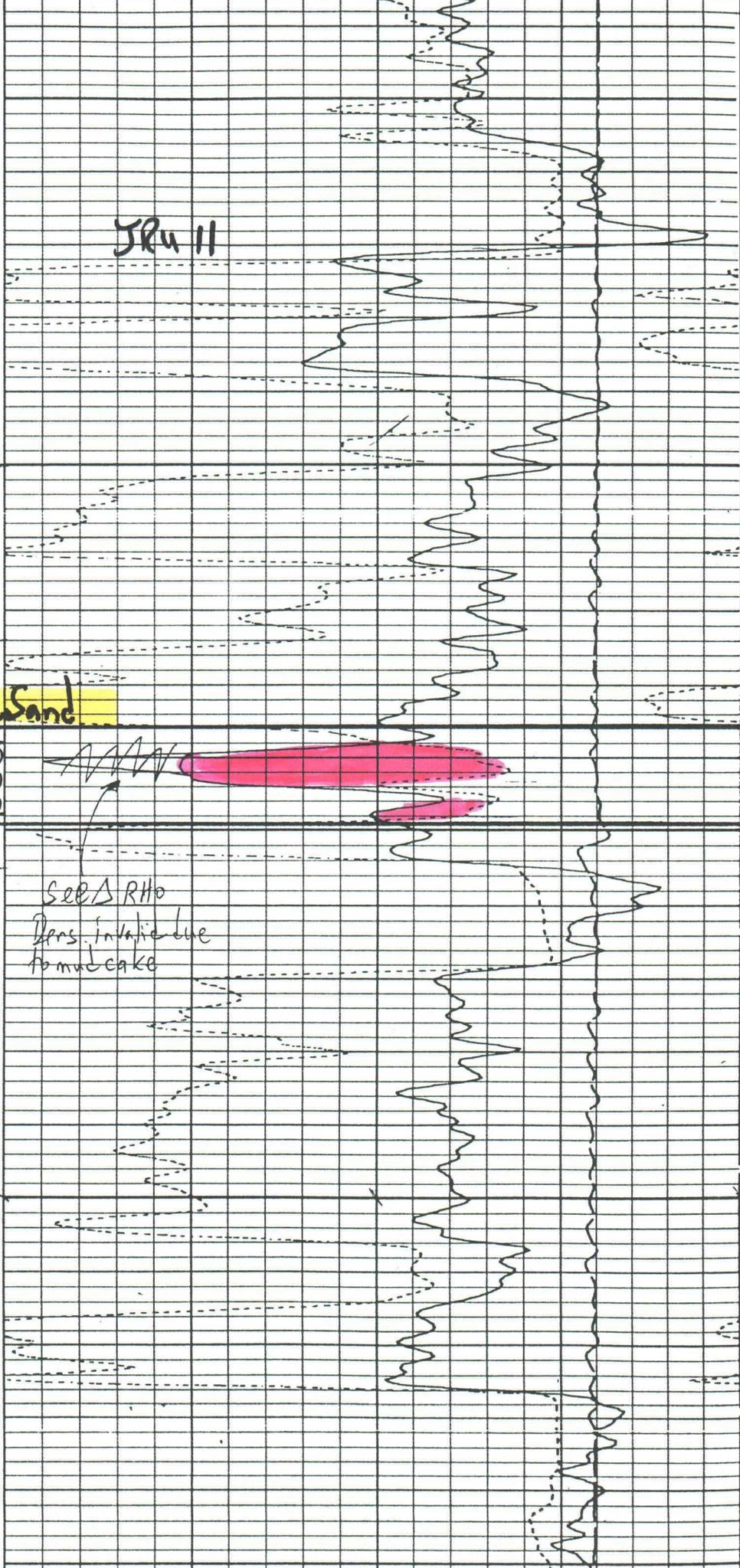
13000

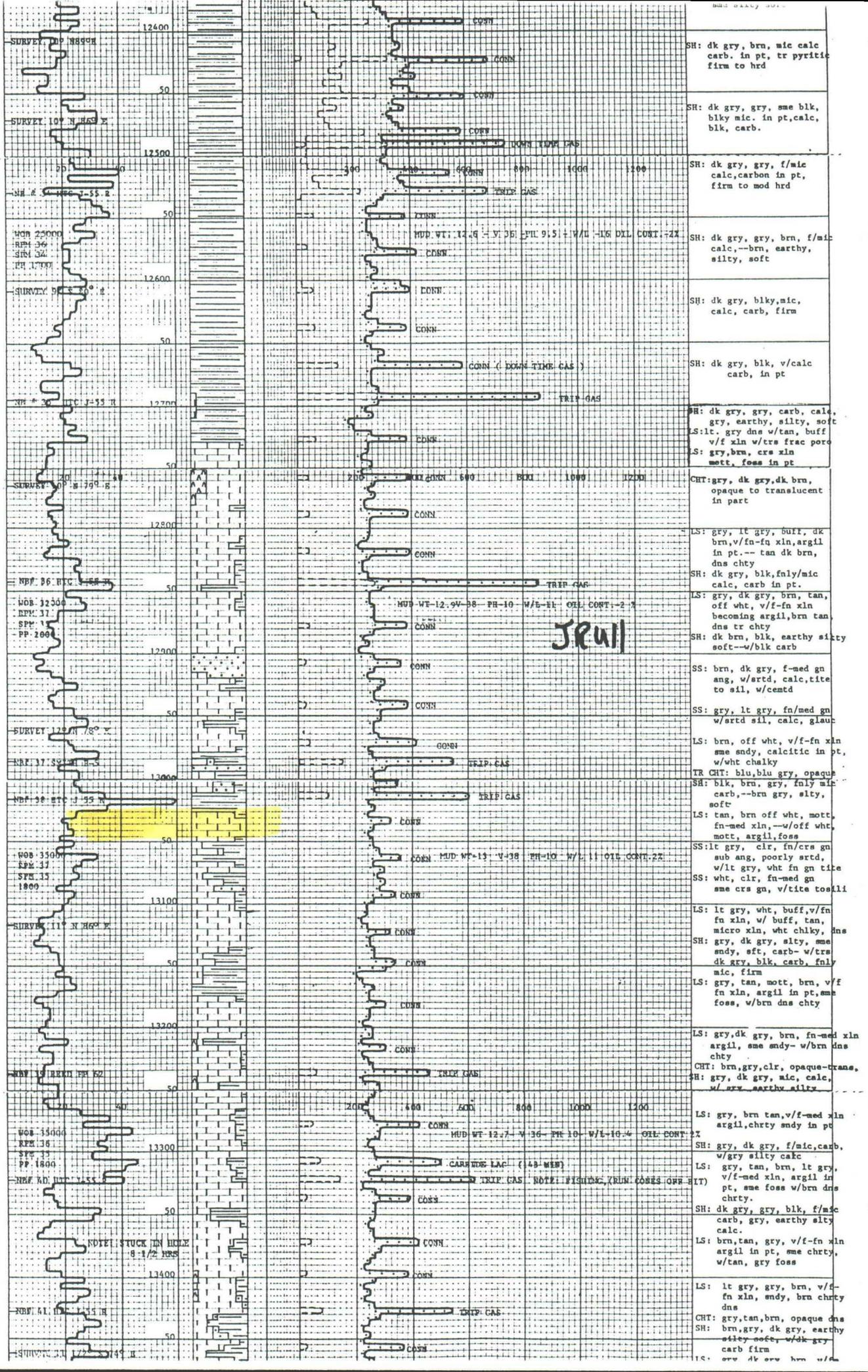
S/81  
2.35mm HIBBORD

T/Atoke Sand

See Δ Rho  
Dens. Int. due  
to mud cake

13100





SURVEY 107 N 146° E

SURVEY 111 N 166° E

WOB 25000  
RPM 36  
SPM 324  
PP 1700

WOB 32500  
RPM 37  
SPM 371  
PP 2000

WOB 35000  
RPM 37  
SPM 351  
PP 1800

WOB 35000  
RPM 36  
SPM 331  
PP 1800

NOTE: STUCK IN HOLE  
8 1/2 HRS

CONN  
CONN  
CONN  
DOWN TIME GAS  
TRIP GAS

MUD WT: 12.6 - V. DE PH 9.5 - W/L - 16 OIL CONT. - 2%

CONN (DOWN TIME GAS)  
TRIP GAS

CONN  
CONN

MUD WT: 12.9 - V. DE PH 10 - W/L - 11 OIL CONT. - 2%

CONN  
TRIP GAS

CONN MUD WT: 13 - V. DE PH 10 - W/L - 11 OIL CONT. - 2%

CONN  
CONN

CONN  
TRIP GAS

CONN  
MUD WT: 12.7 - V. DE PH 10 - W/L - 16 OIL CONT. - 2%

CONN  
CONN  
CONN

CONN  
TRIP GAS

SH: dk gry, brn, mic calc carb. in pt, tr pyritic firm to hrd

SH: dk gry, gry, sme blk, blk mic. in pt, calc, blk, carb.

SH: dk gry, gry, f/mic calc, carbon in pt, firm to mod hrd

SH: dk gry, gry, brn, f/mic calc, -brn, earthy, silty, soft

SH: dk gry, blk, mic, calc, carb, firm

SH: dk gry, blk, v/calc carb, in pt

SH: dk gry, gry, carb, calc, gry, earthy, silty, soft  
LS: lt. gry dns w/tan, buff v/f xln w/trs frac pores  
SS: gry, brn, crs xln mott, foss in pt

CHT: gry, dk gry, dk brn, opaque to translucent in part

LS: gry, lt gry, buff, dk brn, v/fn-xln, argil in pt, -tan dk brn, dns chty  
SH: dk gry, blk, finly/mic calc, carb in pt.

LS: gry, dk gry, brn, tan, off wht, v/f-fn xln becoming argil, brn tan dns tr chty  
SH: dk brn, blk, earthy silty soft - w/blk carb

SS: brn, dk gry, f-med gn ang, w/srd, calc, cite to sil, w/cemtd

SS: gry, lt gry, fn/med gn w/srd sil, calc, glau

LS: brn, off wht, v/f-fn xln sme endy, calcitic in pt, w/wht chalky

TR CHT: blu, blu gry, opaque  
SH: blk, brn, gry, finly mic carb, -brn gry, silty, soft

LS: tan, brn off wht, mott, fn-med xln, -w/off wht, mott, argil, foss

SS: lt gry, clr, fn/crs gn sub ang, poorly srted, w/lt gry, wht fn gn tite

SS: wht, clr, fn-med gn sme crs gn, v/tite to sil

LS: lt gry, wht, buff, v/fn fa xln, w/ buff, tan, micro xln, wht chiky, dns

SH: gry, dk gry, silty, sme endy, sft, carb- w/trs dk gry, blk, carb, finly mic, firm

LS: gry, tan, mott, brn, v/f fa xln, argil in pt, sme foss, w/brn dns chty

LS: gry, dk gry, brn, fn-med xln argil, sme endy- w/brn dns chty

CHT: brn, gry, clr, opaque-trans.  
SH: gry, dk gry, mic, calc, w/ crs earthy silty

LS: gry, brn tan, v/f-med xln argil, chty endy in pt

SH: gry, dk gry, f/mic, carb, w/gry silty calc

LS: gry, tan, brn, lt gry, v/f-med xln, argil in pt, sme foss w/brn dns chrtly.

SH: dk gry, gry, blk, f/mic carb, gry, earthy silty calc.

LS: brn, tan, gry, v/f-fn xln argil in pt, sme chrtly, w/tan, gry foss

LS: lt gry, gry, brn, v/f-fn xln, endy, brn chrtly dns  
CHT: gry, tan, brn, opaque dns  
SH: brn, gry, dk gry, earthy silty soft, w/dk gry carb firm

JRUH

#14  
124



SPECTRAL DENSITY  
DUAL SPACED  
NEUTRON LOG

COMPANY ENRON OIL AND GAS WELL JAMES RANCH UNIT NO. FIELD LOS MEDANOS MORROW COUNTY EDDY STATE NM	COMPANY ENRON OIL AND GAS		
	WELL JAMES RANCH UNIT NO. 18		
	FIELD LOS MEDANOS MORROW		
	COUNTY EDDY STATE NM		
API NO NA		STATE NM	
LOCATION 1980 FNL AND 1980 FEL		OTHER SERVICES	
		DLL-MSFL	
SECT 36		TWP 22-S RGE 33-E	
PERMANENT DATUM G.L.		ELEV. 3316.5	
LOG MEASURED FROM K.B. OR 28		FT. ABOVE PERM DATUM	
DRILLING MEASURED FROM K.B.		ELEV.: K.B. 3344.5 D.F. 3343.5 G.L. 3316.5	
DATE	12/27/92	01/23/93	02/21/93
RUN NO.	ONE	TWO	THREE
DEPTH-DRILLER	7916	11801	14511
DEPTH-LOGGER	7910	11780	14440
BTH. LOG INTER	7865	11775	14438
TOP LOG INTER	SURFACE	3804	11590
CASING DRILLER	9.625#3810	9.625#3810	7.0 #11602
CASING-LOGGER	3804	3804	11590
BIT SIZE	8.5 INCH	8.5 INCH	6.0 INCH
TYPE FLUID IN HOLE	SALT MUD	SALT MUD	SALT MUD
DENS. & VISC.	8.7 & 128	9.1 & 139	10.0 & 137
PH & FLUID LOSS	9.0 & NA	9.0 & 115.0	9.5 & 18.2
SOURCE OF SAMPLE	CIRCULATED	CIRCULATED	CIRCULATED
RM # MEAS. TEMP.	.34 #59	.33 #65	.15 #63
RHF # MEAS. TEMP.	.30 #60	.28 #65	.11 #64
RMC # MEAS. TEMP.	NA #NA	.45 #65	NA #NA
SOURCE RHF/RMC	MEAS & NA	MEAS & MEAS	MEAS & NA
RM #BHT	.16 #126	.13 #162	.05 #207
TIME SINCE CIRC.	9 HOURS	11 HOURS	12.5 HOURS
TIME ON BOTTOM	18:57 HRS.	05:00 HRS	5 HRS.
MAX. REC TEMP.	126 #B.H.	162 #B.H.	207 #B.H.
EQUIP. & LOCATION	7670 #H0888	52555#H0888	7670 #H0888
RECORDED BY	R. RANSEY	K. DRAKE	R. RANSEY
WITNESSED BY	INSALACO	PARROTT	FEDRO

FOLD HERE

PGM VERSION: 2.25

SERVICE TICKET NO.: 88649

API SERIAL NO.: NA

RESISTIVITY SCALE CHANGES

DEPTH

LOG

TYPE

DATE: SAMPLE NO.

SCALE UP HOLE

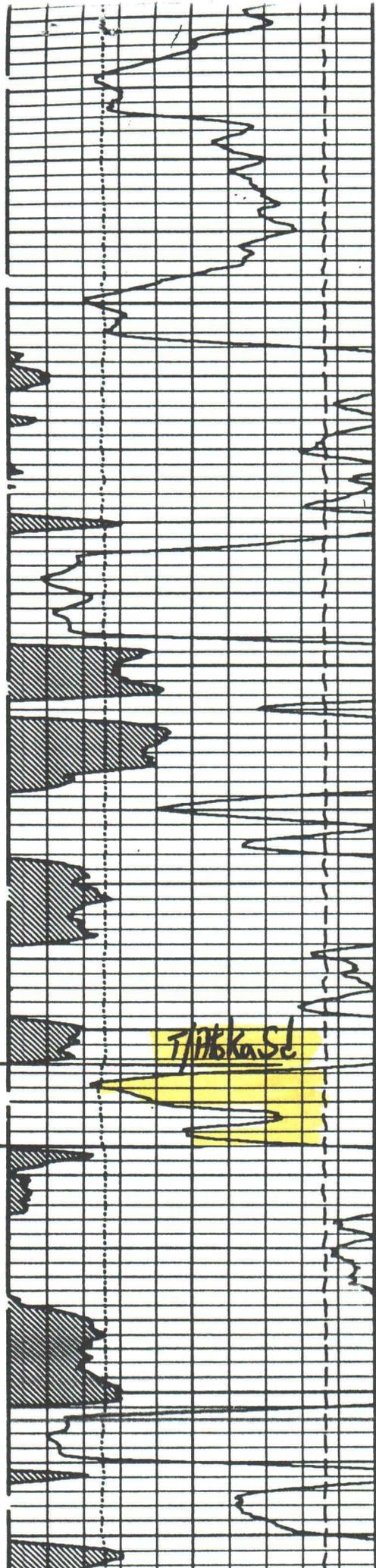
SCALE

DOWN

HOLE

DEPTH-DRILLER

TYPE FLUID



TRAKASL

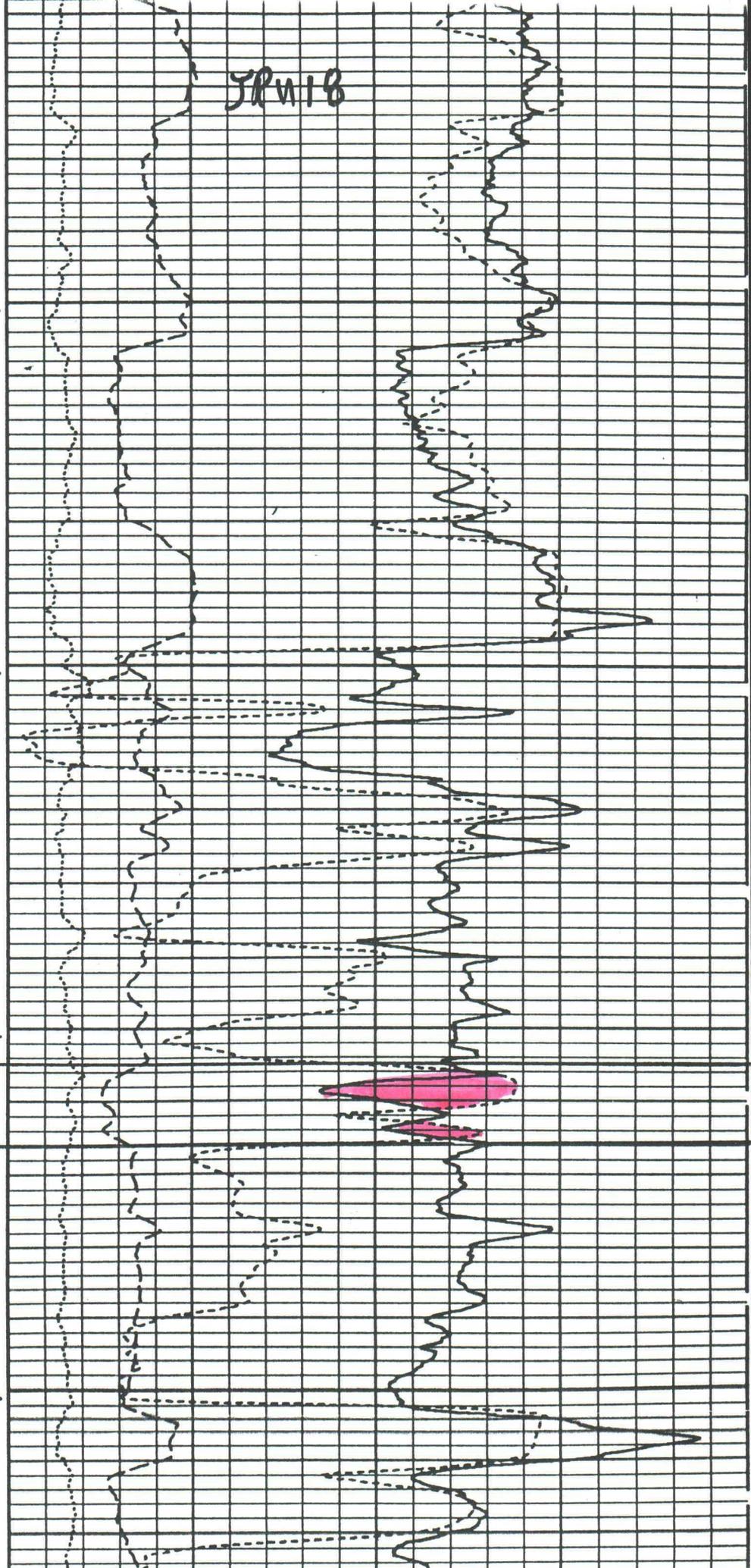
12950.

13000.

13050.

13100.

JRW18



-9503  
3327  
220

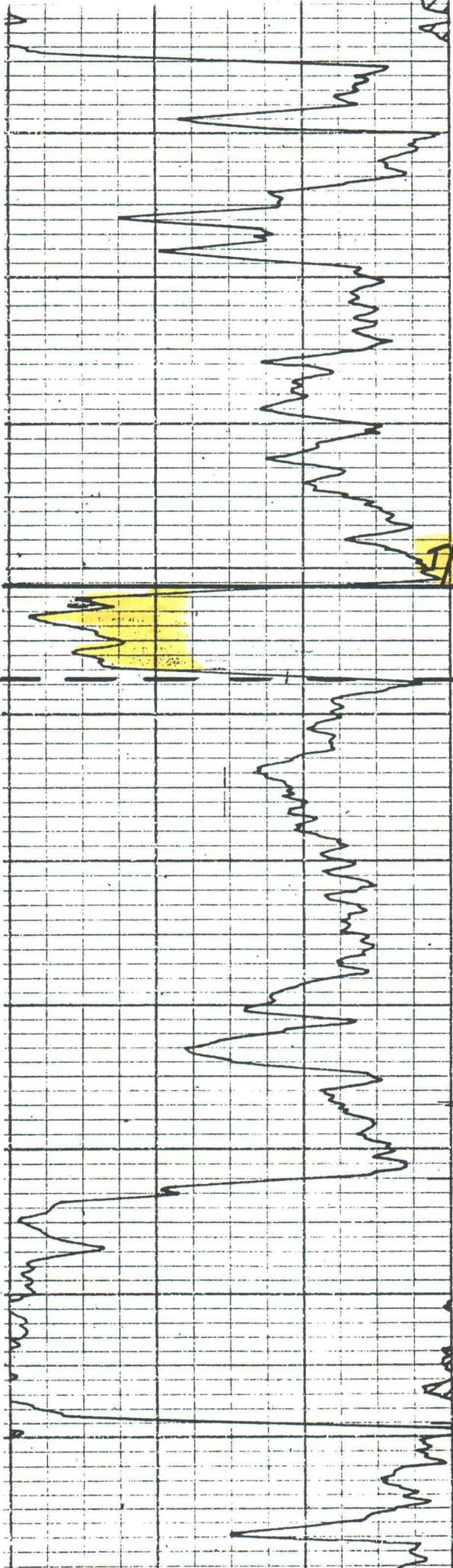
141  
3327  
953

#15

# Radiation Log

Delaware Correlation

LOG NO. 16263 16354 16350 16599 17493 17498		COMPANY SHELL OIL COMPANY			
STATION HOBBS		WELL JAMES RANCH # 1			
TRUCK NO. GR-22 GR-22 GR-24 GR-24 GR-24 GR-24		FIELD W/C			
COUNTY STATE		EDDY, NEW MEXICO			
LOCATION		660' FSL, 2009' FEL, SEC. 36, TWP. 22-S RGE. 30-E			
LOG MEAS. FROM		1' ABOVE R.T. ELEV. 3327			
DRLG. MEAS. FROM SAME		ELEV. 3327			
PERMANENT DATUM		19.1' ABOVE G.L. ELEV. 3307.9			
CASING RECORD		BORE HOLE RECORD			
SIZE "-WT. #	FROM	TO	BIT SIZE -"	FROM	TO
24	SURF	20	-	-	-
16	"	549	-	-	-
10 3/4	"	3849	-	-	-
7 5/8	"	12,065	9 5/8	-	-
5 1/2	"	14,927	6 5/8	12,065	15,506
			4 1/2	15,506	16,271
COMPANY	WELL	FIELD	COUNTY	STATE	
SHELL OIL COMPANY	JAMES RANCH # 1	W/C	EDDY	NEW MEXICO	
TYPE OF LOG	GAMMA RAY - NEUTRON		GAMMA RAY - NEUTRON		
RUN NO.	ONE	TWO	THREE	FOUR	
DATE	2-13-57	3-28-57	5-9-57	8-12-57	
TOTAL DEPTH - DRILLER	9032	12,055	13,310	15,505	
TOTAL DEPTH - P.G.A.C.	9038	12,066	13,313	15,506	
FLUID IN HOLE	MUD - 9.4#	MUD - 11.7#	MUD - 14#	MUD - 13#	
FLUID LEVEL					
MAXIMUM TEMPERATURE °F.					
INSTRUMENT O.D. AND NO.	3 5/8 - 207	3 5/8 - 206	3 5/8 - 207	3 5/8 - 211	
INSTRUMENT TYPE	F - PH - 125	TA - PH - 125	TA - PH - 125	TA - PH - 125	
NEUTRON SOURCE TYPE	RB - 600	RB - 600	RB - 600	RB - 600	
CPS FOR CALIB. STD. - GR	80	100	100	100	
- N	210	195	220	220	
RECD'R. SENS. 4"/100 SNU	190	208	170	167	
RECORDED BY	J. BRAUNER	J. MILLER	J. BRAUNER	J. BRAUNER	
WITNESSED BY	M. ASHLEY	M. ASHLEY	M. ASHLEY	M. ASHLEY	
TYPE OF LOG	GAMMA RAY - NEUTRON		GAMMA RAY - NEUTRON		
RUN NO.	FIVE	SIX			
DATE	4-12-57	5-21-57			
TOTAL DEPTH - DRILLER	15,937	16,250			
TOTAL DEPTH - P.G.A.C.	15,941	16,271			
FLUID IN HOLE	MUD - 9.5#	MUD - 9.5#			
FLUID LEVEL	FULL				
MAXIMUM TEMPERATURE °F.					
INSTRUMENT O.D. AND NO.	1 3/4	1 3/4			
INSTRUMENT TYPE	YB - YPE	YB - YPE			
NEUTRON SOURCE TYPE	RB - 300	RB - 300			
CPS FOR CALIB. STD. - GR	100	200			



12,900

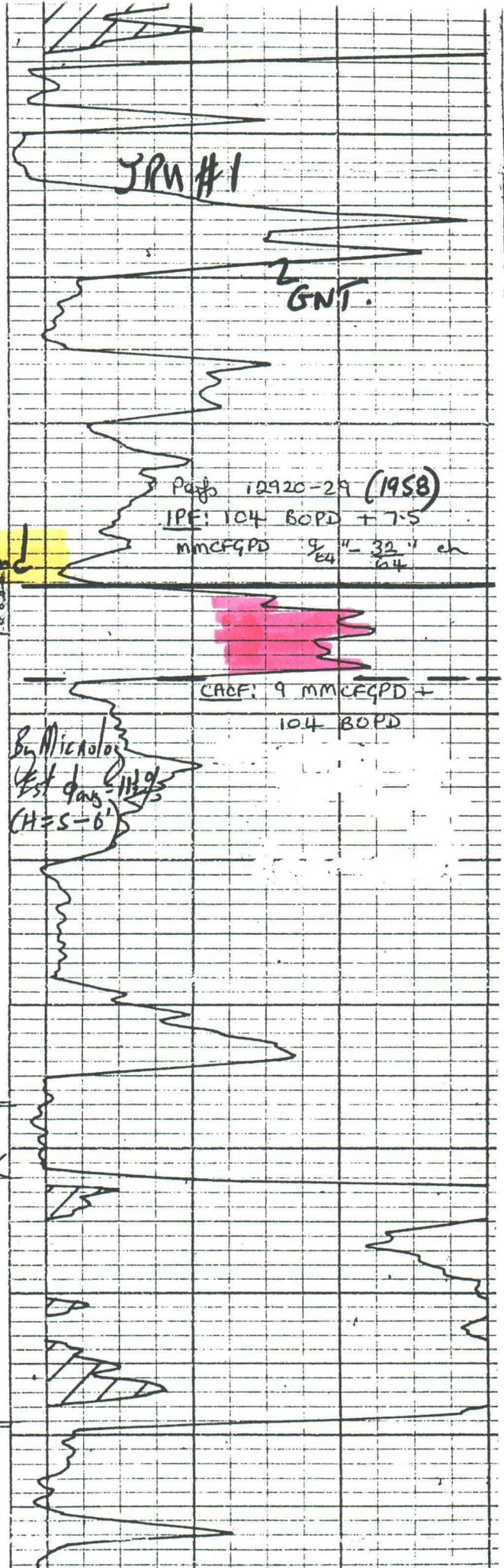
I/AltoKwSand



PB

13,000  
7/Bark  
-9677

H=34



JRN #1

2 GNT.

Page 10920-29 (1958)

IPE: 104 BOPD + 7.5

mmCFQPD  $\frac{9}{24} = \frac{32}{24}$  cu

CAOP: 9 mmCFQPD +

104 BOPD

St. Nicholas

Est. days - 11/9/5  
(H=5-6')



# SCHLUMBERGER WELL SURVEYING CORPORATION

-HOUSTON, TEXAS-



# MICROLOGGING®

COUNTY Eddy FIELD or LOCATION Wildcat WELL Jones Ranch Unit # 1 COMPANY Shell Oil Company	COMPANY SHELL OIL	Other Surveys
	COMPANY	ES II II
	WELL JAMES RANCH	Location of Well
	UNIT # 1	660' f S/L 2009' f E/L
	FIELD WILDCAT	Elevation: D.F.: 3326 K.B.: 3327 or G.L.: 3306
	LOCATION SEC. 36 T22S R30E	FILING No.
COUNTY EDDY		
STATE NEW MEXICO		

RUN No.	1	2	3	4	5
Date	1-28-57	2-13-57	3-29-57	5-9-57	8-13-57
First Reading	7673	9033	12057	13307	15503
Last Reading	3849	6600	3849	12059	12059
Feet Measured	3824	2433	8208	1248	3444
Depth Reached	7676	9036	12060	13309	15504
Bottom Driller	7674	9032	12055	13310	15505
Depth Datum	KB 19' J	Abv. GI		KB 19' Abv. GL	
Mud Nat.	Chem.	Chem.	Chem.	Queb-Drs-C.S.-Gel	
Dens. Visc.	9.4 @ 41	9.4 @ 41	11.6 @ 44	13.7 @ 47	13.8 @ 110
Mud Resist.	.8 @ 64 °F	.55 @ 78 °F	.92 @ 62 °F	.74 @ 72 °F	.8 @ 95 °F
" Res. BHT	.49 @ 110 °F	.35 @ 120 °F	.36 @ 154 °F	.3 @ 176 °F	.35 @ 212 °F
" pH	11.5 @ °F	12 @ °F	12 @ °F	12 @ °F	12.5 @ °F
" Wtr. Loss	7.6 CC 30 min	7.2 CC 30 min	8.2 CC 30 min	6 CC 30 min	2.6 CC 30 min
" Rmf	.48 @ 110 °F	.36 @ 120 °F	.33 @ °F	.21 @ 176 °F	.18 @ 212 °F
" Rmc	.77 @ 110 °F	.64 @ 120 °F	.82 @ °F	.76 @ 176 °F	2.1 @ 87 °F
Mud Log: Rm	.49	.35			.4 @ 196
Limit	Upper				Upper
Depth	7416				15432
Bit Size	9 5/8"	9 5/8"	9 5/8"	6 5/8"	6 5/8"
Brand Type	WRS-P	WRS-P	WRS-P	WRS-P	POWERED
Head Type	H	H	H	H	H
Oper. Rig Time	3 Hrs.	4 Hrs.	4 Hrs.	2-Hrs.	3 Hrs.
Truck No.	1760 - Hobbs	1759 - Hobbs	1760 - Hobbs	1758 - HOBBS	
Recorded By	Maxwell	Giesel	Howe	Howe	Maxwell
Witness	Ashley	Ashley	Ashley	Ashley	Ashley

VOID HERE

REMARKS

Shell No. 1 SW.

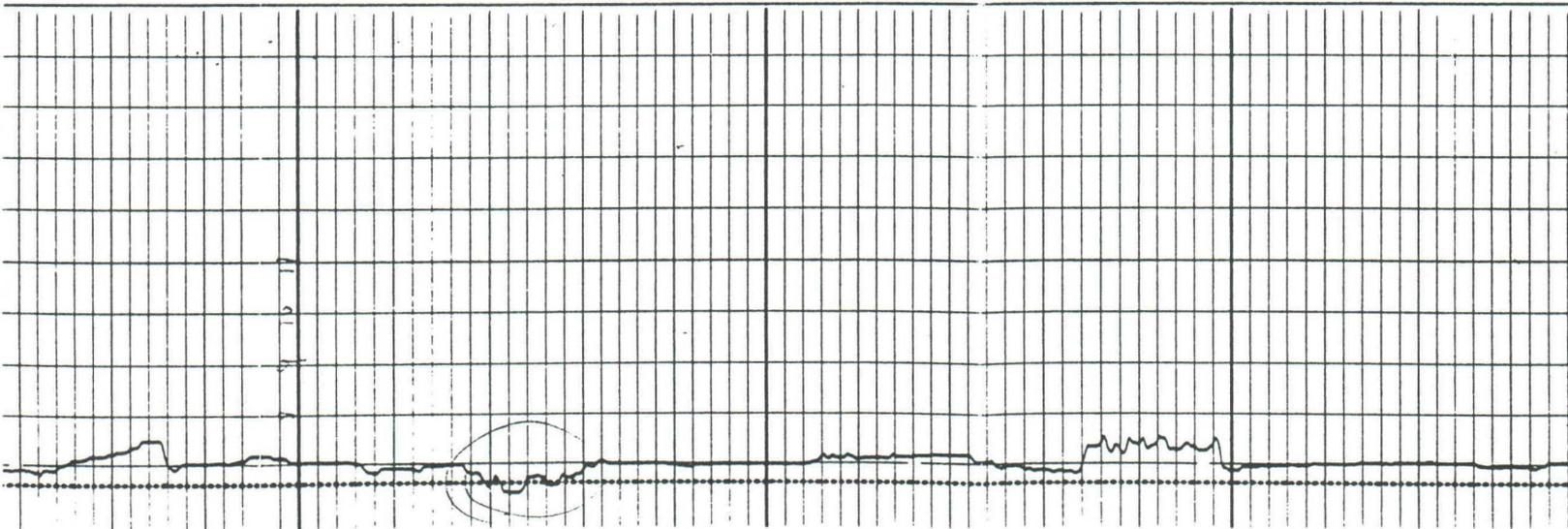
Microlog.

10

10  
12

12900

13000



#16  
12

**Schlumberger**

**BOREHOLE COMPENSATED SONIC LOG**

COUNTY EDDY  
 FIELD LOS MEDANOS  
 LOCATION JAMES RANCH  
 WELL NO. 13  
 COMPANY BASS ENTERPRISES

COMPANY BASS ENTERPRISES  
 WELL JAMES RANCH NO. 13  
 FIELD LOS MEDANOS  
 COUNTY EDDY STATE NEW MEXICO

LOCATION 1440' FWL & 860' FWL  
 API SERIAL NO. 6 SEC. 23-S TWP 31-E RANGE

Other Services:  
DLL

Permanent Datum: G.L.; Elev.: 3308  
 Log Measured From R.K.B. 23.5 Ft. Above Perm. Datum  
 Drilling Measured From R.K.B.

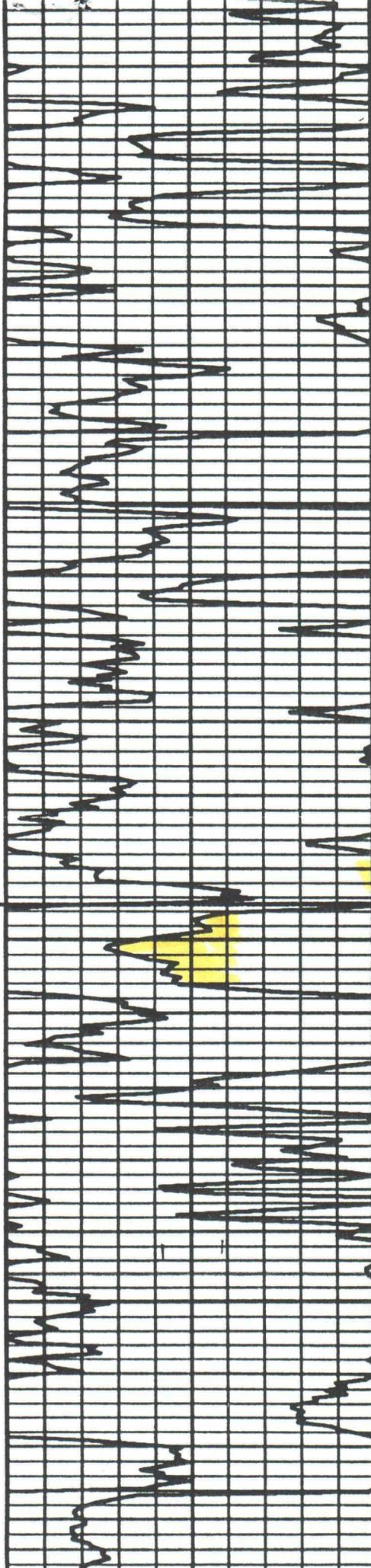
Elev.: K.B. 3331.5  
 D.F. 3330.5  
 G.L. 3308

Date	7-25-82			
Run No.	ONE (TVD)			
Depth-Driller	15078	<b>CORRECTED TO TRUE VERTICAL</b>		
Depth-Logger (Schl.)	15065			
Btm. Log Interval	15062	<b>DEPTH AT PBCC</b>		
Top Log Interval	11578			
Casing-Driller	7.0411580	@	@	@
Casing-Logger	11578			
Bit Size	6.125			
Type Fluid in Hole	XC POLYMER	PROPERTY OF		
Dens.	10.2	40	<b>BASS ENTERPRISES PRODUCTION CO.</b>	
Visc.	10.5	9	<b>ENGINEERING SECTION</b>	
pH		ml		ml
Fluid Loss				
Source of Sample	MUD PIT			
Rm @ Meas. Temp.	0.046 @ 96 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	0.035 @ 96 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Source: Rmf	Rmc			
MEAS				
Rm @ BHT	0.02 @ 202 °F	@ °F	@ °F	@ °F
TIME				
Circulation Stopped	2200 7-24			
Logger on Bottom	1145 7-25			
Max. Rec. Temp.	202 °F	°F	°F	°F
Equip.	Location	8279 HOBBS OH		
Recorded By	RIES			
Witnessed By	TUJAGUE			

The well name, location and borehole reference data were furnished by the customer.

SCALE CHANGES	Type Log			
	Depth			
	Scale Up Hole			
	Scale Down Hole			
Run No.	ONE			
Service Order No.	279622			
Fluid Level				
EQUIPMENT DATA				
Sonic Panel No.	1347			

FOLD HERE



12900

TVD  
log.

T/Atoka Sand.

9/82



13000

JRWIS

100

ΔT

NOTE  
TOOL AMPLITUDE  
= 2.5'



See Reverse  
Bank log  
mnd log

SS: gry-cn, tr  
 imbdd in

LS: itn-bff, xl  
 lt gry-gi  
 tr all ar

SS: clt-wht-f  
 w/consol,  
 v/ang-sub

SH: dk brn-gi  
 mica, carb

SS: clt-frstd  
 c gr, cons  
 calc, sme

LS: lt gry-tn  
 m/sft, tr

LS: gry-lt gr  
 frm, fossil  
 tr pyr

SS: clt-frstd  
 pred lmbd

SH: dk gry-gr  
 calc, w/SS

LS: lt gry, mo  
 v/argill,

SH: gry-lt gr  
 sme silty,

LS: wht-bff, x  
 sft chky  
 inter xln

LS: as above!

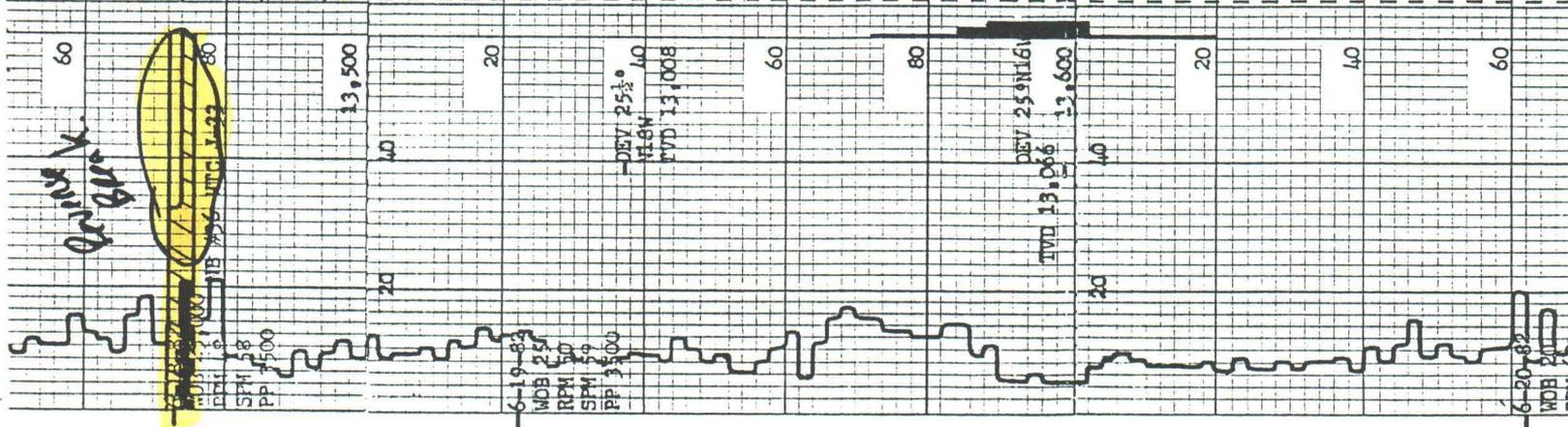
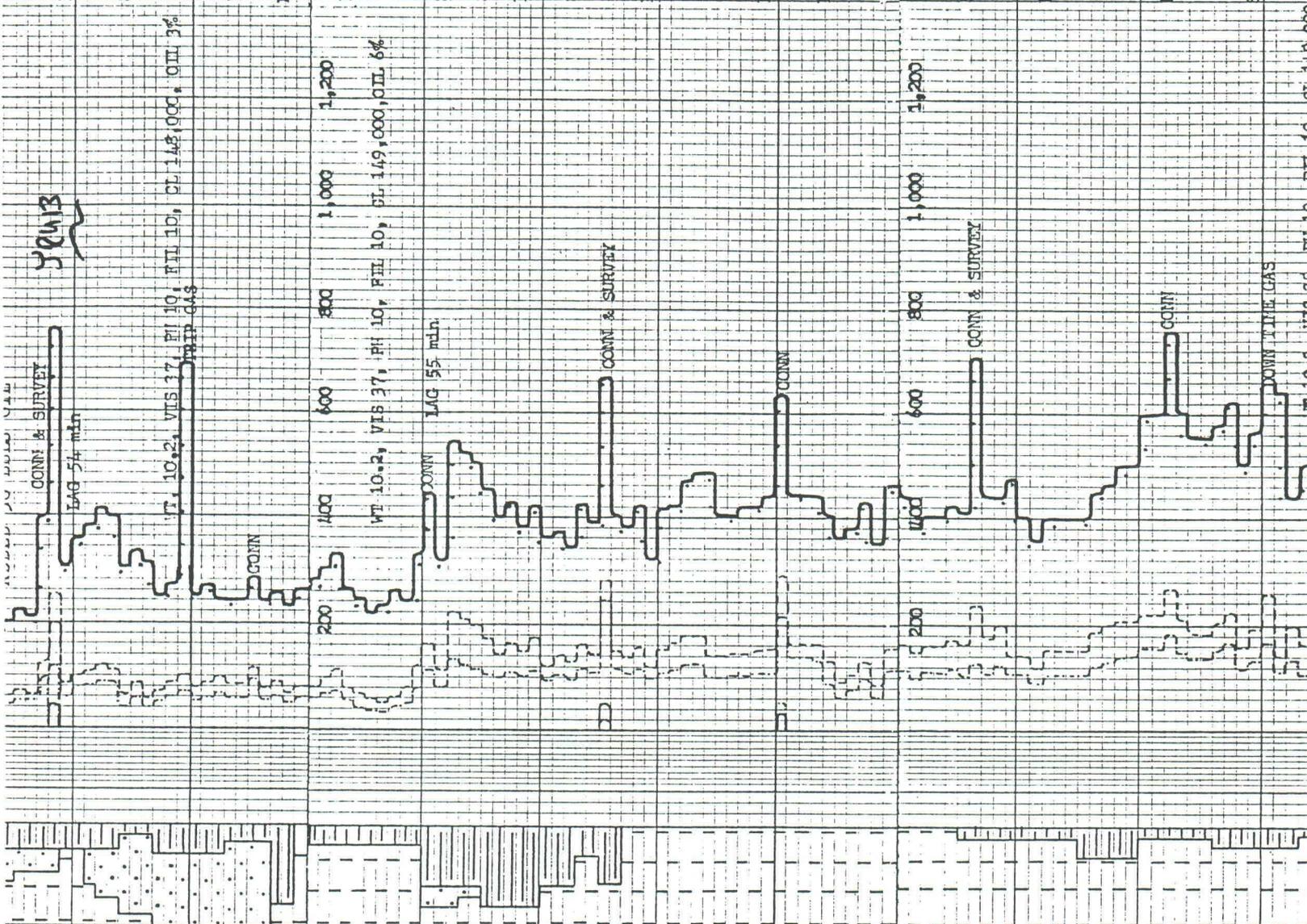
LS: wht-bff, f  
 sucro in l  
 v/clean, tr  
 tr-f pore,

SH: dk gry-bl  
 blk, fuly

LS: wht-bff, x  
 tr free p.

LS: lt gry-wht  
 m/sft, sme  
 argill

SH: gry-dk gr  
 fuly mica,



6-19-83  
 MOB 25  
 RPM 50  
 SPM 50  
 PP 3500

6-20-83  
 MOB 20  
 RPM 50  
 SPM 50  
 PP 3500

#17



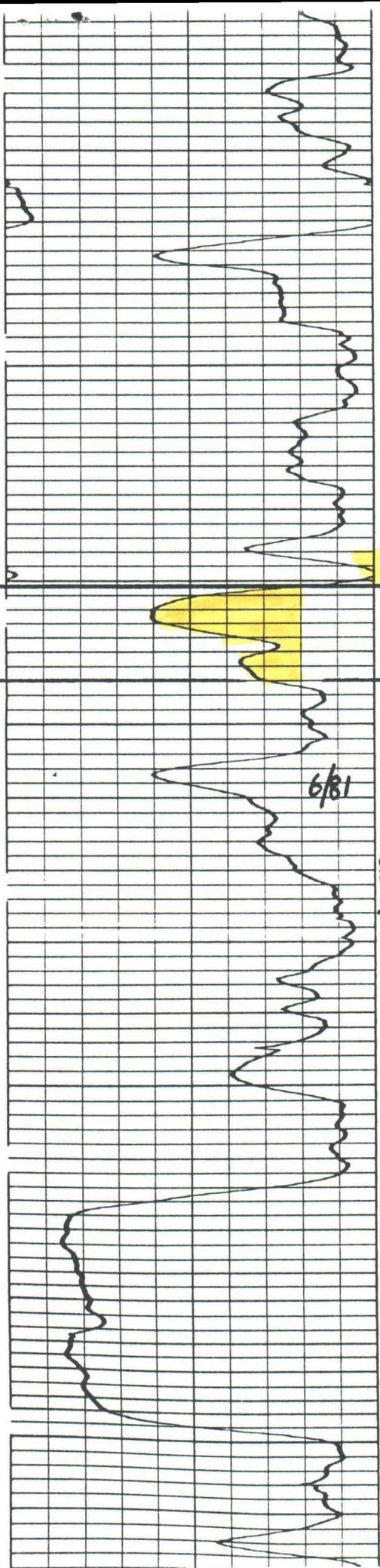
# ACOUSTIC VELOCITY NEUTRON LOG

COMPANY <u>Belco Petroleum Corporation</u> WELL <u>Hudson Federal # 1</u> FIELD <u>Los Medanos</u> County <u>Eddy</u> State <u>N.M.</u>	COMPANY <u>BELCO PETROLEUM CORPORATION</u>		
	WELL <u>HUDSON FEDERAL # 1</u>		
	FIELD <u>LOS MEDANOS</u>		
	COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>		
Location <u>1830' FNL &amp; 1980' FWL</u>		Other Services: <u>Guard Forxo</u>	
Sec. <u>1</u> Twp <u>23-S</u> Rge <u>30-E</u>			
Permanent Datum <u>Ground Level</u> Elev. <u>3298'</u>		Elev.: K.B. <u>3318'</u>	
Log Measured From <u>K. B. - 20</u> Ft. Above Perm. Datum		D.F.	
Drilling Measured From <u>Kelly Bushing</u>		G.L. <u>3298'</u>	
Date	<u>4/1/74</u>	<u>5/9/74</u>	
Run No.	<u>- One</u>	<u>- Two -</u>	
Depth-Driller	<u>11,800</u>	<u>14,312</u>	
Depth-Welex	<u>11,807</u>	<u>14,302</u>	
Btm. Log Inter.	<u>11,803</u>	<u>14,296</u>	
Top Log Inter.	<u>Surface</u>	<u>11,803</u>	
Casing-Driller	<u>10-3/4" @ 3,782</u>	<u>7-5/8" @ 11,800</u>	<u>@</u>
Casing-Welex			
Bit Size	<u>9-1/2"</u>	<u>6-1/2"</u>	
Type Fluid in Hole	<u>Brine</u>	<u>Brine</u>	
Dens.   Visc.	<u>9.2  </u>	<u>10.3   37</u>	<u> </u>
pH   Fluid Loss	<u>10.5   ml</u>	<u>10.0   6.4 ml</u>	<u>  ml</u>
Source of Sample	<u>Circulated</u>	<u>Circulated</u>	
R <sub>m</sub> @ Meas. Temp.	<u>.060 @ 72°F</u>	<u>.053 @ 86°F</u>	<u>@ °F</u>
R <sub>mf</sub> @ Meas. Temp.	<u>.058 @ 68°F</u>	<u>.044 @ 86°F</u>	<u>@ °F</u>
R <sub>mc</sub> @ Meas. Temp.	<u>@ °F</u>	<u>@ °F</u>	<u>@ °F</u>
Source R <sub>mf</sub> R <sub>mc</sub>	<u>Measured</u>	<u>Measured</u>	<u> </u>
R <sub>m</sub> @ BHT	<u>.028 @ 171°F</u>	<u>.025 @ 203°F</u>	<u>@ °F</u>
Time Since Circ.			
Max. Rec. Temp.	<u>171°F @</u>	<u>205°F @ B.H.</u>	<u>°F @</u>
Equip.   Location	<u>8443   Hobbs</u>	<u>8443   Hobbs</u>	<u> </u>
Recorded By	<u>Harrison &amp;</u>	<u>Kidwell</u>	
Witnessed By	<u>Mr. Boundy &amp;</u>	<u>Mr. Henry</u>	

Fold Here

Service Ticket No. \_\_\_\_\_ Remarks: Ticket Nos Run 1-082274; Run 2-081963

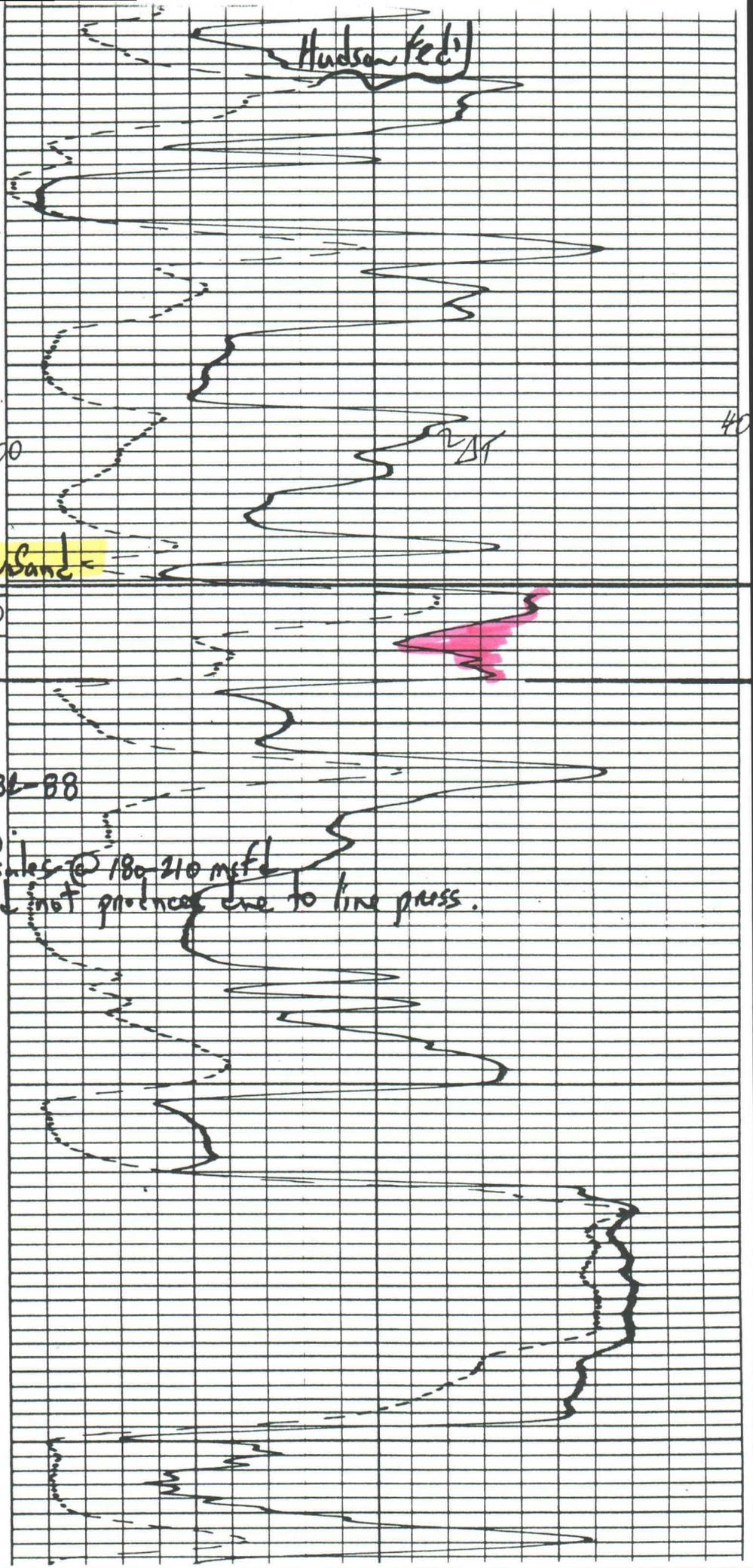
Change in Mud Type or Additional Samples		SCALE CHANGES	
Date	Sample No.	Type Log	Depth
			Scale Up Hole
			Scale Down Hole



800  
12850  
100  
12900  
12950  
13000

T/Atoka Sand

6/81 PG 12886-88  
A/1500g.  
Put to sales @ 180-210 mfd  
but could not produce one to line press.

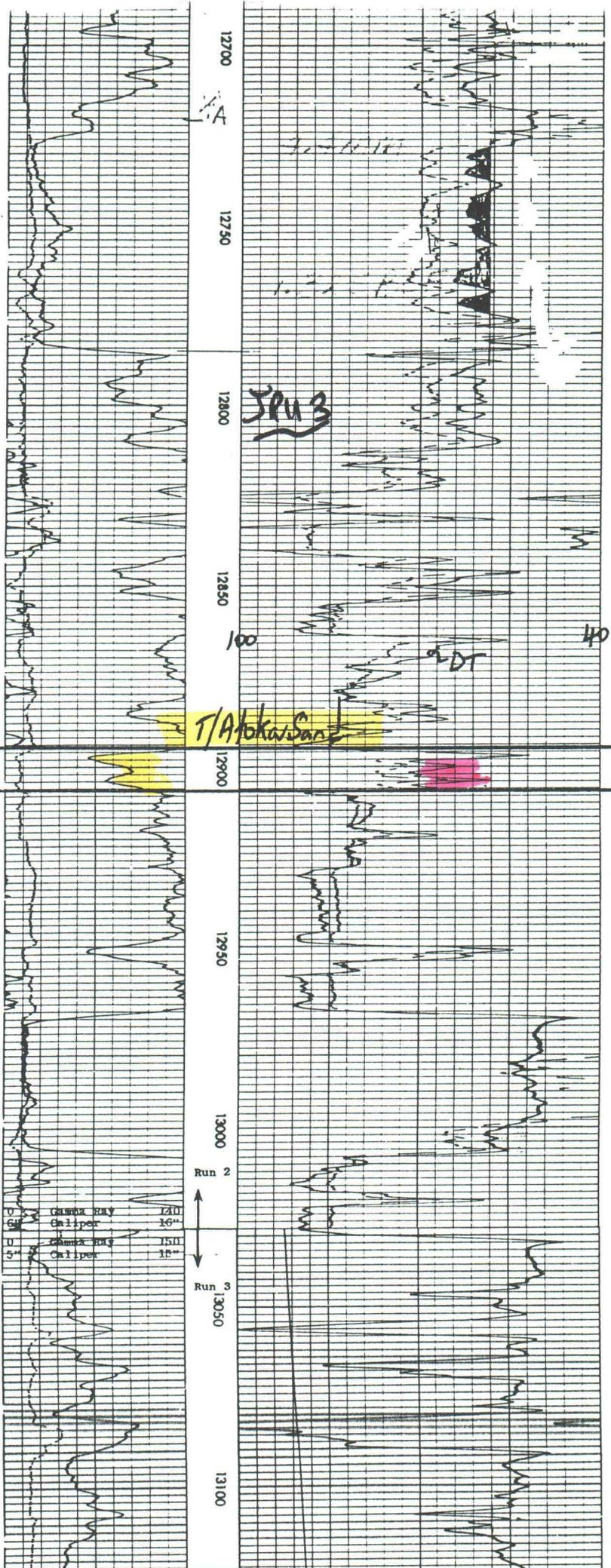


Hudson Fed.

2ST

40





12700

12750

12800

12850

12900

12950

13000

13050

13100

A

SPU 3

100

DT

40

T/A/okas Sand

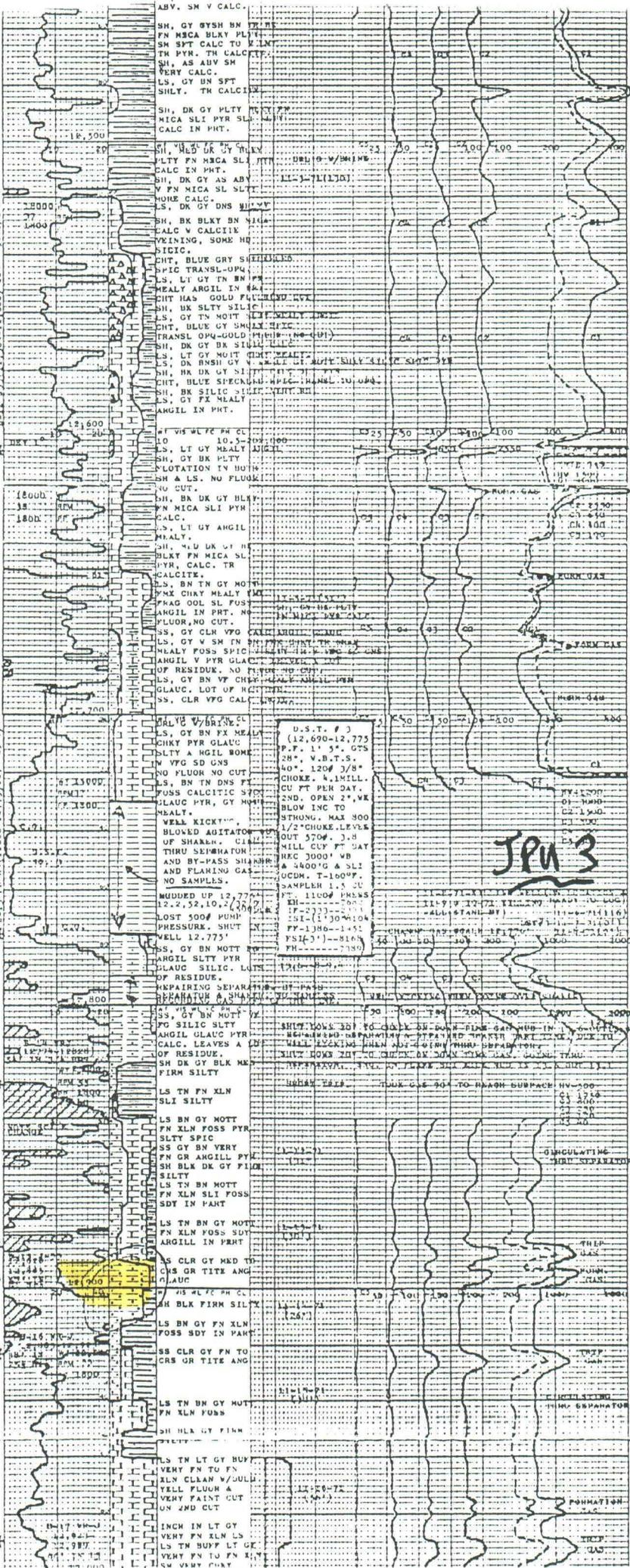
0	Gamma Ray	140
0	Caliper	16"
0	Gamma Ray	150
0	Caliper	18"

Run 2

Run 3

B-12 J55(12,384-12,608) 224' 38 1/2 HRS

B-11 F60H(12,608-12,772) 167' 29' 7 H



U.S.T. # 3  
 (12,690-12,775)  
 P.F. 1' 5" GTS  
 28' W.B.T.S.  
 40" 1200 3/8"  
 CHORE. 4 1/2" MILL  
 CU FT PER DAY.  
 2ND. OPEN 2" WE  
 BLOW INC TO  
 STRONG. MAX 900  
 1/2" CHORE. LEVEL  
 OUT 5700. 3.8  
 MILL CU FT DAY  
 HRC 3000' WB  
 14 2400' & SLI  
 UCDM. T-100W.  
 SAMPLER 1.5 CU  
 FT. 11000 PRESS  
 11-919 1272 THE NEW  
 12-333-200  
 12-1100-1004  
 FF-1380-1452  
 FSI(3)-818K  
 FR-2280

JPA 3

Abk  
 SL

#19

**WORK COPY**  
**Schlumberger**

SIMULTANEOUS  
**COMPENSATED NEUTRON-  
FORMATION DENSITY**

COUNTY _____ FIELD _____ LOCATION <u>12893</u> WELL <u>5315</u> COMPANY <u>4578</u>	COMPANY <u>BELCO PETROLEUM CORPORATION</u> WELL <u>JAMES RANCH NO. 10</u> FIELD <u>LOS MEDANOS</u> COUNTY <u>EDDY</u> STATE <u>N.M.</u> LOCATION <u>1980 FNL + 660 FEL</u> <u>SEC 1, TWP 23S, R1G 30E</u> API SERIAL NO. _____ SEC. <u>1</u> TWP. <u>23S</u> RANGE <u>30E</u> Permanent Datum: <u>GL</u> ; Elev.: <u>3299</u> Log Measured From <u>KB</u> , <u>16</u> Ft. Above Perm. Datum Drilling Measured From <u>KB</u> Elev.: K.B. <u>3215</u> D.F. _____ G.I. <u>3299</u>
Date <u>3-21-80</u> Run No. <u>THREE</u> Depth-Driller <u>14335</u> Depth-Logger <u>14324</u> Btm. Log Interval <u>14322</u> Top Log Interval <u>11800</u> Casing-Driller <u>7 5/8 @ 11800</u> Casing-Logger <u>11792</u> Bit Size <u>6 1/2</u> Type Fluid in Hole <u>BRINE CHEM</u> Dens. <u>1.07</u> Visc. <u>37</u> pH <u>10.5</u> Fluid Loss <u>7.0 ml</u> Source of Sample <u>PIT</u> Rm @ Meas. Temp. <u>.080 @ 75°F</u> Rmf @ Meas. Temp. <u>.060 @ 75°F</u> Rmc @ Meas. Temp. <u>.120 @ 75°F</u> Source: Rmf   Rmc <u>M   M</u> Rm @ BHT <u>.031 @ 197°F</u> TIME Circulation Stopped <u>2:40</u> <u>3:20</u> Logger on Bottom <u>0800</u> <u>3-21</u> Max. Rec. Temp. <u>197</u> °F Equip. Location <u>8016 MOVA</u> Recorded By <u>MCKNIGHT</u> Witnessed By Mr. <u>COOPER/ROGERS</u>	

PROJECT OF  
 LOS ENTERPRISES PRODUCTION CO.  
 Engineering Services:  
 DLL/RXφ

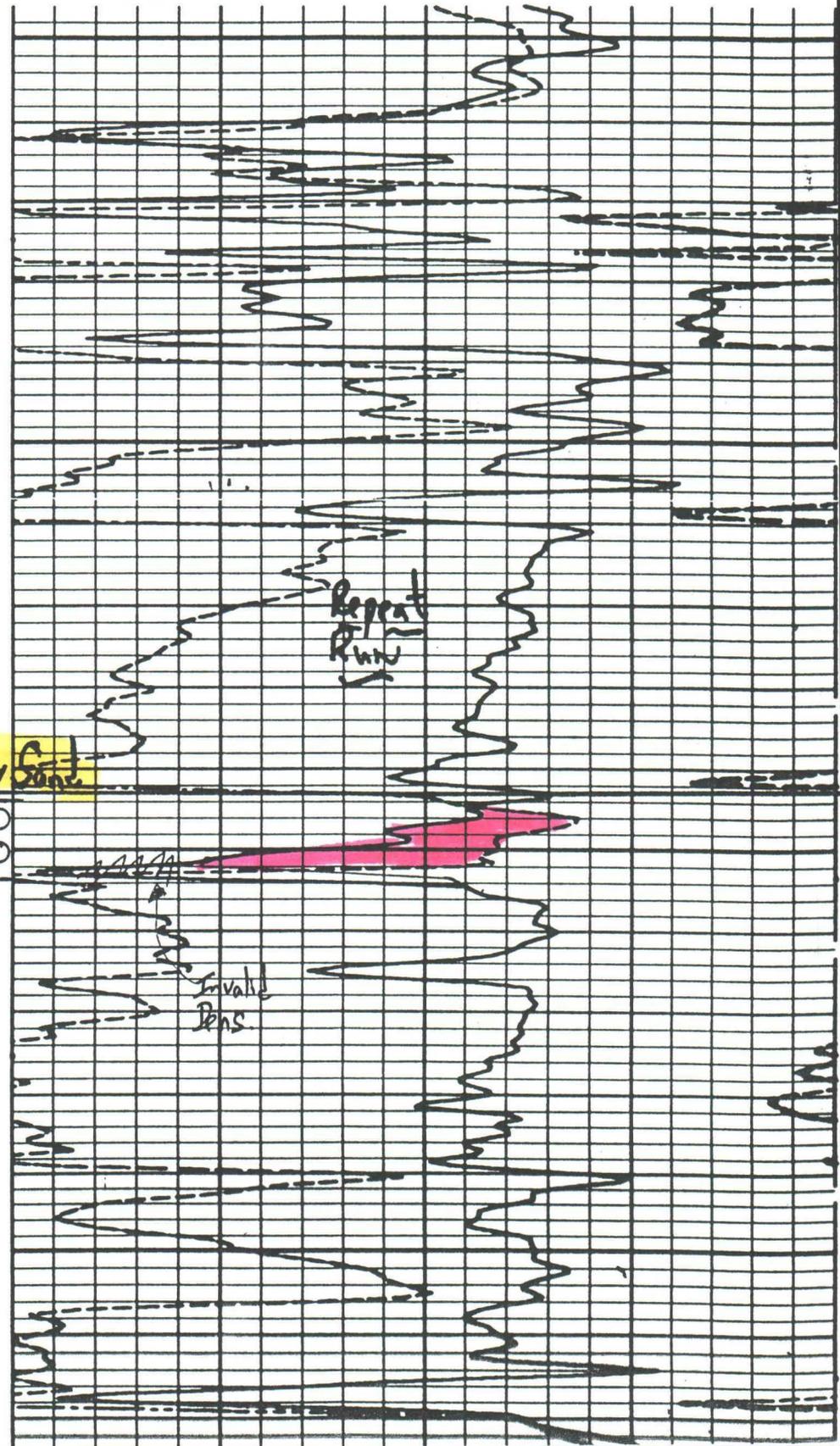
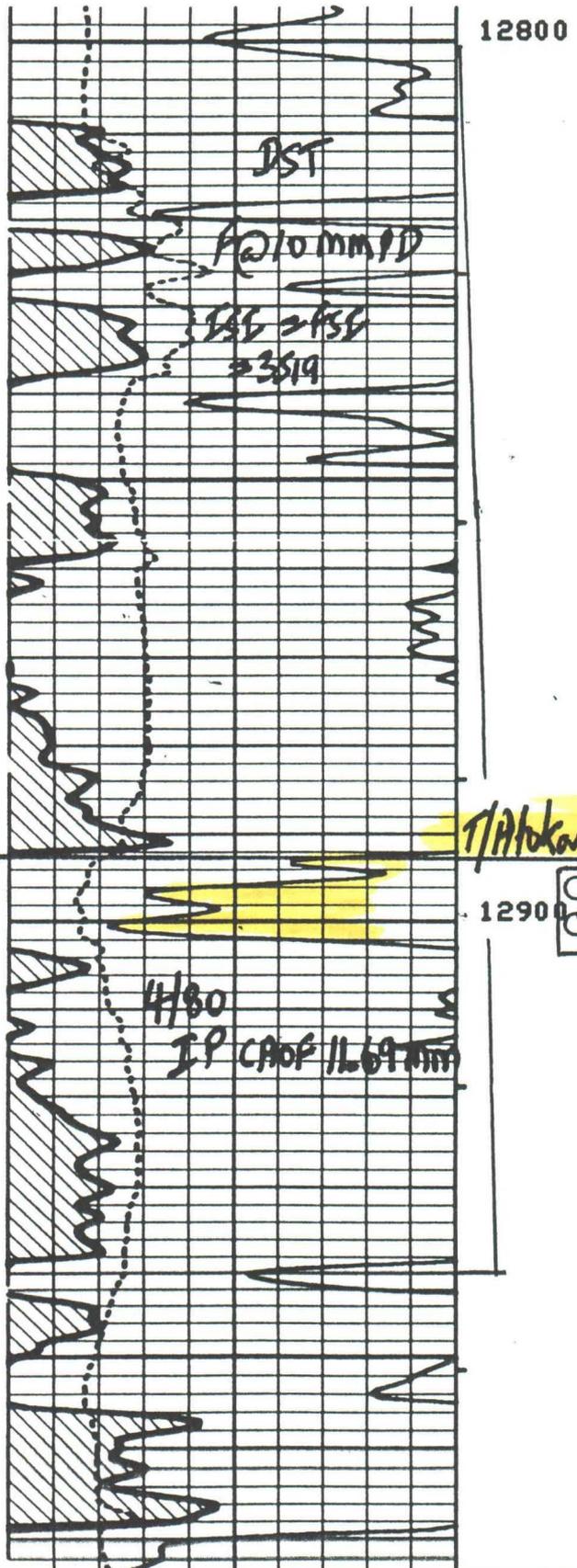
The well name, location and borehole reference data were furnished by the customer.

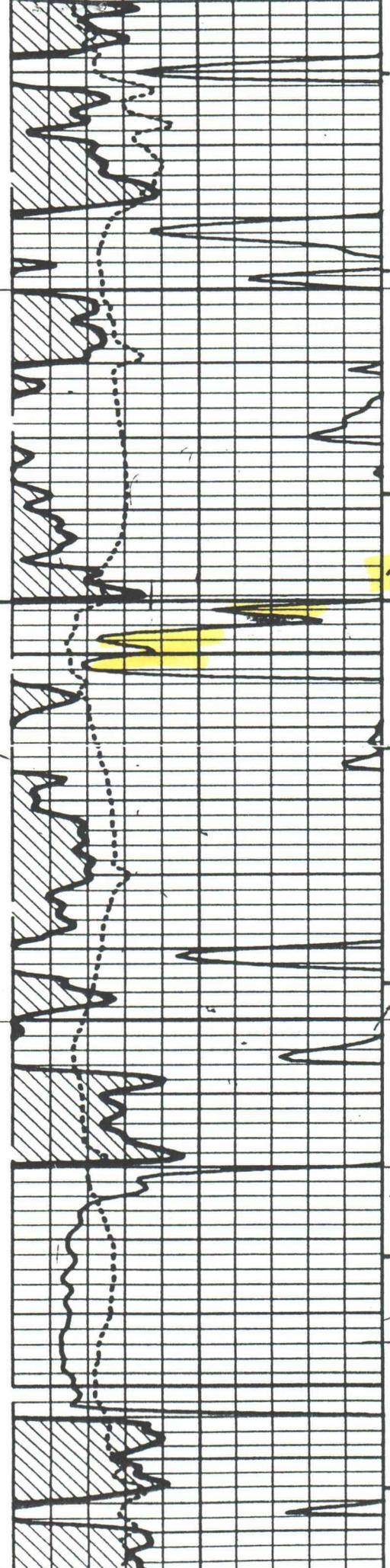
RUN NO.	Service Order No.	Fluid Level	Salinity, PPM CL.	Type Log	Depth
<u>THREE</u>	<u>115101</u>	<u>FULL</u>	<u>86,000</u>		

FOLD HERE

JRU10

REPEAT





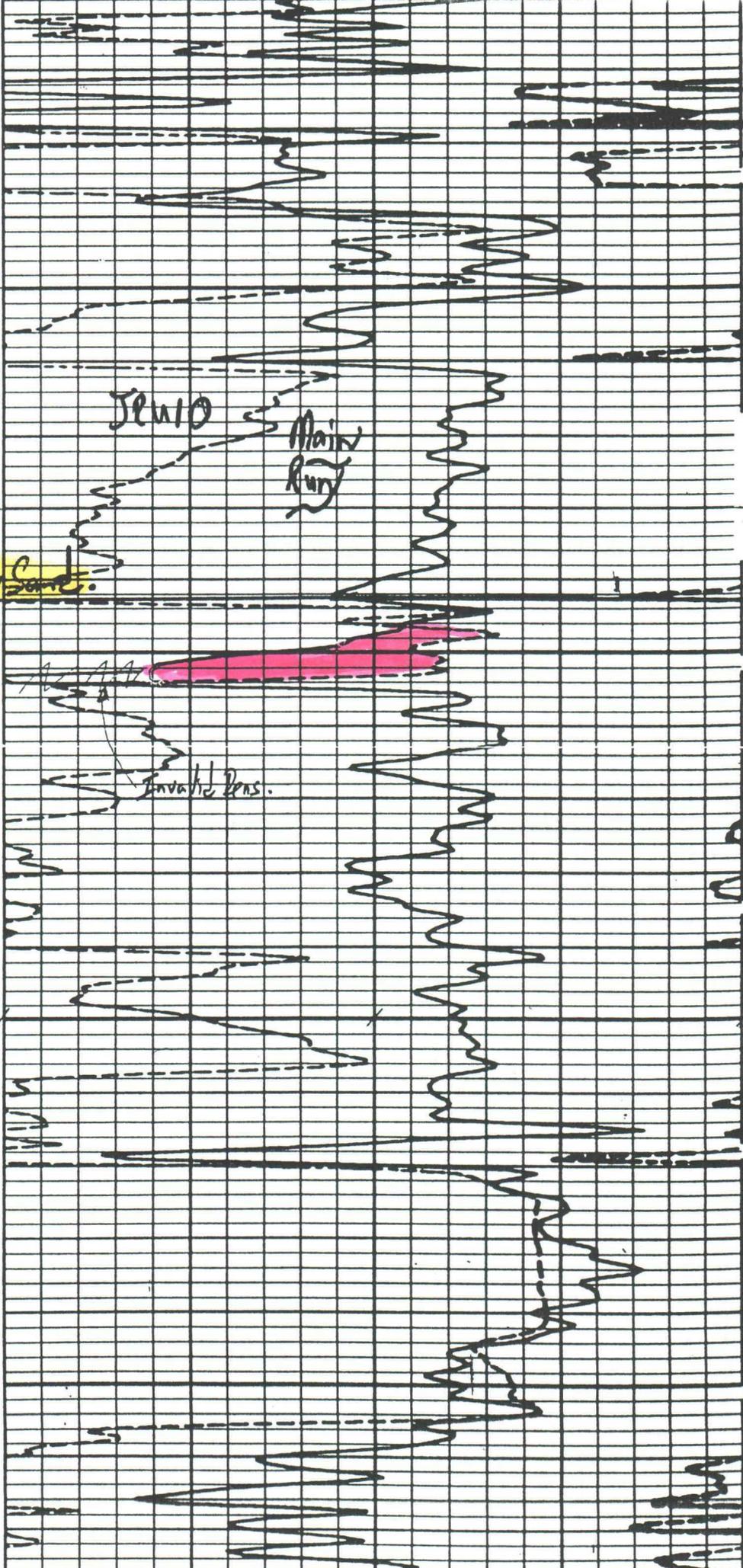
T/Atoka Sand.

12900

T/Boj  
-9655

-9679

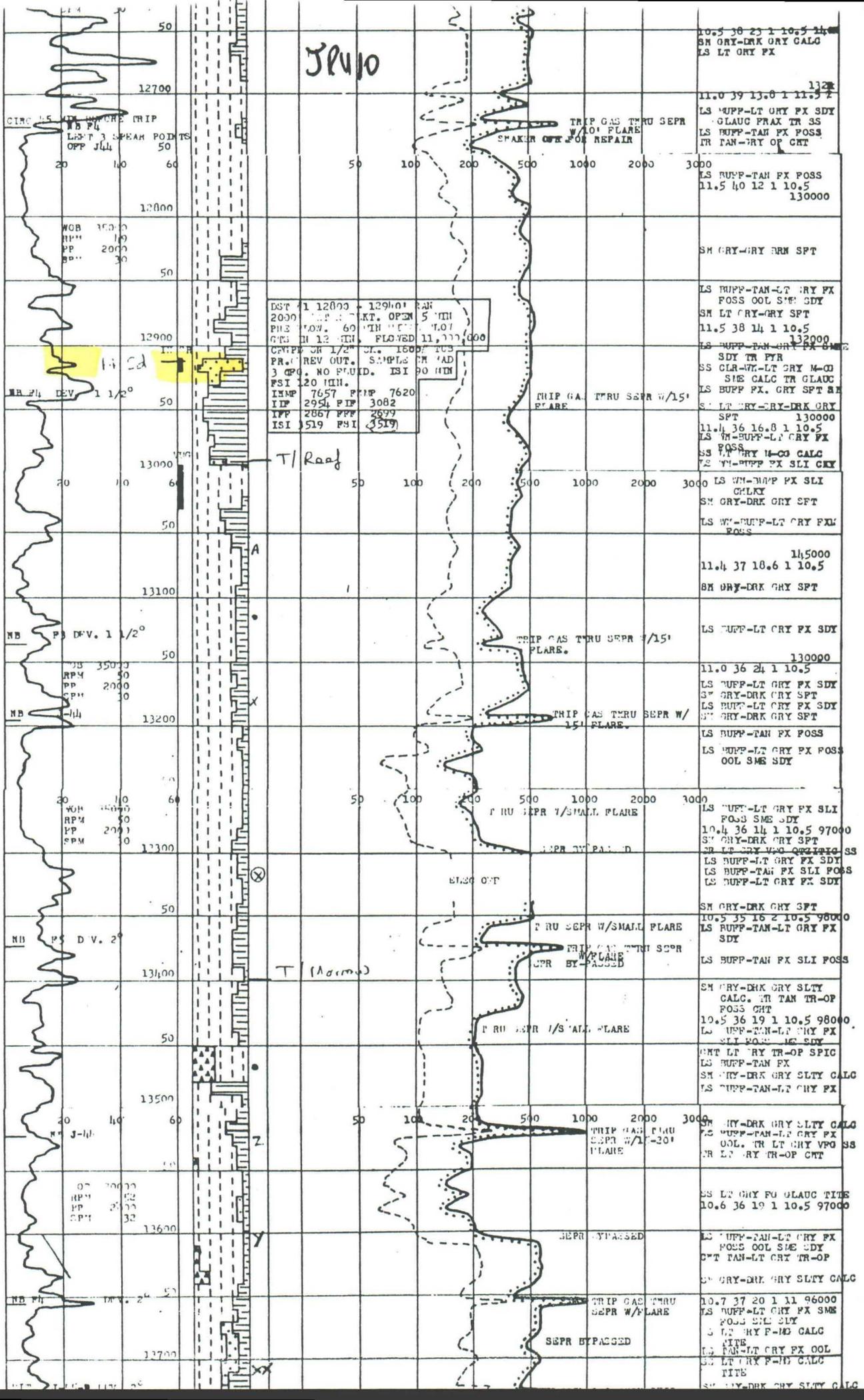
13000



Jeno

Main Run

Invaded Zone



JPL10

DST 12900-12900'	REV. 60	PUMP 120 MIN.	ISI 519
2000	13	7657	2867
60	13	3082	2899
11,000		7620	3519

CIRG 15  
NB P4  
LS-T 3 SPEAR POINTS  
OPP JLL

TRIP GAS THRU SEPR  
W/10' FLARE  
SPARKER OFF FOR REPAIR

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/15'

T/Reef

WOB 3500  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/15'

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/15' FLARE

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/SMALL FLARE

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/SMALL FLARE

T (Normal)

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/SMALL FLARE

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/17-20' FLARE

WOB 1000  
RPM 50  
PP 2000  
SPM 30

SEPR BY-PASSED

WOB 1000  
RPM 50  
PP 2000  
SPM 30

TRIP GAS THRU SEPR W/FLARE

SEPR BY-PASSED



12800

12850

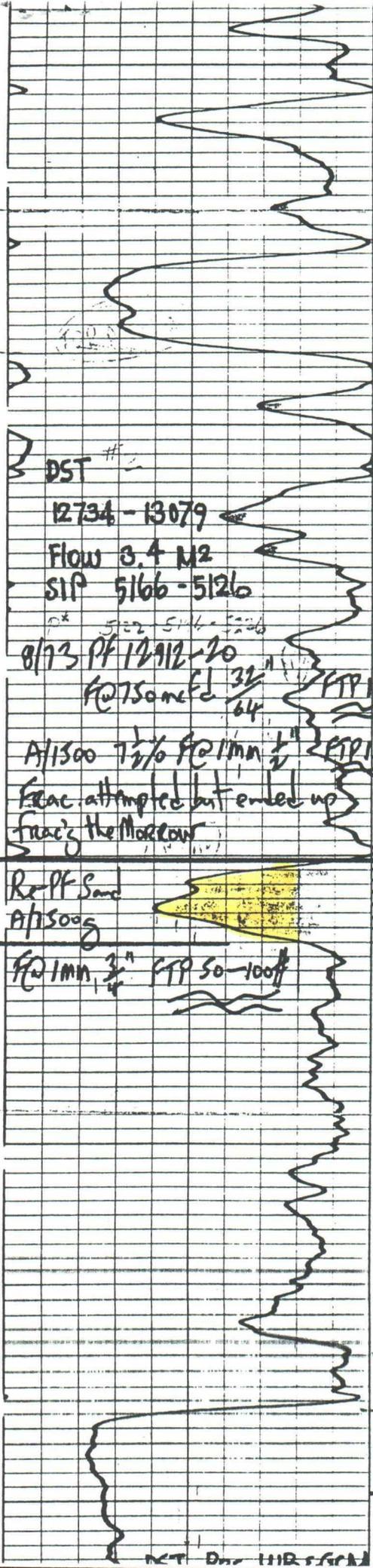
12900

12950

13000

JRU 4

T/Phokar Sand



DST #

12734 - 13079

Flow 3.4 M2

SIP 5166 - 5126

8/73 PF 12912-20

FTP 100  
FTP 150

Frac attempted but ended up  
fract'g the Marrow

Re PF Sand  
A/1500g

Fract 1mm, 3/4" FTP 50-100ft



SS 11"  
GP 30"  
4A

2694

NET Dns HIR SFM

#21  
11

lumberger

SIMULTANEOUS  
COMPENSATED NEUTRON-  
FORMATION DENSITY

COUNTY EDDY  
FIELD LOS MEDANOS  
LOCATION JAMES RANCH UNIT #7  
WELL  
COMPANY CONTINENTAL OIL CO.

COMPANY CONTINENTAL OIL COMPANY  
*Delaware Correlation*  
PROPERTY OF  
BASS ENGINEERING SECTION  
JAMES RANCH UNIT #7  
LOS MEDANOS  
COUNTY EDDY STATE NEW MEXICO

LOCATION 1980' FNL & 1980' FEL,  
API SERIAL NO SEC TWP RANGE  
6 23-S 31-E

Other Services:  
DLL

Permanent Datum: G.L. ; Elev.: 3319  
Log Measured From K.B. , 19 Ft. Above Perm. Datum  
Drilling Measured From K.B.

Elev.: K.B. 3338  
D.F. 3337  
G.L. 3319

Date	7-30-74	9-27-74		
Run No.	ONE	TWO		
Depth-Driller	11913	14569		
Depth-Logger	11896	14567		
Btm. Log Interval	11895	14566		
Top Log Interval	0	11895		
Casing-Driller	10 34@3942	7 @ 11912	@	@
Casing-Logger	3940	11920		
Bit Size	9 1/2	6 1/4		
Type Fluid in Hole	BRINE WTR.	SALTY MUD		
Dens.	10	28	10.6	36
Visc.				
pH	7.5		9	
Fluid Loss		ml		ml
Source of Sample	FLOWLINE	FLOWLINE		
Rm @ Meas. Temp.	.042 @ 90 °F	.044 @ 84 °F	@ °F	@ °F
Rmf @ Meas. Temp.	.038 @ 90 °F	.042 @ 84 °F	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Source: Rmf	M	M		
Rmc				
Rm @ BHT	.023 @ 170 °F	@ °F	@ °F	@ °F
Circulation Stopped	1000	0530		
Logger on Bottom	2200	2000		
Max. Rec. Temp.	170 °F			
Equip. Location	7646 HOBBS	7627 HOBBS		
Recorded By	CREEK	BIRKHEAD, REED		
Witnessed By Mr.	PRYDE	PRYDE		

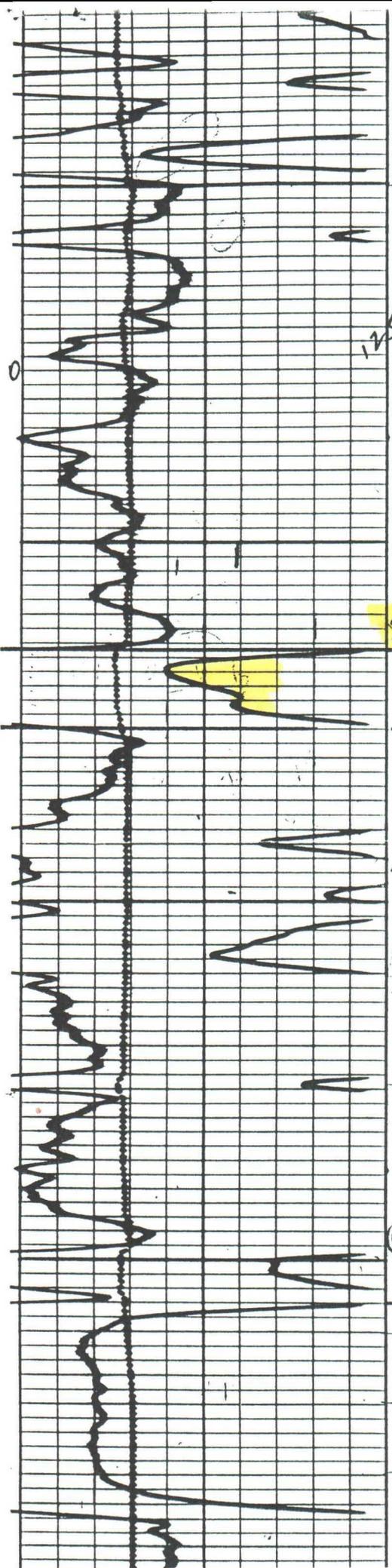
2284  
222

F.W. OFFICE  
BASS

The well name, location and borehole reference data were furnished by the customer.

SCALE CHANGES  
Type Log Death Scale Up Hole Scale Down Hole  
RUN NO. ONE 14509 TWO 14509  
Service Order No.

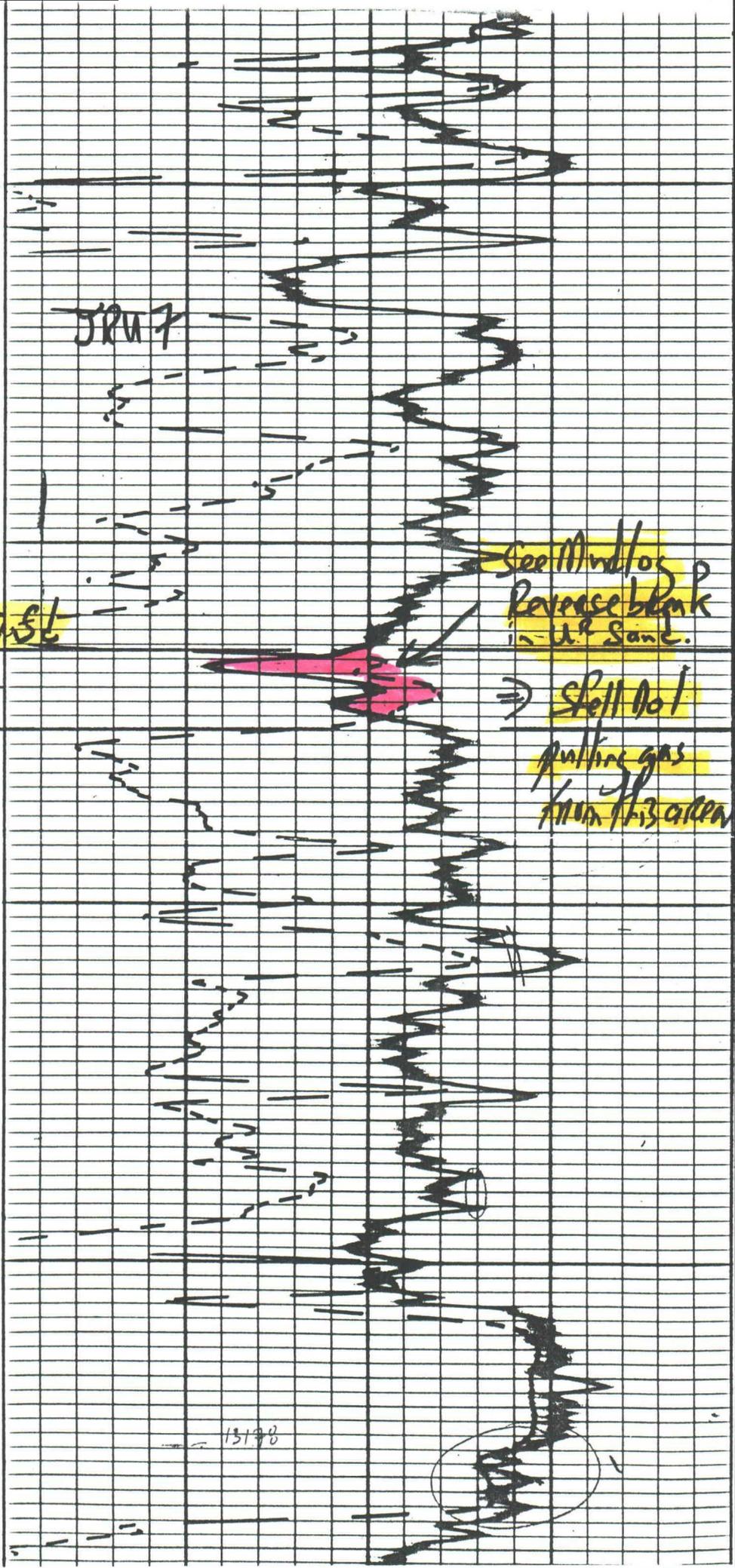
FOLD HERE



T/A/ok/5/6

1300

1300



JRU 7

See Mnd/og  
Reverse blank  
in U<sup>2</sup> Sand.

⇒ Shell Oil  
pulling gas  
from this area

13198

1300

1300

JPM7.

TR OOL

SH:GY DK GRY SFT-FIRM CALC

SH:GRY SFT MICA FYI CALC

SS:WH M-LT BRN TGT FRI HD RD SUB-RD GLAU IYR

SH:AA

LS:DK GRY BRN FX DIS SFT HD FYI

SM FREE PYRITE

LS:GRY DK GRY BRN VFX SILIC FOSS DK

SH:MED GRY SFT DK GRY SLTY HD CALC

LS:GRY DK GRY BRN VFFX FOSS

SS:CLR GRY FSD M C G QZITIC SLI GLAUC PYT TR MIC

SH:GRY DK GRY SLTY HD MICA SM GY SFT

LS:DK GRY ARGIL SLT GRY BRN VFX FOSS SM SILIC GLAUC

SS:GRY FSTD CLR RNI SUB ANG ANG CONSI F C G SLI GLAUC

LS:WH BUF LT GRY DR MICRO XLN (CLEAN) SM CALCITE FILLED VUGS

LS:BUF WH TAN VF FX DNS SM VUGS FOSS DULL GOLD FLU NO CUT

SH:DK GRY SLTY MICA HD SLI CALC

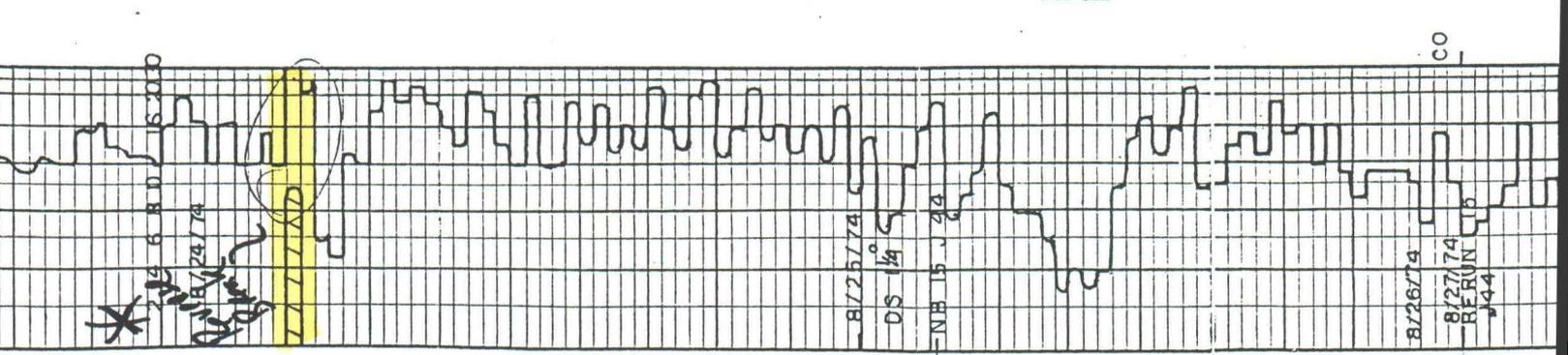
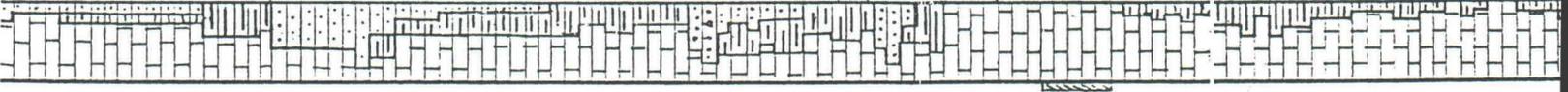
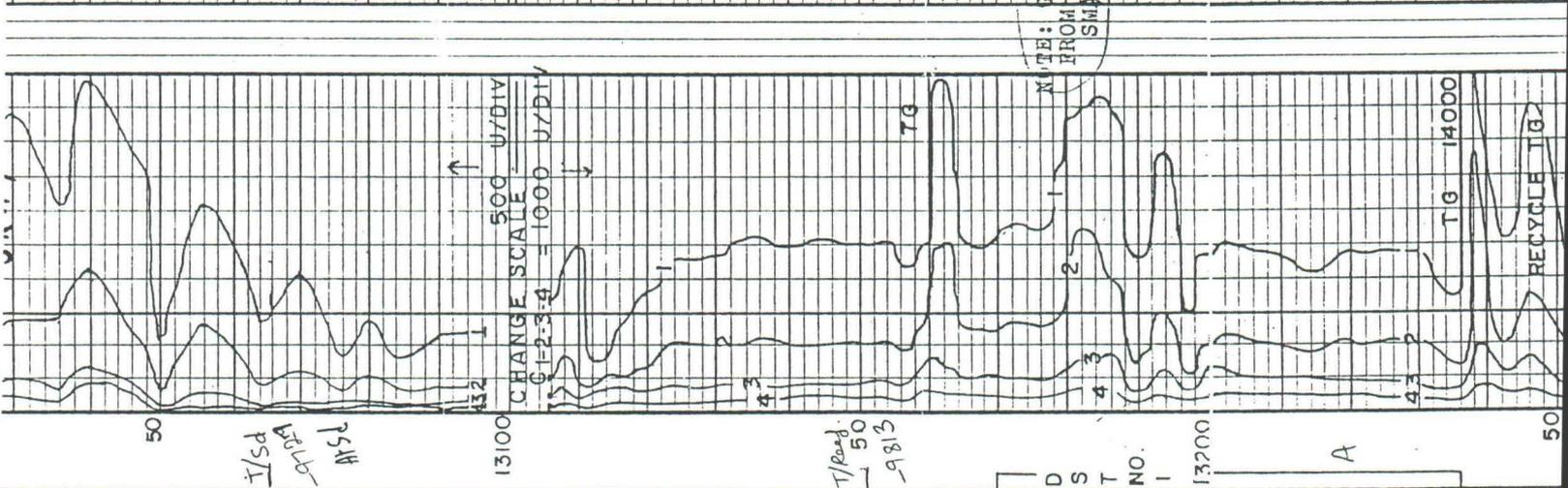
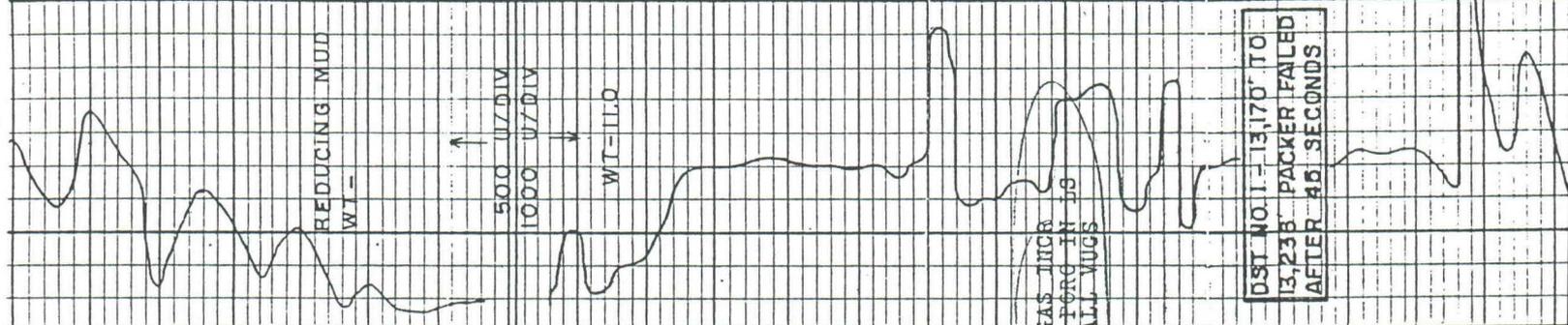
LS:GRY TAN DNS VFX

LS:BRN GRY/BRN VFX DES MICRO FOSSIL ARGIL SM MICACEOUS SILY DK BRN COL

SH:DK GRY SLTY FIRM FELY PYT MICA

LS:TAN GRY BUF VFX MICRO FOSSIL

SS:LT BRN FG TGT HD SUP R V/CALC LATE



NOTE: GAS INCR FROM LOG IN FB SMALL VUGS

DST NO. 1 - 13170' TO 13238' PACKER FAILED AFTER 46 SECONDS

8/25/74  
8/26/74  
8/27/74

#22



DIGITAL LOGGING SYSTEM

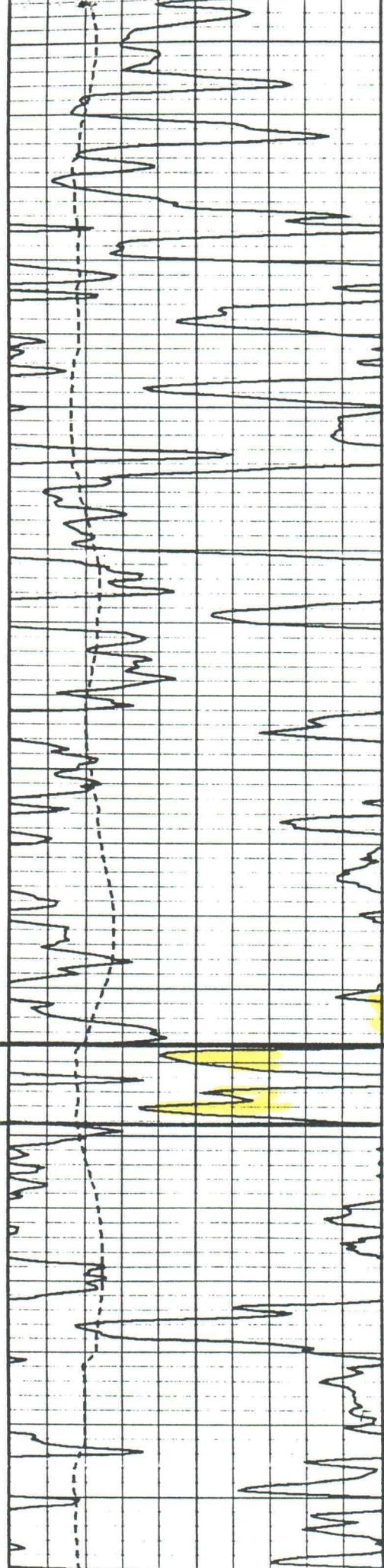
# COMPENSATED DENSITY DUAL SPACED NEUTRON LOG

COMPANY Belco - Petroleum Corporation Corporation James Ranch Unit # 14 WELL Los Medanos FIELD Eddy State N.M. County	COMPANY <u>BELCO PETROLEUM CORPORATION</u>		
	WELL <u>JAMES RANCH UNIT # 14</u>		
	FIELD <u>LOS MEDANOS</u>		
	COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>		
Location		Other Services:	
SURF: 1980' FWL & 100' FSL of Sec. 6		Dual Guard-Forxo	
BTM : 1980' FWL & 660' FNL of Sec. 7			
Sec. _____ Twp <u>23-S</u> Rge <u>31-E</u>			
Permanent Datum <u>Ground Level</u> Elev. <u>3300'</u>		Elev.: K. B. <u>3327'</u>	
Log Measured From <u>K. B. - 27</u> Ft. Above Perm. Datum		D. F. <u>3326'</u>	
Drilling Measured From <u>Kelly Bushing</u>		G. L. <u>3300'</u>	
Date	<u>6-5-83</u>	<u>7-12-83</u>	
Run No.	<u>- One -</u>	<u>- Two -</u>	
Depth—Driller	<u>12,058</u>	<u>14,640</u>	
Depth—Welex	<u>12,058</u>	<u>14,645</u>	
Btm. Log. Inter	<u>11,850</u>	<u>14,644</u>	
Top Log Inter.	<u>60</u>	<u>11,850</u>	
Casing—Driller	<u>13-3/8" @ 3,930</u>	<u>7-5/8" @ 12,058</u>	<u>@</u>
Casing—Welex	<u>3,915</u>	<u>12,046</u>	
Bit Size	<u>9-7/8"</u>	<u>6-1/2"</u>	
Type Fluid in Hole	<u>Salt Mud</u>	<u>Salt Mud</u>	
Dens. I Visc.	<u>9.1   29</u>	<u>10.9   34</u>	
pH I Fluid Loss	<u>9   ml</u>	<u>9.5   6.4 ml</u>	
Source of Sample	<u>Pit</u>	<u>Circulated</u>	
R <sub>m</sub> @ Meas. Temp.	<u>.08 @ 82 °F</u>	<u>.06 @ 82 °F</u>	<u>@ °F</u>
R <sub>m</sub> @ Meas. Temp	<u>.09 @ 79 °F</u>	<u>.04 @ 100 °F</u>	<u>@ °F</u>
R <sub>m</sub> @ Meas. Temp.	<u>.10 @ 70 °F</u>	<u>.10 @ 92 °F</u>	<u>@ °F</u>
Source R <sub>m</sub> R <sub>m</sub>	<u>Measured</u>	<u>Measured</u>	
R <sub>m</sub> @ BHT	<u>.04 @ 154 °F</u>	<u>.022 @ 222 °F</u>	<u>@ °F</u>
Time Since Circ.	<u>8 Hours</u>	<u>8 Hours</u>	
Max. Rec. Temp.	<u>154 °F @ -</u>	<u>222 °F @ B.H.</u>	<u>°F @</u>
Equip. I Location	<u>3414   Hobbs</u>	<u>4551   Hobbs</u>	
Recorded By	<u>Kveton</u>	<u>Campbell &amp; Baeza</u>	
Witnessed By	<u>Mr. Parrott</u>	<u>Mr. Parrott</u>	

Fold Here

EQUIPMENT DATA

GAMMA	Run No.	<u>- 1&amp;2 -</u>	Run No.	<u>- 1&amp;2 -</u>
	Tool Model No.	<u>265&amp;265A</u>	Log Type	<u>N - N</u>
ACOUSTIC	Tool Model No.	<u>3-3/8"</u>	Density	<u>127</u>
	Diameter	<u>1.09</u>	Tool Model No.	<u>265 A</u>
DENSITY	Run No.	<u>- 1&amp;2 -</u>	Run No.	<u>- 1&amp;2 -</u>
	Log Type	<u>Density</u>	Log Type	<u>N - N</u>
NEUTRON	Tool Model No.	<u>127</u>	Tool Model No.	<u>265 A</u>
	Serial No.	<u>109</u>	Serial No.	<u>109</u>



13000.

JRU14

13050.

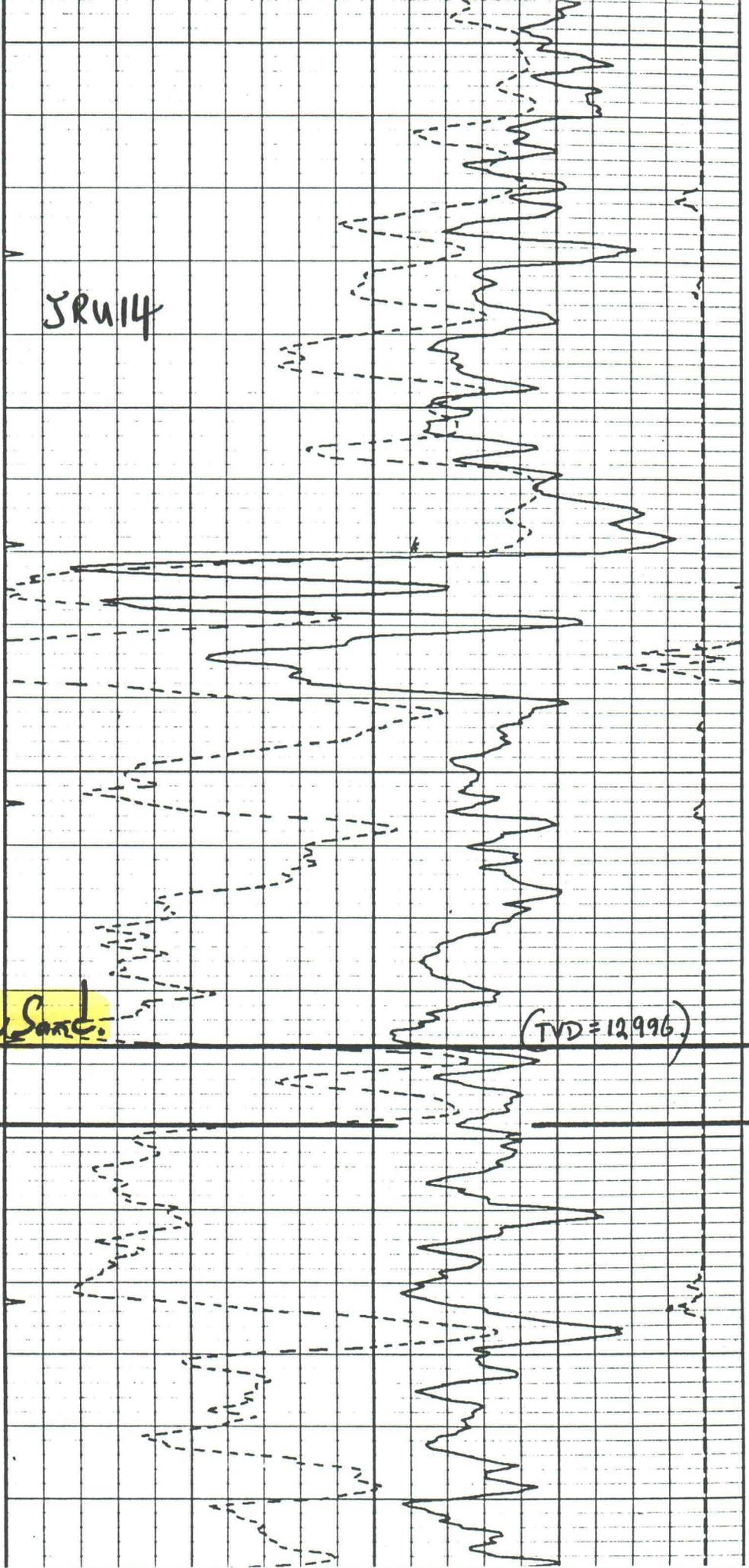
13100.

1/1 Ahoka Sand.

(TVD = 12996)

13150.

13200.



#23  
~

# EDDY SEC-4 TWP-23S RGE-31E

## Petroleum Information

DENVER, COLORADO 80201

REFERENCE **Y** 5734F

42

API NO. 30-015-26509.....

REPRODUCTION FOR RESALE IN WHOLE OR PART PROHIBITED

<b>Well Name:</b> WEST SAND DUNES (MORROW) <b>Well No.:</b> 200 F.M. 300 F.M. SEC 8 SURF LOCATION <b>Field:</b> WEST SAND DUNES (MORROW) <b>County:</b> EDDY <b>State:</b> NEW MEXICO		<b>Company:</b> SANTA FE ENERGY OPERATING PART, L.P. <b>Well:</b> P. G. #4 FEDERAL NO. 1 <b>Field:</b> WEST SAND DUNES (MORROW) <b>County:</b> EDDY <b>State:</b> NEW MEXICO	
<b>Well No.:</b> 200 F.M. 300 F.M. SEC 8 SURF LOCATION <b>Well Name:</b> WEST SAND DUNES (MORROW) <b>Field:</b> WEST SAND DUNES (MORROW) <b>County:</b> EDDY <b>State:</b> NEW MEXICO		<b>Well No.:</b> 200 F.M. 300 F.M. SEC 8 SURF LOCATION <b>Well Name:</b> WEST SAND DUNES (MORROW) <b>Field:</b> WEST SAND DUNES (MORROW) <b>County:</b> EDDY <b>State:</b> NEW MEXICO	
<b>Well No.:</b> 200 F.M. 300 F.M. SEC 8 SURF LOCATION <b>Well Name:</b> WEST SAND DUNES (MORROW) <b>Field:</b> WEST SAND DUNES (MORROW) <b>County:</b> EDDY <b>State:</b> NEW MEXICO		<b>Well No.:</b> 200 F.M. 300 F.M. SEC 8 SURF LOCATION <b>Well Name:</b> WEST SAND DUNES (MORROW) <b>Field:</b> WEST SAND DUNES (MORROW) <b>County:</b> EDDY <b>State:</b> NEW MEXICO	

The well name, location and barohole reference data were furnished by the customer.

All interpretations are opinions based on information from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Well No.	178848
Section Order No.	078848
Section Well Level	
Section	2000 F.M.
Section 1	221 DEEP
Section 2	221 DEEP
Section 3	2000 F.M.
Section 4	
Section 5	
Section 6	
Section 7	
Section 8	
Section 9	
Section 10	
Section 11	
Section 12	

SAFETY IN MILES PE NOT PRESENTED.

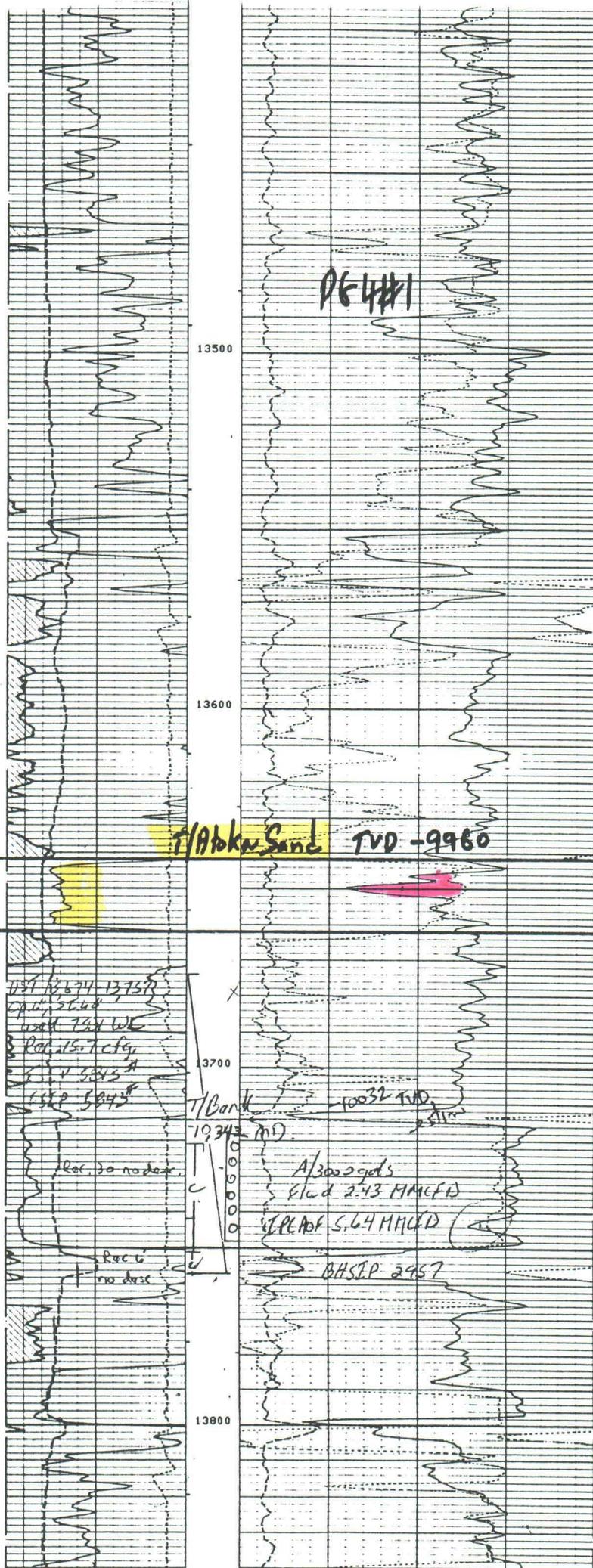
NOTE DEPTH OFFSETS ON TOP SIBRITS

DID NOT TIE INTO RUN 2.

USED OWN DEPTH SYSTEM ON THIS RUN.

WILL CHANGE RUN 2 TO MATCH

CHANGED PARAMETERS							
NAME	VALUE	UNIT	DEPTH ( F )	NAME	VALUE	UNIT	DEPTH ( F )
DD	11.0000	F	11500.0	DD	11.0000	F	11000.0
DD	10.5000	F	10500.0	DD	10.0000	F	10000.0
DD	9.50000	F	9500.0	DD	9.00000	F	9000.0



DE 441

13500

13600

T/Abok Sand TVD -9980

Use 12.74 13.75  
 pin stud  
 with 7.5 W  
 Rec. 15.7 cty  
 15845  
 (SEP 5045)

13700

T/Bank 10032 TVD  
 19342 (m)

Rec. 30 no data

A/3000 gals  
 flow 2.43 MMCFD  
 STRENGTH 5.64 MMCFD

Rec. 6  
 no data

BHSIP 2457

13800

Work Copy S.A.H. 7/90.

#24



**ATLAS  
WIRESLINE  
SERVICES**

COMPENSATED  
**Z-DENSILOG**  
GAMMA RAY

COMPENSATED  
**NEUTRON**

FILE NO.	COMPANY <u>SANTA FE ENERGY OPERATING PARTNERS, L.P.</u>	
RPI NO.	WELL <u>NORTH PURE GOLD "8" FEDERAL NO. 1</u>	
	FIELD <u>WEST SAND DUNES - MORROW</u>	
	COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>	
CONFIDENTIAL	LOCATION: <u>1900' FSL &amp; 660' FEL !</u>	OTHER SERVICES DLL/MLL/GR
	<u>SEC 8 1 TWP 23 S RGE 31 E</u>	

PERMANENT DATUM	GROUND LEVEL	ELEV. <u>3333.7</u>	ELEVATIONS
LOGGING MEASURED FROM	<u>K.B 26.5</u>	FT. ABOVE P.D.	KB <u>3360.2'</u>
DRILLING MEASURED FROM	<u>KELLY BUSHING</u>		DF <u>3359.2'</u>
			GL <u>3333.7'</u>

DATE	16 APRIL, 1990	25 MAY, 1990
RUN	<u>2</u>	<u>3</u>
SERVICE ORDER	<u>42799</u>	<u>59589</u>
DEPTH-DRILLER	<u>11,718'</u>	<u>14,825'</u>
DEPTH-LOGGER	<u>11,716'</u>	<u>14,807'</u>
BOTTOM LOGGED INTERVAL	<u>11,713'</u>	<u>14,804'</u>
TOP LOGGED INTERVAL	<u>SURFACE</u>	<u>11,660'</u>
CASING - DRILLER	<u>9 5/8" @ 4125'</u>	<u>7.0" @ 11,718'</u>
CASING - LOGGER	<u>4117'</u>	<u>11,709'</u>
BIT SIZE	<u>8 1/2"</u>	<u>6.0"</u>
TYPE FLUID IN HOLE	<u>GEL/CAUSTIC</u>	<u>GEL/POLYMER/BARITE</u>
DENSITY / VISCOSITY	<u>8.5 PPG 28</u>	<u>12.8 PPG 39</u>
PH / FLUID LOSS	<u>10</u>	<u>9.5 26</u>
SOURCE OF SAMPLE	<u>CIRCULATION TANK</u>	<u>FLOW LINE</u>
RM AT MEAS. TEMP.	<u>0.208 @ 81 DEG.F</u>	<u>0.094 @ 90 DEG.F</u>
RMF AT MEAS. TEMP.	<u>0.208 @ 81 DEG.F</u>	<u>0.072 @ 85 DEG.F</u>
RMC AT MEAS. TEMP.	<u>@</u>	<u>@</u>
SOURCE OF RMF / RMC	<u>MEASURED</u>	<u>MEASURED</u>
RM AT BHT	<u>0.105 @ 161 DEG.F</u>	<u>0.042 @ 202</u>
TIME SINCE CIRCULATION	<u>4.5 HOURS</u>	<u>7 HOURS</u>
MAX. REC. TEMP. DEG. F	<u>161 DEG.F</u>	<u>202</u>
EQUIP. NO. / LOC.	<u>HL 6364 HOBBS N.M.</u>	<u>HL 6433 HOBBS N.M.</u>
RECORDED BY	<u>S. HOWELL/W. ROQUEMORE</u>	<u>ZANE REYNOLDS</u>
WITNESSED BY	<u>MR. DOUGLAS/MR. MACHO</u>	<u>PAUL BAUERNFEIND</u>

IN  
EM  
FI  
AL  
ON  
ME  
GU  
OF  
LI  
CO  
INC  
RES  
BY

FOLD HERE

Pure Gold 8 Feb/1 #1.

13200

S/90 DSI 13197-268

F@ 1.18MM +461BWPD

SSI 7234

SSI 6996 (480")

PX 7168

T/A/oka SE



13300

# 25  
11



# COMPENSATED DENSITY DUAL SPACED NEUTRON LOG

Part Number 26000

COMPANY BELCO DEVELOPMENT CORPORATION  
 WELL JAMES RANCH  
 FIELD LOS MEDANOS  
 COUNTY EDDY STATE NEW MEXICO

API No.: \_\_\_\_\_  
 Location: BHL: 1924' FEL & 791' FSL  
 Sec. 7  
 SL : 660' FSL & 100' FWL  
 Sec. 8  
 Sec. \_\_\_\_\_ Twp 23-S Rge 31-E

Other Services:  
 Dual Guard-  
 Forxo

Permanent Datum Ground Level Elev. 3311'  
 Log Measured From K. B. - 28 Ft. Above Perm. Datum Elev.: K.B. 3339'  
 Drilling Measured From Kelly Bushing D.F. 3338'  
 G.L. 3311'

Date	6-1-84	9-5-84		
Run No.	One	Two		
Depth-Driller	12,265	15,100		
Depth-Welex	12,267	15,092		
Btm. Log Inter.	12,250	15,091		
Top Log Inter.	50	12,250		
Casing-Driller	13-3/8" @ 4,012	7-7/8" @ 12,236		@
Casing-Welex	4,008	12,260		
Bit Size	9-7/8"	6-1/2"		
Type Fluid in Hole	Salt Mud	Salt Mud		
Dens.   Visc.	9.2   30	12.1   9.5		
pH   Fluid Loss	9.5   ml	46   5.6 ml	ml	ml
Source of Sample	Pit	Pit		
R <sub>m</sub> @ Meas. Temp.	.10 @ 84 °F	.18 @ 74 °F	@ °F	@ °F
R <sub>my</sub> @ Meas. Temp.	.08 @ 84 °F	.14 @ 70 °F	@ °F	@ °F
R <sub>mx</sub> @ Meas. Temp.	.12 @ 84 °F	.23 @ 68 °F	@ °F	@ °F
Source R <sub>my</sub> R <sub>mx</sub>	Measured	Measured		
R <sub>m</sub> @ BHT	.055 @ 154°F	@ 203 °F	@ °F	@ °F
Time Since Circ.	6 Hours	10 Hours		
Time On Bottom	20:45	10:30		
Max. Rec. Temp.	154 °F @ 12265	203 °F @ B.H.	°F @	°F @
Equip.   Location	3414   Hobbs	3414   Hobbs		
Recorded By	Kveton	Kveton & Sexton		
Witnessed By	Mr. Parrott	Mr. Parrott		

Fold Here

PGM Version: VI. 71 3-12-84  
 VI. 72 7-20-84

Service Ticket No.: 181608(1) 191649(2) API Serial No.: \_\_\_\_\_

RESISTIVITY/RWA SCALE CHANGES

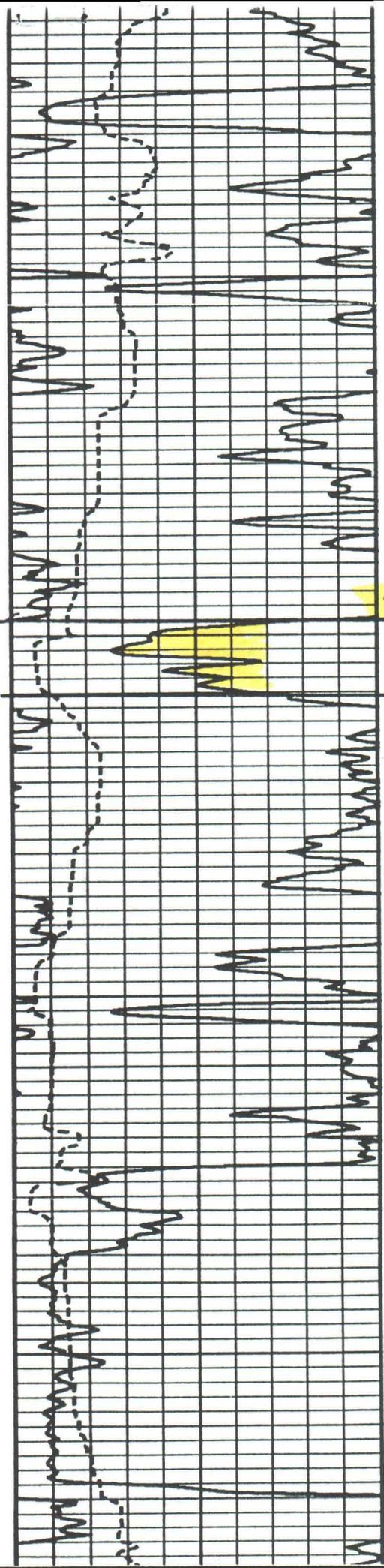
COMPUTED FROM

Change in Mud Type or Additional Samples

Date \_\_\_\_\_ Sample No. \_\_\_\_\_

Scale Up Hole \_\_\_\_\_ Scale Down Hole \_\_\_\_\_

Depth \_\_\_\_\_ Type Log \_\_\_\_\_



13050.

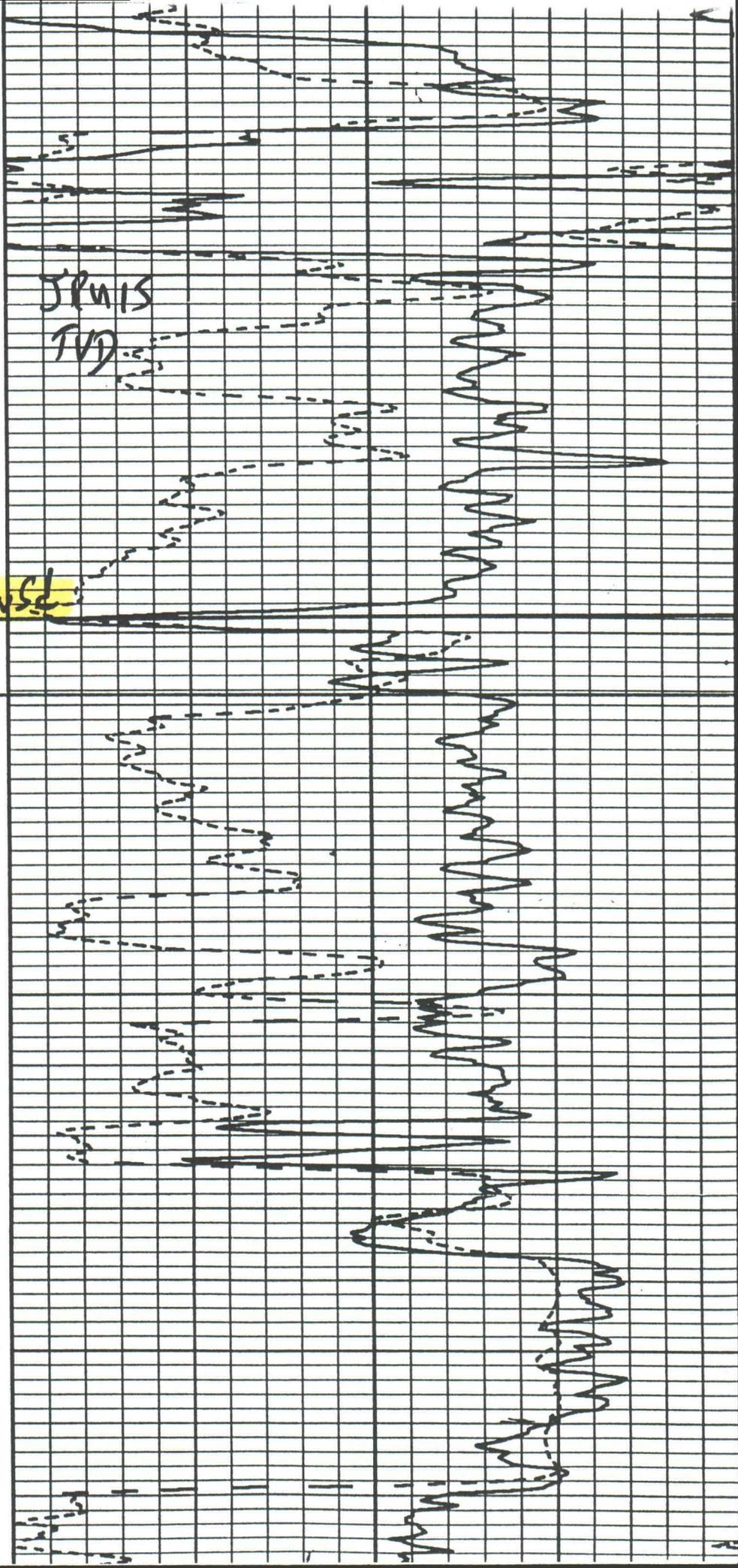
JRNIS  
TVD

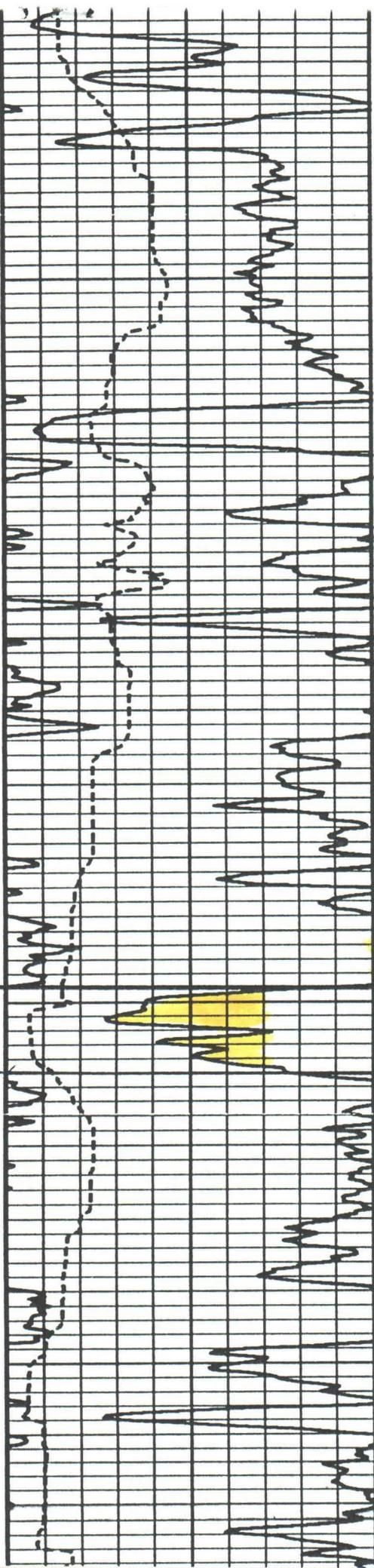
T/Atoke Sd

13100.

13150.

13200.





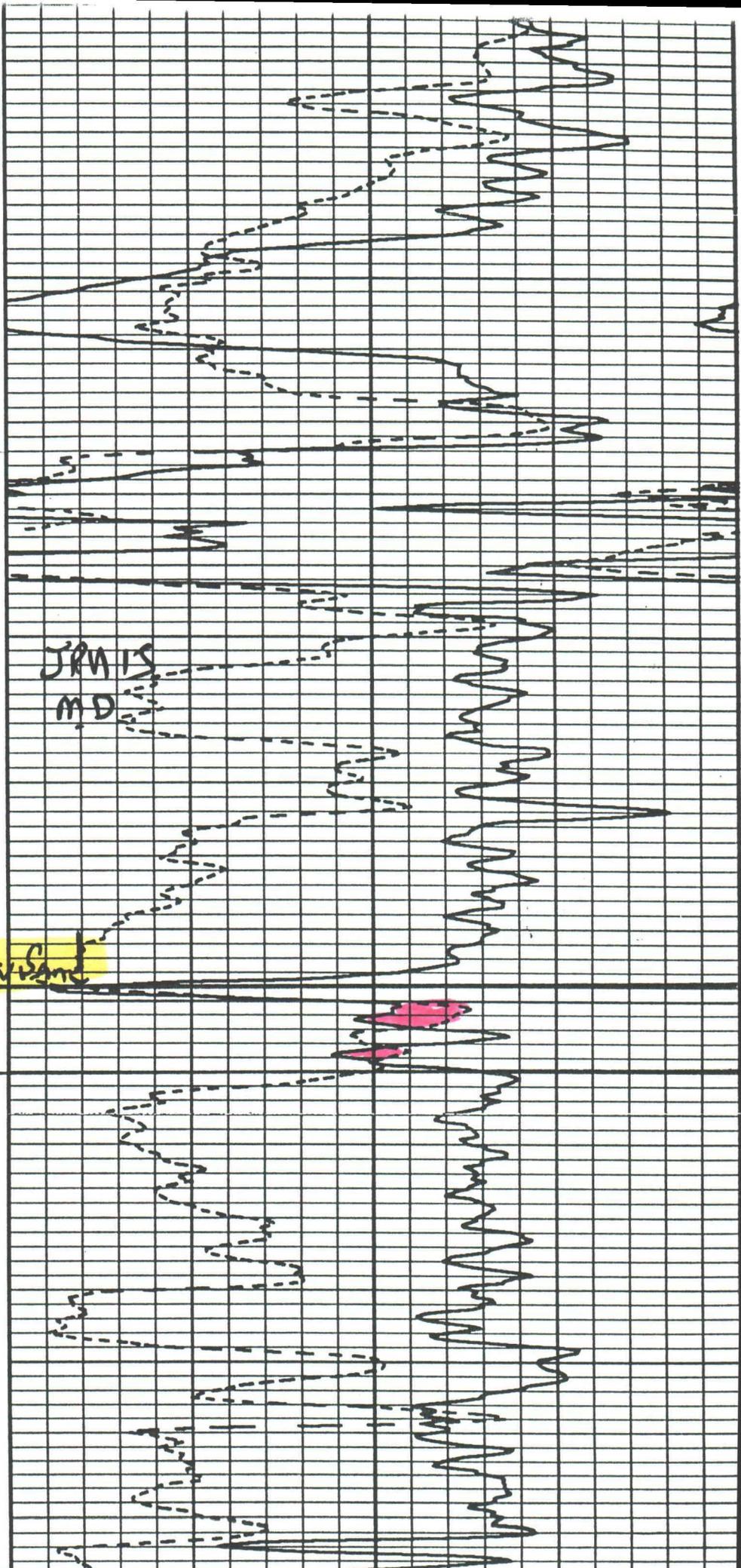
13300.

13350.

T/Atokan Sand

13400.

13450.



#26  
2

**Schlumberger**

**SIMULTANEOUS  
COMPENSATED NEUTRON-  
LITHO DENSITY**

COUNTY EDDY, NM FIELD WEST SAND DUNES LOCATION PURE GOLD C-17 WELL FEDERAL NO. 2 COMPANY SANTA FE ENERGY	COMPANY	SANTA FE ENERGY OPERATING PARTNERS		
	WELL	PURE GOLD C-17 FEDERAL NO. 2		
	FIELD	WEST SAND DUNES		
	COUNTY	EDDY	STATE	NEW MEXICO
	LOCATION	1980' FNL & 2310' FEL		Other Services:
API SERIAL NO.	SEC.	TWP.	RANGE	DIL BHC EPT
	17	23-S	31-E	

Permanent Datum:	G.L.	3320.0	Elev.:	K.B. 3347.5
Log Measured From:	K.B.	26.5	Ft. Above Perm. Datum	D.F. 3346.0
Drilling Measured From:	K.B.			G.L. 3321.0

Date	20-OCT-89	23-NOV-89		
Run No.	ONE (LDT)	TWO (FDC)		
Depth-Driller	11820	14850		
Depth-Logger	11819	14845		
Btm. Log Interval	11817	14842		
Top Log Interval	SURF	11816		
Casing-Driller	9 5/8 @ 4100	7 @ 11820	@	@
Casing-Logger	4100	11816		
Bit Size	8 1/2	6		
Type Fluid in Hole	WATER		XL	
Dens.	8.50	28.0	12.70	44.0
Visc.				
pH	10.0	ml	9.5	4.0 ml
Fluid Loss				
Source of Sample	PIT		PIT	
Rm @ Meas. Temp.	.298 @ 56 °F	.083 @ 66 °F	@ °F	@ °F
Rmf @ Meas. Temp.	@ °F	.063 @ 66 °F	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Source: Rmf		MEAS		
Rmc				
Rm @ BHT	.121 @ 48 °F	.032 @ 180 °F	@ °F	@ °F
Circulation Stopped	1900	1900 11-22		
Logger on Bottom	SEE LOG	SEE LOG		
Max. Rec. Temp.	148 °F	180 °F	°F	°F
Equip.	8234 RSWL	8502 RSWL		
Location				
Recorded By	SULLIVAN	RUSHING		
Checked By	DUGAN	BAUERNFEIND		

The well name, location and borehole reference data were furnished by the customer.

RUN NO.	ONE	TWO
Service Order No.	521740	563325
Program Tape No.		
Fluid Level		
Type Log		
Depth		

FOLD HERE

C#2

A30  
-9816

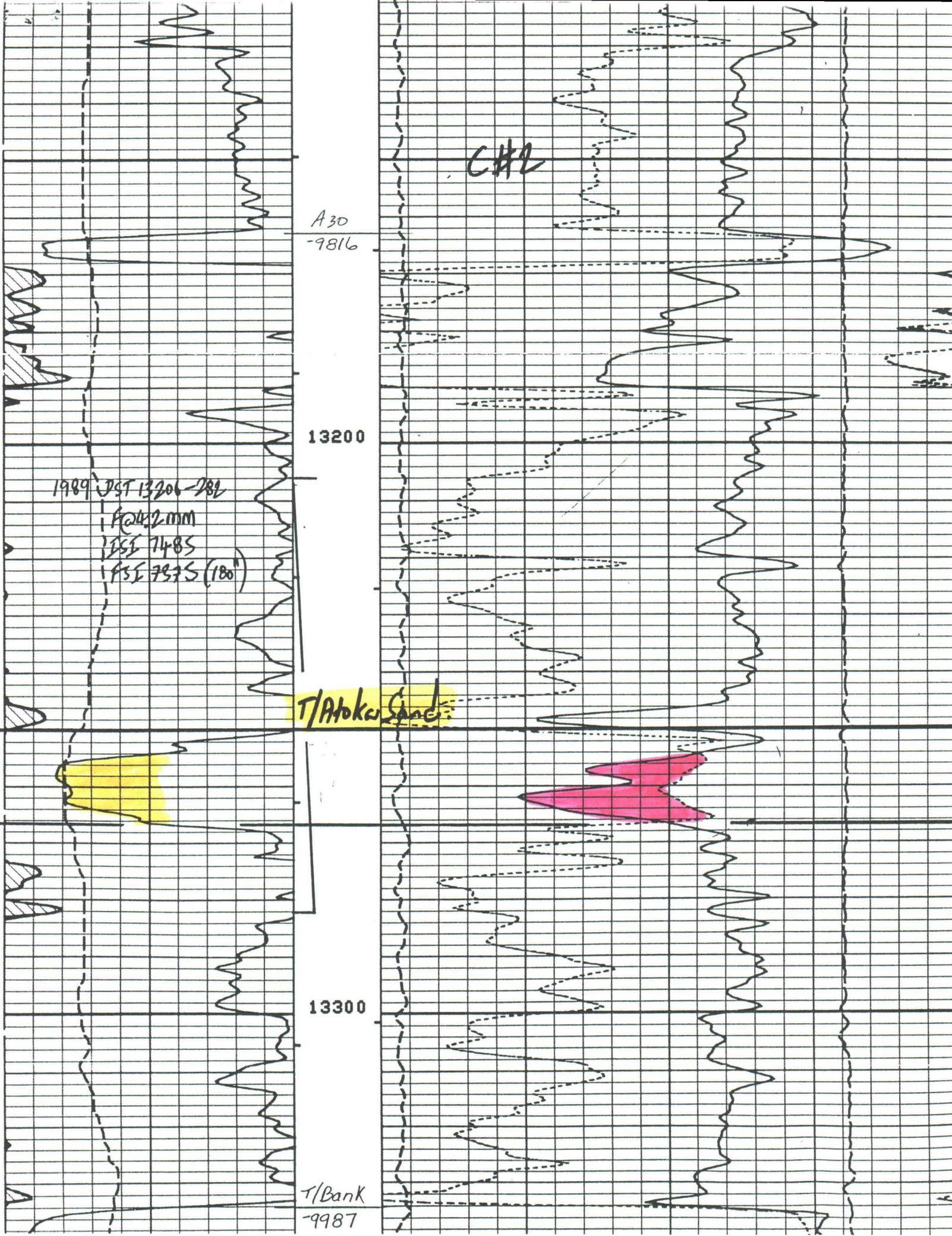
13200

1989 DST 13206-282  
A<sub>2</sub> 42mm  
ISS 7485  
FSS 7575 (180°)

T/Atoka Sand

13300

T/Bank  
-9987







x Sec

#28

		<b>COMPENSATED ACOUSTIC VELOCITY LOG</b>		
				COMPANY <u>EL PASO NATURAL GAS COMPANY</u> (Now Yates Pet.)
WELL <u>ARCO STATE # 1-16</u>		#1 Medano		
FIELD <u>WILDCAT</u>		"VA" State.		
COUNTY <u>EDDY</u> STATE <u>NEW MEXICO</u>				
Location <u>1980' FSL &amp; 1980' FWL</u>		Other Services:		
Sec. <u>16</u> Twp <u>23-S</u> Rge <u>31-E</u>				
Permanent Datum <u>Ground Level</u> Elev. <u>3358</u>		Elev.: <u>K.B. 3381</u>		
Log Measured From <u>K. B. 23</u> Ft. Above Perm. Datum		<u>D.F. 3380</u>		
Drilling Measured From <u>Kelly Bushing</u>		<u>O.L. 3358</u>		
Date	4-26-71	5-28-71	7-2-71	7-29-71
Run No.	- One -	- Two -	- Three -	- Four -
Depth-Driller	4,180	12,465	14,155	15,000
Depth-Welex	4,178	12,459	14,160	15,006
Blm. Log Inter.	4,156	12,440	14,132	15,000
Top Log Inter.	Surf.	4,156	12,440	14,132
Casing-Driller	20" @ 627	3-3/8" @ 4167	9-5/8" @ 2,444	7-5/8" @ 1415
Casing-Welex				
Bit Size	17-1/2"	12-1/4"	8-1/2"	6-1/2"
Type Fluid in Hole	Brine	Water	Mud	Mud
Dens.   Visc.	10.2	8.8   28	12.9   51	10.7   38
pH   Fluid Loss	10.5   ml	1	10.0   16.2 ml	2.8 ml
Source of Sample				
R. @ Meas. Temp.	Circ. @ °F	1.02 @ 80	.69 @ 102	.05 @ 105
R. @ Meas. Temp.	@ °F	.45 @ 81	.042 @ 78	@ °F
R. @ Meas. Temp.	@ °F	1.30 @ 79	@ °F	@ °F
Source of R.	1	1	Measured	Measured
R. @ BH	@ °K	@ °F	.37 @ 200	.025 @ 220
Time Since Circ.				
Max. Rec. Temp.	108° @ BH	177° @ BH	200° @ BH	229° @ BH
Equip. Location	8442 Hobbs	8444 Hobbs	8443 Hobbs	8444 Hobbs
Recorded By	Whitacre	Stroud	Cable	Stroud
Witnessed By	Mr. Plotte	& Mr. Sheldon		

Reproduced By

Electrical Log Services

MIDLAND, TEXAS 79701

REFERENCE W 5399F



47 COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORD

API NO. 30-015-20423

CASING RECORD

PERFORMING RECORD

ACID. FRAC SHOT

I P

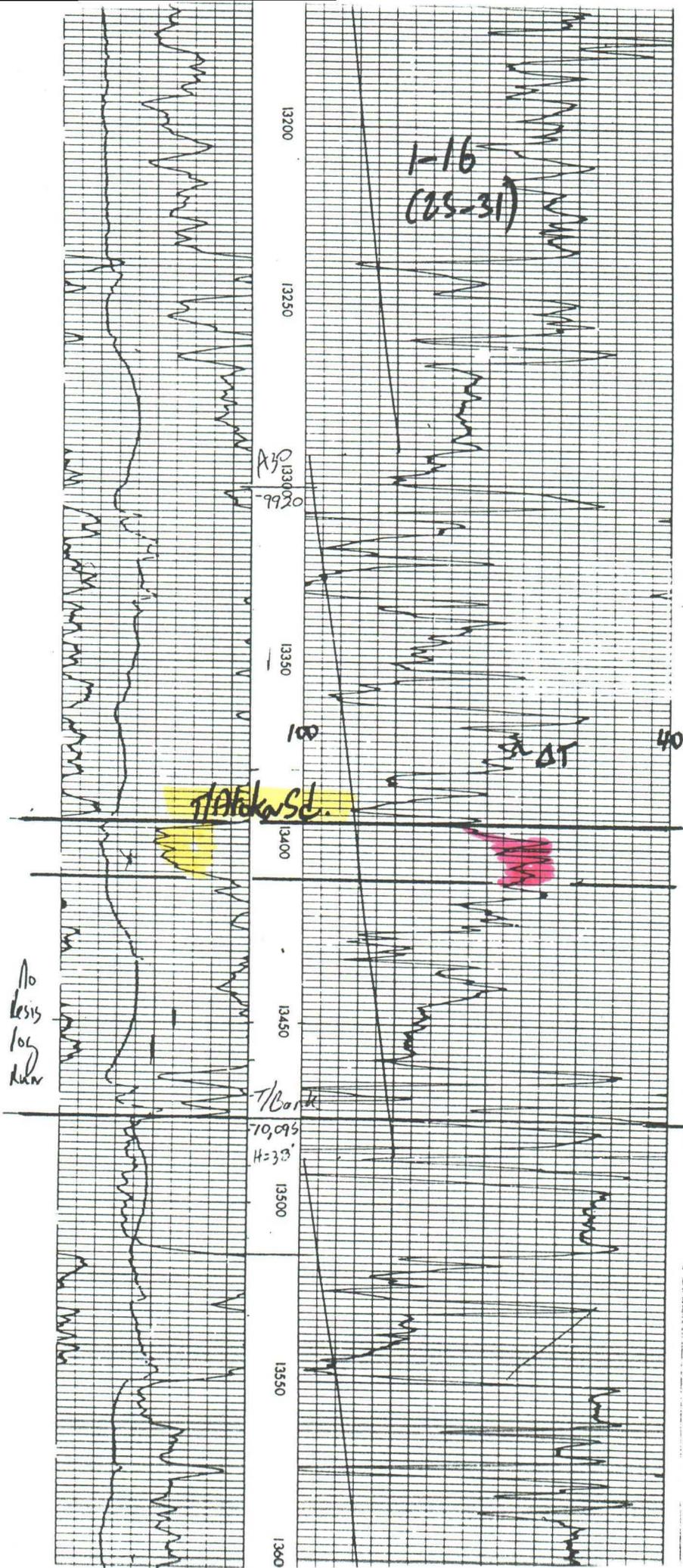
GOR

GR

T P

C P

REMARKS



RSD  
13300  
99.6

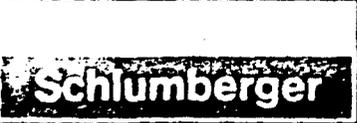
ST DT

HAWKST.

No basis for data

T/Bar  
10,095  
H=33'

# 29



SIMULTANEOUS  
COMPENSATED NEUTRON  
FORMATION DENSITY

FIELD PURE GOLD PROSPECT  
 LOCATION PURE GOLD "C"  
 WELL FED NO. 1  
 COMPANY COQUINA OIL CORP.

COMPANY COQUINA OIL CORPORATION  
WORK COPY  
 WELL PURE GOLD "C" FED NO. 1  
 FIELD PURE GOLD PROSPECT  
 COUNTY EDDY STATE NEW MEXICO

LOCATION 660' FSL & 1980' FWL  
 Other Services: DLL/MSFL  
BHC

API SERIAL NO 17 SEC 23-S TWP 31-E RANGE 31-E

Permanent Datum: G.L.; Elev.: 3327  
 Log Measured From K.B., 26 Ft. Above Perm. Datum  
 Drilling Measured From K.B.  
 Elev.: K.B. 3353  
 D.F. \_\_\_\_\_  
 G.L. 3327

Date	7-3-82	7-21-82		
Run No.	ONE	TWO		
Depth-Driller	14246	14850		
Depth-Logger	14244	14838		
Btm Log Interval	14220	14835		
Top Log Interval	SURF	14227		
Casing-Driller	9 5/8 @ 12429	7 5/8 @ 14237	@	@
Casing-Logger	12400	14227		
Bit Size	8 1/2	6.5		
Type Fluid in Hole	::	SALT GEL		
De vis.	13	39	9.9	29
pH				
Fluid Loss	9	9 ml	9.5	8 ml
Source of Sample	CIRC	MUD PIT		
R <sub>1</sub> @ Meas. Temp.	.045 @ 98 F	.064 @ 87 F	@	F
R <sub>2</sub> @ Meas. Temp.	@ F	@ F	@	F
R <sub>3</sub> @ Meas. Temp.	a F	@ F	@	F
Source Rmf				
R <sub>1</sub> @ BHT	.024 @ 194 F	.028 @ 204 F	@	F
TIME Circulation Stopped	1300	0300		
Logger on Bottom	2130	1030		
Max Rec. Temp.	194 F	204 F	F	F
Equip Location	8141 RSWL	8141 RSWL		
Recorded By	MURRAY	JENSEN		
Witnessed By	WILLIS	WILLIS		

PROPERTY OF  
BASS ENTERPRISES PRODUCTION CO.  
ENGINEERING SECTION

The well name, location and borehole reference data were furnished by the customer.

DEPTH				
TYPE LOG				
DEPTH				
RUN NO.	ONE	TWO		
Service Order No.	293132			
Fluid Level	FULL	FULL		
Solids PPM CL	151000	160000		

FOLD HERE

13100

Pure Gold c-1

A30

-9789

9789

13200

T/A toker Sam

-9871

DSF 12994-13017

Ra 5.258 mm 2.1/k

ISIP 7971

PSIP 7778

CAMPBELL, CARR & BERGE, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

March 19, 1996

**BY FACSIMILE AND MAIL**

Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201  
ATTENTION: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. William J. LeMay

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

Re: **Application for Approval of the Third and Fourth Revisions of the Initial Atoka Participating Area; James Ranch Unit; Eddy County, New Mexico**

Gentlemen and Ms. Bailey:

On behalf of Enron Oil & Gas Company ("Enron"), please accept this letter in protest of Bass Enterprises Production Co.'s ("Bass") referenced application.

Pursuant to "Article 11 of the James Ranch Unit Agreement dated April 22, 1953 no participating area shall be revised without the consent of the owners of all working interests within the participating area. Enron is the largest and, except for Bass, the only working interest owner in the current Atoka Participating Area. Bass has not given Enron any information concerning these applications. Enron has not consented to the third or fourth revisions proposed by Bass. Until March 14, 1996 Enron did not even know Bass was proposing these revisions. Enron has previously requested that Bass involve Enron in this process (orally and by letter) (see letter of April 10, 1995) before submission of revisions to government agencies. However, these requests have been ignored.

Bureau of Land Management  
New Mexico Oil Conservation Division  
Commissioner of Public Lands  
March 19, 1996  
Page 2

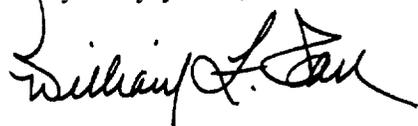
Enron received the legal description of what Bass proposes to include in the participating area, from the BLM on March 14. Based on this description, and a review of its own geological and engineering data, Enron does not concur with the revisions proposed by Bass.

Much of the land included in these revisions has not been developed. In addition, the data currently available on this area does not support the conclusion that it has reasonably been proved to be productive of unitized substances in paying quantities. Furthermore, the proposed revision is inconsistent with the record made by Bass in Oil Conservation Case No. 11019, which was heard on September 22, 1994. In that case, the testimony of Bass' own expert witnesses appears inconsistent with these applications.

Enron requests that approval of the Application of Bass for the Third and Fourth Expansions of the Atoka Participating Area in the James Ranch Unit be withdrawn. Enron further requests that the Bureau of Land Management, the Commissioner of Public Lands, and the Oil Conservation Division return to Bass its applications with instructions to comply with the James Ranch Unit Agreement and obtain the consent of Enron prior to filing these requests for revisions. In the event Enron and Bass have not come to a mutually agreeable resolution of this matter within sixty (60) days of the date the application is returned to Bass, Enron requests that a hearing be set before agency representatives and the parties be given an opportunity to present technical data in support of appropriate Atoka participating area boundaries.

Your attention of this request is appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr". The signature is written in a cursive style with a large initial "W".

WILLIAM F. CARR  
ATTORNEY FOR ENRON OIL & GAS COMPANY

WFC:mlh

Enclosures as indicated

cc: Patrick J. Tower

# **ENRON**

## **Oil & Gas Company**

P. O. Box 2267 Midland, Texas 79702 (915) 686-3600

April 10, 1995

Mr. John Smitherman  
Bass Enterprises  
P.O. Box 2760  
Midland, Texas 79702

Re: **Recent Developments and  
Proposal Plan of Action  
James Ranch Unit Atoka PA  
Eddy County, New Mexico**

Dear John:

Bass, Mitchell and Yates recently made Atoka sand completions to the north of the James Ranch Unit Atoka PA. Geologic mapping and bottomhole pressure information concludes that the new completions and existing PA wells are producing gas from the same reservoir. Competition between wells for the remaining reserves is obvious; although, the magnitude of drainage effects was not agreed upon by Enron and Bass engineering personnel in a meeting on Thursday, March 30, 1995.

Current Atoka PA daily production is estimated to be 4.5 MMCFD with non-PA wells producing 18 to 20 MMCFD. Mapping and pressure data show these wells to be producing from the same reservoir as the current Atoka PA wells, and that reserves are being lost to the newly drilled wells. To prevent further loss of reserves to the PA wells, Enron proposes the following program be initiated immediately:

- No. 1 Expand the James Ranch Unit Atoka PA to include the S/2 of Section 12-23S-31E, containing the Bass, James Ranch Unit No. 70 and to include the James Ranch Unit No. 11.
- No. 2 Fracture-stimulate the James Ranch Unit Nos. 10, 11 and 13 with Alco-foam within 90 days (AFE's for these jobs are attached). Install compression as soon as stabilized rates are achieved.

James Ranch Unit Atchafalaya PA  
April 10, 1995  
Page 2

Enron anticipates that it will soon be a working interest owner in the James Ranch Unit No. 70 and thereby requests that Bass provide a copy of all drilling, completion and test information on the well.

Enron views the above request to be top priority due to the potential for additional lost reserves. Enron also has plans to recomplete the James Ranch Unit No. 17 and perform additional work as outlined in our meeting with you last week. The AFEs will be sent to you later this week. Please respond to this proposal at your earliest convenience.

Sincerely,

ENRON OIL & GAS COMPANY



Gary L. Thomas  
Vice President & General Manager

**CAMPBELL, CARR & BERGE, P.A.**  
**LAWYERS**

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE

MICHAEL N. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1110 NORTH GUADALUPE  
POST OFFICE BOX 8200  
SANTA FE, NEW MEXICO 87504-2200  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 988-4443

**TELECOPIER COVER SHEET**

Date: 3-21-96

TO: Bill LeMay

FROM: Paul Owen

TELECOPIER NUMBER: 827-8177

TOTAL PAGES (including this cover sheet): 3

DOCUMENT: \_\_\_\_\_

OPERATOR: Marta CLIENT/MATTER #: 185

PLEASE CALL:

TO CONFIRM RECEIPT       AFTER REVIEW

MESSAGE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**IF THERE ARE ANY PROBLEMS WITH OUR TRANSMISSION,  
PLEASE CALL OPERATOR AT (505) 988-4421**

**THIS DOCUMENT IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHOM  
IT IS ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED AND CONFIDENTIAL  
OR THAT CONSTITUTES WORK PRODUCT AND IS EXEMPT FROM DISCLOSURES UNDER  
APPLICABLE LAW.**

**IF YOU ARE NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT OF THE INTENDED  
RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY USE, DISSEMINATION, DISTRIBUTION OR  
COPYING OF THE COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS  
COMMUNICATION IN ERROR, PLEASE NOTIFY US BY TELEPHONE AND DESTROY THE  
DOCUMENT.**

THANK YOU

**CAMPBELL, CARR & BERGE, P.A.**

LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 866-4421  
TELECOPIER: (505) 866-8043

March 21, 1996

**VIA FACSIMILE**

Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201  
ATTENTION: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. William J. LeMay

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

**Re: *Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy Count, New Mexico.***

Gentlemen and Ms. Bailey:

In further support of the March 19, 1996 protest of Enron Oil & Gas Company ("Enron") of Bass Enterprises Production Co.'s ("Bass") referenced application, we submit the following information. We previously advised you that Bass failed to comply with Article 11 of the James Unit Agreement dated April 22, 1953.

As we previously advised, Article 11 of the Unit Agreement requires that participating areas may only be revised "with the consent of the owners of all working interests in the lands within the participating areas" to be revised. Enron's consent to the revisions was never sought or obtained.

March 21, 1996

Page 2

Furthermore, Article 25 of the Unit Agreement requires that Bass, as the Unit Operator, must provide notice to any party whose interest may be affected by an agency action prior to appearing before the Department of the Interior, the Commissioner of Public Lands, and the New Mexico Oil Conservation Division. In order to obtain approval of the revisions, Bass appeared before all three of those agencies. Paragraph 26 of the Unit Agreement provides specific methods of providing notice. Enron did not receive notice of the application for the revisions. In fact, it is our understanding that Bass did not provide notice to any party whose interest would be affected by the revisions.

As we indicated in our letter to you of March 19, 1996, Enron is the largest, and except for Bass, the only working interest owner in the current Atoka Participating Area. Enron's interests are severely affected by the revisions. Therefore, Bass was required to provide notice to, and obtain consent from, Enron, prior to applying for approval of the revisions. Bass did neither.

Enron requests that you consider Bass's failure to notify Enron of the requests for approval of the revisions of the participating area in light of the requirements imposed upon Bass by Articles 25 and 11 of the Unit Agreement. Once again, Enron requests that you rescind any approval that has been issued and return Bass's application for approval of the revisions with instructions to Bass to provide notice to Enron of the proposed revisions and to obtain Enron's consent to the revisions as stated in the March 19, 1996 letter.

Thank you for your attention to this matter. We anticipate your response.

Very truly yours,



WILLIAM F. CARR

/mb

CAMPBELL, CARR & BERGE, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4481  
TELECOPIER: (505) 988-8043

March 25, 1996

**VIA FACSIMILE AND U.S. MAIL**

Bass Enterprises Production Co.  
Attention: Mr. Wayne Bailey  
201 Main Street  
Fort Worth, Texas 76102-3131

**Re: *Third and Fourth Revisions to the Atoka Participating Area,  
James Ranch Unit Area, Eddy Count, New Mexico.***

Dear Mr. Bailey:

On behalf of Enron Oil and Gas Company, we hereby demand that you withdraw the third and fourth revisions ("revisions") to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico, which were approved by the Bureau of Land Management (BLM) on March 4, 1996. We also demand that you immediately provide Enron with all data supporting your application for the above revisions, specifically including any data that supports the effective dates of December 1, 1982, and July 1, 1993 for the revisions.

These demands are made because the process by which you requested approval of the above revisions is in violation of the provisions of the James Ranch Unit Agreement ("Unit Agreement"), entered into as of April 22, 1953. In order that any revisions to the Atoka Participating Area may be accomplished in compliance with the explicit terms and requirements of the Unit Agreement, you must immediately withdraw the revisions, provide Enron with the requested data, and obtain the concurrence of all interest owners who will be affected by any revision.

Mr. Wayne Bailey  
March 25, 1996  
Page 2

Enron is the largest and, except for Bass, the only working interest owner in the current Atoka Participating Area. The revisions seriously injure Enron's interests. Paragraph 11 of the Unit Agreement requires that participating areas may only be revised "with the consent of the owners of all working interests in the lands within the participating areas" to be revised. Enron's consent to the revisions was never sought or obtained.

Furthermore, paragraph 25 of the Unit Agreement requires that Bass, as the Unit Operator, must provide notice to any party whose interest may be affected by an agency action prior to appearing before the Department of the Interior, the Commissioner of Public Lands, and the New Mexico Oil Conservation Division. In order to obtain approval of the revisions, Bass appeared before all three of those agencies. Paragraph 26 of the Unit Agreement provides specific methods of providing notice. Enron did not receive notice of the application for the revisions. In fact, it is our understanding that Bass did not provide notice to any party whose interest would be affected by the revisions.

Enron has previously requested that Bass involve Enron in the process of expanding participating areas, before any request is submitted to any governmental agency. Bass has ignored those requests. Therefore, Bass's failure to provide notice to, and obtain consent of, Enron, prior to submitting any request to any governmental agency, appears to be willful and will be so considered in any further proceedings regarding this matter. Additionally, we renew Enron's request, and right provided by the Unit Agreement, to be apprised of, and consent to, any action regarding the Unit that will affect Enron's interests in any way. You must involve Enron in the process before any requests to governmental agencies are submitted.

The Unit Agreement further provides that the approval of the BLM, the New Mexico Commissioner of Public Lands, and the New Mexico Oil Conservation division is required for any establishment or expansion of participating areas. The BLM's approval of Bass's application is explicitly "conditioned upon conditional approval from the New Mexico Oil Conservation Division and the New Mexico Commissioner of Public Lands." We are advised that the Commissioner of Public Lands has not yet extended approval. Therefore, Bass may still cure any defects by withdrawing the current requests for approval of the revisions and then providing notice to, and obtaining the consent of, Enron, prior to submitting a new request for approval of the revisions.

Enron would like to cooperatively review Bass's data concurrently with data developed by Enron in order to develop a participating area that is mutually satisfactory. However, should

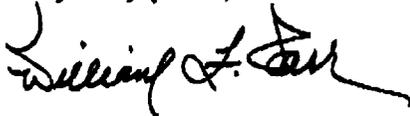
Mr. Wayne Bailey

March 25, 1996

Page 3

**Bass fail to withdraw the revisions by Friday, March 30, 1996, Enron will consider that lack of response a refusal to comply, and will take appropriate action to protect its interests.**

Very truly yours,



WILLIAM F. CARR

/mb

cc: Tony Ferguson  
Jami Bailey  
William J. LeMay  
Pat Tower

**CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS**

**MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN**

**MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN**

**JACK M. CAMPBELL  
OF COUNSEL**

**JEFFERSON PLACE  
SUITE 1 -110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043**

**TELECOPIER COVER SHEET**

March 27, 1996

To: William J. LeMay  
NM Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, NM 87505

Fax: (505) 827-8177

Re: *Application for Approval of Third and Fourth Revisions of Initial  
Atoka Participating Area; James Ranch Unit*

FROM: William F. Carr/Paul R. Owen

TOTAL PAGES (including this cover sheet): 5

DOCUMENT:

OPERATOR: Marita

CLIENT/MATTER # 185

PLEASE CALL: [ ] TO CONFIRM RECEIPT [ ] AFTER REVIEW

**IF THERE ARE ANY PROBLEMS WITH OUR TRANSMISSION,  
PLEASE CALL OPERATOR AT (505) 988-4421.**

**THIS DOCUMENT IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHOM IT  
IS ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED AND CONFIDENTIAL, OR  
THAT CONSTITUTES WORK PRODUCT AND IS EXEMPT FROM DISCLOSURES UNDER APPLICABLE  
LAW.**

**IF YOU ARE NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT OF THE INTENDED  
RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY USE, DISSEMINATION, DISTRIBUTION OR  
COPYING OF THE COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS  
COMMUNICATION IN ERROR, PLEASE NOTIFY US BY TELEPHONE AND DESTROY THE DOCUMENT.**

**CAMPBELL, CARR & BERGE, P.A.**

**LAWYERS**

**MICHAEL B. CAMPBELL  
WILLIAM P. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN**

**MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN**

**JACK M. CAMPBELL  
OF COUNSEL**

**JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 998-4421  
TELECOPIER: (505) 993-8043**

March 27, 1996

**VIA FACSIMILE AND CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

William C. Calkins, State Director  
United States Department of the Interior  
Bureau of Land Management  
Post Office Box 27115  
Santa Fe, New Mexico 87502

**Re: *Third and Fourth Revisions to the Atoka Participating Area, James Ranch  
Unit Area, Eddy Count, New Mexico. BLM # 3180 (06200) 14-08-001-5558***

Dear Mr. Calkins:

Pursuant to 43 C.F.R. §§ 3185.1 and 3165.3(b), Enron Oil & Gas Company ("Enron"), a party adversely affected by an action taken by the United States Department of the Interior, Bureau of Land Management, (the "Department") under 43 C.F.R. §3183.5, hereby requests administrative review of the decision of the Department to approve the application of Bass Enterprises Production Co. for approval of the third and fourth revisions of the Atoka Participating Area, James Ranch Unit (the "Revisions"). The approval of the Department was issued on March 4, 1996.

William C. Calkins  
March 27, 1996  
Page 2

**Propriety of this appeal.**

Enron is the largest, and except for Bass, the only working interest owner in the current Atoka Participating Area. Enron's interests are severely affected by the revisions. Therefore, Enron may properly seek review of the Department's approval of Bass' application for approval of the Revisions. 43 C.F.R. §§ 3185.1 and 3165.3(b) (1995). This appeal, taken pursuant to 43 C.F.R. §§ 3185.1 and 3165.3(b), is timely, being submitted to the Department within twenty working days of March 4, 1996, the date of the Department's approval of Bass' application. Enron was not notified of the Department's approval, and did not learn of this action, until March 14, 1996.

**Basis of request for State Director review.**

The basis for this request for State Director review is Bass' failure to comply with the explicit provisions of the James Ranch Unit Agreement, which governs all revisions of participating areas within the Unit and Bass' misinterpretation of the data which it presented in support of its proposed revision of the Atoka Participating Area in the James Ranch Unit. The process by which Bass applied for and obtained approval of the Revisions violated several provisions of the Unit Agreement. Accordingly, the Department should have denied approval of the Revisions and directed Bass to comply with the Unit Agreement prior to re-submitting any application for approval of the Revisions.

*This is the whole deal!*

Article 11 of the Unit Agreement provides that participating areas shall be revised "whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities . . ." Enron contends that the Revisions do not meet this criteria. Enron proposes to present to the State Director documentation and data that supports this contention. Enron's preliminary review of the relevant data indicates that Bass' contrary position is patently wrong.

Article 11 of the Unit Agreement requires that participating areas may only be revised "with the consent of the owners of all working interests in the lands within the participating areas" to be revised. Enron's consent to the revisions was never sought or obtained.

Article 25 of the Unit Agreement requires that Bass, as the Unit Operator, must provide notice to any party whose interest may be affected by an agency action prior to appearing before the Department of the Interior, the Commissioner of Public Lands, and the New

William C. Calkins

March 27, 1996

Page 3

Mexico Oil Conservation Division. As stated above, Enron is the largest, and except for Bass, the only working interest owner in the current Atoka Participating Area. In order to obtain approval of the revisions, Bass appeared before all three of the above agencies. Paragraph 26 of the Unit Agreement provides specific methods of providing notice. Enron did not receive notice of the application for the revisions. In fact, it is our understanding that Bass did not provide notice to any party whose interest would be affected by the revisions. Therefore, Bass was required to provide notice to, and obtain consent from, Enron, prior to applying for approval of the revisions. Bass did neither.

**Request for extension to submit supporting data.**

Pursuant to 43 C.F.R. § 3165.3(b), Enron requests that the State Director grant an extension of time in which Enron may submit supporting data supporting Enron's contention that the Revisions are not proper under the explicit requirements of the Unit Agreement, and that the lands sought to be included have not been proved, as a result of further drilling operations or otherwise, to be reasonably proved to be productive in paying quantities.

Prior to filing its application for approval of the Revisions, Bass had a long period of time to compile and interpret its supporting data. 43 C.F.R. § 3183.5 (1995) requires that applications for approval of revisions of participating areas be supported by "[t]wo counterparts of a substantially geologic report, including structure-counter map, cross sections, and pertinent data." To the extent that Bass contends that the data supports the revisions, Enron states that such data cannot support the Revisions. Enron has unsuccessfully sought to obtain the data submitted by Bass. Enron anticipates that it will require sixty additional business days to complete the data necessary to support this contention. Therefore, Enron requests that the State Director allow Enron until June 19, 1996, to submit such data.

Enron requests that the Director inform Enron whether the requested extension is granted as soon as possible.

**Request for hearing before the State Director.**

Pursuant to 43 C.F.R. § 3165.3(b), Enron requests that it be allowed to submit an oral presentation in support of the State Director's review. Enron states that the technical data and conclusions to be presented will likely substantially differ from that presented by Bass in support of its application for approval of the Revisions. Therefore, an oral presentation will greatly assist the State Director in his review.

William C. Calkins  
March 27, 1996  
Page 4

**Request for relief.**

Enron requests that the State Director review the Department's approval of Bass' application for approval of the Revisions. Enron requests that the Director rescind the Department's approval and direct the Department to return Bass' application for approval of the revisions with instructions to Bass to provide notice to Enron of the proposed revisions and to obtain Enron's consent to the revisions.

Very truly yours,



WILLIAM F. CARR  
PAUL R. OWEN

/mb

- cc: Patrick Tower (by facsimile)
- Rick Weimer (by facsimile)
- Wayne Bailey (by facsimile)
- Jami Bailey (by facsimile)
- William LeMay (by facsimile)
- Tony Ferguson (by facsimile)
- Solicitor's Office (by facsimile)
- U.S. Dept. of the Interior
- Bureau of Land Management



## United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201

RECEIVED  
1996 APR 2 11 8 52

IN REPLY REFER TO:

James Ranch Unit  
NM-70965

Mr. William F. Carr  
Campbell, Carr & Berge, P.A.  
P.O. Box 2208  
Santa Fe, NM 87504-2208

MAR 28 1996

Dear Mr. Carr:

We have received your letters on behalf of Enron Oil and Gas Company (Enron) dated March 19, 1996, and March 21, 1996, protesting the Application for Approval of the Third and Fourth Revisions of the Initial Atoka Participating Area as submitted by Bass Enterprises Company (Bass). We have also received the copy of your correspondence with Bass dated March 25, 1996. After a thorough review, which included coordination with the BLM Solicitor's Office, we have the following information to report regarding your protests.

Article 11 of the James Ranch Unit Agreement dated April 22, 1953 states that:

Upon completion of a well capable of producing unitized substances in paying quantities or as soon thereafter as required by the Supervisor or the Commissioner, the Unit Operator shall submit for approval by the Director, the Commissioner and the Commission a schedule, based on sub-divisions of the public land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all land in said schedule on approval of the Director, the Commissioner and the Commission to constitute a participating area, effective as of the date of first production. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director, the Commissioner and the Commission. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, and the percentage of allocation shall also be revised accordingly. ...

Your protest states that "Pursuant to Article 11 of the James Ranch Unit Agreement dated April 22, 1953, no participating area shall be revised without the consent of the owners of all working interests within the participating area." The consent of the owners of all working interests in the lands within the participating areas is only required when two or more participating areas so established are being combined. The consent of the working interest owners should not be confused with like approval. The language in Article 11 regarding approval is specific to the Director, the

Commissioner and the Commission. The language is also specific to when two or more existing participating areas are proposed for combining. This is clearly not the case in regard to the Third and Fourth Revisions of the Initial Atoka. Therefore, the Third and Fourth Revisions of the Initial Atoka Participating Area do not require consent of the working interests since they are not combining two or more existing participating areas.

Your letter of March 21, 1996, added an additional protest under Article 25 of the Unit Agreement that requires Bass, as the Unit Operator, provide notice to any party whose interest may be affected by an agency action prior to appearing before the Department of the Interior, the Commissioner of Public Lands, and the New Mexico Oil Conservation Division. Article 25 states that:

Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected before the Department of the Interior, the Commissioner of Public Lands and the New Mexico Oil Conservation Commission and to appeal from orders under the regulations of said Department, the Commissioner or Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceedings.

The Bureau of Land Management (BLM) recognizes that notice to other parties affected is required under Article 25 of the James Ranch Unit Agreement. The BLM also recognizes that the Unit Operating Agreement specifically addresses the notification and approval of actions involving the Unit Operator and Working Interest Owners. The BLM, therefore believes that sufficient controls are in place to address operational conflicts between the working interest owners and the Unit Operator.

In response to your protest, we have notified Bass of their responsibilities as Unit Operator under Articles 25 and 26. We are also enclosing a copy of our correspondence and instructions to Bass for your records. One of the major benefits of unitization is the streamlining of the approval process and the ability to work exclusively with and through the Unit Operator. Finally, the BLM requests that Enron and Bass work out an agreement to follow for future revisions that will allow for a more mutually beneficial approach to approval actions.

If you have any questions, please feel free to give me a call at (505) 627-0298.

Sincerely,



Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

Enclosure

1 - Copy of Bass Letter Dated March 28, 1996 (2 pages)

cc:

Bass Enterprises Production Co.  
Attention: Mr. Wayne Bailey  
201 Main Street  
Fort Worth, Texas 76102-3131

New Mexico Oil Conservation Division  
Attention: Mr. William J. LeMay  
2040 S. Pacheco  
Santa Fe, New Mexico 87505



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201

OIL CONSERVATION DIVISION  
RECEIVED  
'96 APR 2 AM 8 52

IN REPLY REFER TO:

James Ranch Unit  
NM-70965

CERTIFIED--RETURN RECEIPT REQUESTED  
P 392 286 011

**MAR 28 1996**

Mr. Wayne Bailey  
Bass Enterprises Production Company  
201 Main Street  
Fort Worth, Texas 76102-3131

Dear Mr. Bailey:

The Bureau of Land Management (BLM) has received a formal protest regarding the Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico from Enron Oil and Gas Company (Enron). Enron is a working interest owner in the James Ranch Unit and as such is recognized as an affected party.

Based upon information supplied by Enron and in accordance with Article 25 of the James Ranch Unit Agreement entered into as of April 22, 1953, Bass Enterprises Production Company (Bass) is required to adhere to the following:

Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior, the Commissioner of Public Lands and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the Commissioner or Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

Enron claims that Bass failed to provide notice of the proposed Third and Fourth Revisions to the Atoka Participating Area, prior to submittal of applications to the BLM, New Mexico Oil Conservation Division, and the Commissioner of Public Lands.

Therefore, the BLM hereby orders the following:

- (1) That Bass contact Enron and provide notice as specifically addressed under Articles 25 and 26 of the James Ranch Unit Agreement.
- (2) That Bass provide a statement to BLM within 15 days of receipt of this letter, specifically documenting that notification was served to Enron as per the James Ranch Unit Agreement.

(3) That Bass follow the notification procedures as outlined in Articles 25 and 26 on all future proposed revisions to the James Ranch Unit Area.

The Third and Fourth Revisions to the Atoka Participating Area, requires approval by the BLM, the Commissioner, and the Commission. The BLM and the New Mexico Oil Conservation Commission have approved the proposed revisions. The Commissioner of Public Lands, however, has not formally approved the revisions, thus final approval has not been issued. The BLM has contacted the Commissioner and has requested that final approval action be withheld until this issue between Bass and Enron has been resolved.

One of the major benefits of unitization is the streamlining of the approval process and the ability to work exclusively with and through the Unit Operator. It is advantageous to all affected parties that this dispute be resolved as soon as possible. As Unit Operator, it is Bass' responsibility to follow all requirements of the Unit Agreement.

If BLM does not receive the documentation as requested in item (2) above within the specified time frames, we will rescind the BLM approval and return the proposed revision package to Bass.

If you have any questions, please feel free to give me a call at (505) 627-0298.

Sincerely,



Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

cc:  
New Mexico Oil Conservation Division  
Attention: Mr. William J. LeMay  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

SDR 96-013  
3165.3 (NM 93200)

APR 1 1996

Mr. William Carr  
Campbell, Carr, Berge & Sheridan  
P.O. Box 2208  
Santa Fe, NM 87504-2208

Re: State Director Review, Third and Fourth Revisions to the Atoka Participating Area,  
James Ranch Unit, Eddy, County, New Mexico

Dear Mr. Carr:

We received your request for the subject State Director Review on March 27, 1996. It is our understanding that our Roswell District Office (RDO) is in the process of following up on written protests filed by Enron Oil and Gas Company. We hereby grant your request for an extension of time until June 19, 1996, to submit your statement of reasons. This extension should allow sufficient time to prepare your case, as well as give RDO a chance to pursue Enron's protests.

Please contact Rick Wymer at (505) 438-7411 to make arrangements for an oral presentation or for answers to questions concerning this appeal. Our review should be completed within ten (10) business days after receipt of your written and oral arguments.

Sincerely,

Stephen D. Salzman

**Acting**

Richard A. Whitley  
Deputy State Director  
Resource Planning, Use and Protection

cc:

Enron Oil and Gas Company  
Attention: Mr. Patrick Tower  
P.O. Box 2267  
Midland, TX 79702

Bass Enterprises Production Company  
Attention: Mr. Wayne Bailey  
201 Main Street  
Fort Worth, TX 76102-3131

NM060 (Minerals Support Team - NMNM70965)

022.PAWYMER-04/01/96:312:SDR.96.13.LTR

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

APR 11 1996  
11 8 52

April 2, 1996

**CERTIFIED EXPRESS MAIL**

Enron Oil and Gas Company  
P.O. Box 2267  
Midland, Texas 79702

Attention: Mr. Patrick Tower

Re: Notice of Participating Area Revisions  
Third and Fourth Revisions  
Atoka Participating Area  
James Ranch Unit  
Eddy County, New Mexico

Gentlemen:

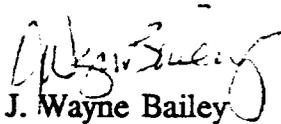
As you are aware, as a result of the drilling and completion of the James Ranch Unit No. 70 Well, Bass, as Operator of the James Ranch Unit, on July 18, 1995 submitted an application for creation of an Atoka Participating Area around said well. Subsequent to the filing of said application, on November 2, 1995 Enron made an appearance before the BLM in opposition to Bass' plan and proposed changes which involved revisions and expansions of the existing Atoka Participating Area in the unit. Subsequently, in accordance with the BLM's guidelines, Bass revised its application to provide for the Third and Fourth Revisions of the Atoka Participating Area in the James Ranch Unit, copies of which are attached herewith for your reference. The Bureau of Land Management and the New Mexico Oil Conservation Division have approved the above revisions and a final approval is pending before the Commissioner of Public Lands.

As you also aware, by letter dated March 28, 1996, the BLM requested that Bass provide Enron formal written notice of its revised proposal with respect to the Third and Fourth Revisions of the Atoka Participating Area in accordance with Articles 25 and 26 of the Unit Agreement. This letter shall constitute formal written notice in accordance with the BLM's letter dated March 28, 1996 and specifically notice of the Third and Fourth Revisions to the Atoka Participating Area which was submitted by Bass to the BLM by letter dated February 8, 1996, copy of which is attached herewith. Further, Bass will notify Enron in accordance with Articles 25 and 26 on future revisions to the James Ranch Unit Area as provided in the BLM's letter of March 28, 1996.

Letter to Enron Oil and Gas Company  
April 2, 1996  
Page 2

If you have any questions, please call the undersigned at (817) 390-8671.

Very truly yours,

  
J. Wayne Bailey

JWB:sd

cc: Commissioner of Public Lands  
State of New Mexico  
P.O. Box 1148  
Santa Fe, NM 87504-1148  
Attn: Mr. Pete Martinez

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505  
Attn: Mr. William J. LeMay

Bureau of Land Management  
1717 W. 2nd Street  
Roswell, NM 88201  
Attn: Mr. Tony Ferguson

William F. Carr  
Campbell, Carr & Berge  
P.O. Box 2208  
Santa Fe, NM 87504-2208

Losee, Carson, Haas & Carroll  
311 W. Quay Ave.  
Artesia, NM 88211-1720



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201

LAND RECEIVED		
APR 01 1996		
WRS _____	Jwb _____	TCS _____
DDC _____	HBF _____	WWC _____
HCM _____	JTW _____	SF _____

IN REPLY REFER TO:  
James Ranch Unit  
NM-70965

MAR 28 1996

CERTIFIED--RETURN RECEIPT REQUESTED  
P 392 286 011

Mr. Wayne Bailey  
Bass Enterprises Production Company  
201 Main Street  
Fort Worth, Texas 76102-3131

Dear Mr. Bailey:

The Bureau of Land Management (BLM) has received a formal protest regarding the Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico from Enron Oil and Gas Company (Enron). Enron is a working interest owner in the James Ranch Unit and as such is recognized as an affected party.

Based upon information supplied by Enron and in accordance with Article 25 of the James Ranch Unit Agreement entered into as of April 22, 1953, Bass Enterprises Production Company (Bass) is required to adhere to the following:

Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior, the Commissioner of Public Lands and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the Commissioner or Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

Enron claims that Bass failed to provide notice of the proposed Third and Fourth Revisions to the Atoka Participating Area, prior to submittal of applications to the BLM, New Mexico Oil Conservation Division, and the Commissioner of Public Lands.

Therefore, the BLM hereby orders the following:

- (1) That Bass contact Enron and provide notice as specifically addressed under Articles 25 and 26 of the James Ranch Unit Agreement.
- (2) That Bass provide a statement to BLM within 15 days of receipt of this letter, specifically documenting that notification was served to Enron as per the James Ranch Unit Agreement.

(3) That Bass follow the notification procedures as outlined in Articles 25 and 26 on all future proposed revisions to the James Ranch Unit Area.

The Third and Fourth Revisions to the Atoka Participating Area, requires approval by the BLM, the Commissioner, and the Commission. The BLM and the New Mexico Oil Conservation Commission have approved the proposed revisions. The Commissioner of Public Lands, however, has not formally approved the revisions, thus final approval has not been issued. The BLM has contacted the Commissioner and has requested that final approval action be withheld until this issue between Bass and Enron has been resolved.

One of the major benefits of unitization is the streamlining of the approval process and the ability to work exclusively with and through the Unit Operator. It is advantageous to all affected parties that this dispute be resolved as soon as possible. As Unit Operator, it is Bass' responsibility to follow all requirements of the Unit Agreement.

If BLM does not receive the documentation as requested in item (2) above within the specified time frames, we will rescind the BLM approval and return the proposed revision package to Bass.

If you have any questions, please feel free to give me a call at (505) 627-0298.

Sincerely,



Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

February 8, 1996

Bureau of Land Management  
P. O. Box 1397  
Roswell, New Mexico 88201

Attention: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. William LeMay

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Ms. Jami Bailey

Re: Application for Approval of the Third Revision of the  
Initial Atoka Participating Area  
James Ranch Unit, No. 14-08-001-558  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as unit operator of the James Ranch Unit Agreement pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the selection of the following described lands to constitute the third revision to the Initial Atoka Participating Area. The revised participating area consists of 2,604.65 acres to be comprised of the lands indicated on the plat attached hereto and further described as follows:

E/2 Section 35, S/2 Section 36, T22S-R30E  
S/2 Section 31, T22S-R31E  
E/2, NE/4 NW/4 Section 1, T23S-R30E  
W/2 W/2 Section 5, Section 6, W/2 Section 8, SW/4 Section 17, T23S-R31E

All in Eddy County, New Mexico and containing exactly 2,604.65 acres of land.

February 8, 1996  
Page 2

In support of this application, the following numbered items are attached hereto and made a part hereof:

1. An ownership map (Exhibit "A") depicting the boundaries of the proposed third revision to the Initial Atoka Participating Area.
2. A schedule (Exhibit "B") identifying the lands entitled to participation in the revised participating area with the percentage of participation of each lease or tract indicated thereon.
3. A geological report with accompanying geological maps supporting and justifying the proposed selection of the revised area based on the results obtained from the Santa Fe 1-C Pure Gold Federal.

This proposed third revision to the Initial Atoka Participating Area is predicated upon the knowledge and information first obtained from the the Santa Fe 1-C Pure Gold Federal Well located in SE/4 SW/4 Section 17, T23S-R31E in December, 1982. According to Section 11 of the Unit Agreement, the effective date of the subject revision should be the first of the month in which the above information was obtained or December 1, 1982. Therefore, Bass respectfully requests your approval of the hereinabove described 2,604.65 acres of land to constitute the third revision of the Initial Atoka Participating Area, to be effective December 1, 1982.

Thank you very much for your cooperation in this regard and should you have any questions or comments concerning same, please do not hesitate to contact the undersigned.

Very truly yours,

  
J. Wayne Bailey  
Division Landman

JWB/WWC:sd

ACCEPTED AND AGREED this \_\_\_\_\_ day of \_\_\_\_\_, 1996.

BUREAU OF LAND MANAGEMENT

By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION DIVISION

By: \_\_\_\_\_

**EXHIBIT "B"**  
**Third Revision to Initial Atoka Participating Area**  
**James Ranch Unit**  
**Eddy County, New Mexico**

<u>Tract Lease No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
2	NM 02883-A Section 5, T23S-R31E; SW/4 NW/4, W/2 SW/4	120.00	4.6071	Bass Enterprises Production Co. - 100%
3	NM 02884-A Section 1, T23S-R30E; Lot 3	40.30	1.5472	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
3-A	NM 02884-B Section 1, T-23S-R30E; Lots 1 & 2, S/2 NE/4, SE/4	320.24	12.2949	Bass Enterprises Production Co. - 37.5093% Enron Oil & Gas Co. - 62.4906%
4	NM 02887-A Section 6, T23S-R31E; Lots 1 & 2, S/2 NE/4, NE/4 SE/4	199.92	7.6755	Bass Enterprises Production Co. - 74.9937% Enron Oil & Gas Co. - 25.0063%
4	NM 02887-D Section 6, T23S-R31E; Lots 3, 4, 5, SE/4 NW/4	161.08	6.1843	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
4-A	NM 02887-B Section 5, T23S-R31E; Lot 4	39.98	1.5350	Bass Enterprises Production Co. - 100%
6	NM 02952-C Section 35, T22S-R30E; NE/4	160.00	6.1429	Bass Enterprises Production Co. - 100%
6-A	NM 02952-A Section 35, T22S-R30E; SE/4	160.00	6.1429	Bass Enterprises Production Co. - 100%

**EXHIBIT "B"**  
**Third Revision to Initial Atoka Participating Area**  
 Page 2

<u>Tract Lease No.</u>	<u>No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
7	NM 02953-C	Section 31, T22S-R31E; S/2	320.98	12.3233	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
8	NM 04473	Section 6, T23S-R31E; Lots 6, 7, E/2 SW/4, W/2 SE/4, SE/4 SE/4	282.15	10.8325	Bass Enterprises Production Co. - 51.0554% Enron Oil & Gas Co. - 48.9445%
20	LC 071988-B	Section 8, T23S-R31E; W/2 Section 17, T23S-R31E; NW/4	480.00	18.4286	Bass Enterprises Production Co. - 100%
21	E-5229-1	Section 36, T22S-R30E; SW/4	160.00	6.1429	Bass Enterprises Production Co. - 75% Enron Oil & Gas Co. - 25%
21	E-5229-2	Section 36, T22S-R30E; SE/4	160.00	6.1429	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
<b>TOTALS:</b>			2604.65	100%	
<b>Total Federal Lands:</b>		2284.65 Acres			
<b>Total State Lands:</b>		320.00 Acres			
<b>Total Fee Lands:</b>		<u>0.00</u> Acres			
<b>Total:</b>		2604.65 Acres			

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

February 8, 1996

Bureau of Land Management  
P. O. Box 1397  
Roswell, New Mexico 88201

Attention: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. William LeMay

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Ms. Jami Bailey

Re: Application for Approval of the Fourth Revision of the  
Initial Atoka Participating Area  
James Ranch Unit, No. 14-08-001-558  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as unit operator of the James Ranch Unit Agreement pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the selection of the following described lands to constitute the fourth revision to the Initial Atoka Participating Area. The revised participating area consists of 2,844.50 acres to be comprised of the lands indicated on the plat attached hereto and further described as follows:

SW/4 NW/4 Section 7, T22S-R31E  
N/2 SE/4, SW/4 SE/4, S/2 SW/4 Section 12, T22S-R30E  
E/2 Section 35, S/2 Section 36, T22S-R30E  
S/2 Section 31, T22S-R31E  
E/2, NE/4 NW/4 Section 1, T23S-R30E  
W/2 W/2 Section 5, Section 6, W/2 Section 8, SW/4 Section 17, T23S-R31E

All in Eddy County, New Mexico and containing exactly 2,844.50 acres of land.

In support of this application, the following numbered items are attached hereto and made a part hereof:

1. An ownership map (Exhibit "A") depicting the boundaries of the proposed fourth revision to the Initial Atoka Participating Area.
2. A schedule (Exhibit "B") identifying the lands entitled to participation in the revised participating area with the percentage of participation of each lease or tract indicated thereon.
3. A geological report with accompanying geological maps supporting and justifying the proposed selection of the revised area based on the results obtained from the Mitchell Energy-Apache Federal 13 No. 1.

This proposed fourth revision to the Initial Atoka Participating Area is predicated upon the knowledge and information first obtained from the Mitchell Energy-Apache Federal 13 No. 1 located in SE/4 NE/4 Section 13, T22S-R30E in July, 1993. According to Section 11 of the Unit Agreement, the effective date of the subject revision should be the first of the month in which the above information was obtained or July 1, 1993. Therefore, Bass respectfully requests your approval of the hereinabove described 2,844.50 acres of land to constitute the fourth revision of the Initial Atoka Participating Area, to be effective July 1, 1993.

Thank you very much for your cooperation in this regard and should you have any questions or comments concerning same, please do not hesitate to contact the undersigned.

Very truly yours,



J. Wayne Bailey  
Division Landman

JWB/WWC:sd

ACCEPTED AND AGREED this \_\_\_\_\_ day of \_\_\_\_\_, 1996.

BUREAU OF LAND MANAGEMENT

By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION DIVISION

By: \_\_\_\_\_

**EXHIBIT "B"**  
**Fourth Revision to Initial Atoka Participating Area**  
**James Ranch Unit**  
**Eddy County, New Mexico**

<u>Tract Lease No.</u>	<u>No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
1	NM 0300	Section 12, T22S-R30E; N/2SE/4, SW/4 SE/4, S/2 SW/4	200.00	7.0311	Bass Enterprises Production Co. - 100%
2	NM 02883-A	Section 5, T23S-R31E; SW/4 NW/4, W/2 SW/4	120.00	4.2187	Bass Enterprises Production Co. - 100%
3	NM 02884-A	Section 1, T23S-R30E; Lot 3	40.30	1.4168	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
3-A	NM 02884-B	Section 1, T-23S-R30E; Lots 1&2, S/2 NE/4, SE/4	320.24	11.2582	Bass Enterprises Production Co. - 37.5093% Enron Oil & Gas Co. - 62.4906%
4	NM 02887-A	Section 6, T23S-R31E; Lots 1&2, S/2 NE/4, NE/4 SE/4	199.92	7.0283	Bass Enterprises Production Co. - 74.9937% Enron Oil & Gas Co. - 25.0063%
4	NM 02887-D	Section 6, T23S-R31E; Lots 3, 4, 5, SE/4 NW/4	161.08	5.6629	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
4-A	NM 02887-B	Section 5, T23S-R31E; Lot 4	39.98	1.4055	Bass Enterprises Production Co. - 100%
6	NM 02952-C	Section 35, T22S-R30E; NE/4	160.00	5.6249	Bass Enterprises Production Co. - 100%

**EXHIBIT "B"**  
**Fourth Revision to Initial Atoka Participating Area**  
 Page 2

<u>Tract Lease No.</u>	<u>No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
6-A	NM 02952-A	Section 35, T22S-R30E; SE/4	160.00	5.6249	Bass Enterprises Production Co. - 100%
7	NM 02953-C	Section 31, T22S-R31E; S/2	320.98	11.2842	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
8	NM 04473	Section 6, T23S-R31E; Lots 6, 7, E/2 SW/4, W/2 SE/4, SE/4 SE/4	282.15	9.9191	Bass Enterprises Production Co. - 51.0554% Enron Oil & Gas Co. - 48.9445%
18	NM 69509	Section 7, T22S-R31E; SW/4 NW/4	39.85	1.4009	Bass Enterprises Production Co. - 100%
20	LC 071988-B	Section 8, T23S-R31E; W/2 Section 17, T23S-R31E; NW/4	480.00	16.8747	Bass Enterprises Production Co. - 100%
21	E-5229-1	Section 36, T22S-R30E; SW/4	160.00	5.6249	Bass Enterprises Production Co. - 75% Enron Oil & Gas Co. - 25%
21	E-5229-2	Section 36, T22S-R30E; SE/4	160.00	5.6249	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
<b>TOTALS:</b>			2844.50	100%	
Total Federal Lands:		2524.50 Acres			
Total State Lands:		320.00 Acres			
Total Fee Lands:		<u>0.00</u> Acres			
Total:		2844.50 Acres			

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

April 3, 1996

**HAND-DELIVERED**

New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Attn: Mr. Roy E. Johnson

Re: **Application of Bass Enterprises Production Company for Approval of the  
Third and Fourth Revisions to the Atoka Participating Area, James  
Ranch Unit Area, Eddy County, New Mexico**

Dear Mr. Johnson:

By letters dated March 19, 1996 and March 21, 1996 to the Bureau of Land Management, the Commissioner of Public Lands and the Oil Conservation Division, Enron Oil & Gas Company ("Enron"), protested the above-referenced applications of Bass Enterprises Production Company ("Bass").

The Bureau of Land Management has concurred with Enron that Article 25 of the James Ranch Unit Agreement ("the Unit Agreement") requires Bass to notify Enron of proposed revisions to the Atoka Participating Area in this unit prior to submission of applications for approval of revisions to governmental authorities. The BLM wrote Bass on March 28, 1996, directing Bass to formally provide notice to Enron of the proposed revisions under Articles 25 and 26 of the Unit Agreement and to otherwise comply with the terms of this agreement.

The BLM and OCD have approved the Third and Fourth Revisions. However, the State Land Office has not given its approval and the BLM has contacted the Commissioner of Public Lands and requested that his final approval be withheld until this issue between Bass

Mr. Roy E. Johnson  
New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
April 3, 1996  
Page 2

and Enron has been resolved.

Enron does not agree with the Third and Fourth Revisions proposed by Bass and has requested review by the BLM's State Director of the technical data supporting these proposed expansions. Enron requested sixty (60) working days (until June 19, 1996) to prepare and submit its data and recommendations. This request was granted on this date.

It is Enron's hope that Bass will comply with the provisions of the Unit Agreement and that the parties will be able to agree on revisions to the Atoka Participating Area. If this does not occur, Enron will oppose the current proposed revisions before the State Director.

The James Ranch Unit Agreement was accepted and approved by the Oil Conservation Commission by Order No. R-2979. By its approval, the Commission has endorsed this unit contract as being consistent with its statutory duties: the prevention of waste and the protection of correlative rights. Not only do parties to these contracts, like Enron, rely on that approval, but their property rights are protected by the provisions in the Unit Agreement which require OCD approval of revisions of participating areas.

Although Bass filed its applications in early February, 1996, it was not until March 14, 1996 that Enron learned that Bass was proposing revisions to the Atoka Participating Area in this unit. Articles 25 and 26 of the Unit Agreement entitle Enron to notice of these applications, and Enron's approval of the proposed revisions is required prior to submission of an application to the Oil Conservation Division. These procedures were not followed. Therefore, Division approval of these revisions violates the Unit Agreement, impairs the correlative rights of Enron, will lead to waste, and violates Enron's due process rights. The only way this can be corrected is for the Division to withdraw its approval of these revisions until Enron has been given notice of the proposed changes and an opportunity to have a hearing on them.

Enron requests that the Oil Conservation Division withdraw its approval of Bass's application for the Third and Fourth Revisions of the Atoka Participating Area of the James Ranch Unit Area. If the Division does not withdraw its approval of this application, Enron

Mr. Roy E. Johnson  
New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
April 3, 1996  
Page 3

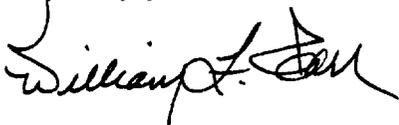
requests that it be set for hearing before a Division Examiner to permit Enron an opportunity to present its evidence in opposition to this application. Since notice was not given to Enron of this application as provided in Article 25 of the Unit Agreement, Enron's request for hearing is timely. Furthermore, no Division rule provides less than twenty days afforded to a party adversely affected by a Division decision to seek further review of that action.

When the Division sets this matter for hearing, to protect Enron's due process rights the Division must also allow Enron adequate time to prepare its case. The BLM has agreed to extend the time for filing of Enron's technical data to June 19, 1996 and Enron hereby requests that any hearing on this matter be scheduled after that date.

Enclosed for your review is the James Ranch Unit Agreement and Enron's March 19th and 21, 1996 letters and the responses of the BLM dated March 28th and April 2, 1996.

Your attention to this matter is appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr". The signature is written in a cursive style with a large initial "W".

WILLIAM F. CARR  
ATTORNEY FOR ENRON OIL & GAS COMPANY

WFC:mlh  
Enclosures as indicated

Mr. Roy E. Johnson  
New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
April 3, 1996  
Page 4

cc: Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201  
ATTENTION: Mr. Tony Ferguson

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

Mr. Patrick J. Tower  
Enron Oil & Gas Company  
Post Office Box 2267  
Midland, TX 79702

Ernest L. Carroll, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
Post Office Box 1720  
Artesia, NM 88211-1720  
Attorney for Bass Enterprises Production Company

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

APR 11 1996  
APR 11 8 02

April 4, 1996

Bureau of Land Management  
1717 West 2nd Street  
Roswell, New Mexico 88201

Attn: Mr. Tony Ferguson

Re: Affidavit of Notice  
Third & Fourth Revisions  
Atoka Participating Area  
James Ranch Unit  
Eddy County, New Mexico

Dear Mr. Ferguson:

Pursuant to the second requirement contained in your letter dated March 28, 1996, please find attached hereto one (1) original copy of that certain Affidavit of Notice whereby the undersigned has stated that Enron Oil & Gas was provided with notice regarding the Third and Fourth Revisions of the Atoka Participating Area of the James Ranch Unit by certified express mail on April 2, 1996. It is Bass' understanding that the BLM's requirements in this regard have now been met. Thank you very much for your cooperation in this regard and should you have any questions or comments concerning same, please do not hesitate to contact the undersigned.

Very truly yours,

  
J. Wayne Bailey

JWB:sd

C:\LMH\JWB\BLM8

Letter to Bureau of Land Management  
April 4, 1996  
Page 2

cc: Commissioner of Public Lands  
State of New Mexico  
P.O. Box 1148  
Santa Fe, NM 87504-1148  
Attn: Mr. Pete Martinez

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505  
Attn: Mr. William J. LeMay

William F. Carr  
Campbell, Carr & Berge  
P.O. Box 2208  
Santa Fe, NM 87504-2208

Losee, Carson, Haas & Carroll  
311 W. Quay Ave.  
Artesia, NM 88211-1720

Enron Oil and Gas Company  
P.O. Box 2267  
Midland, Texas 79702  
Attn: Mr. Patrick Tower

c:\lmh\jwb\blm7

AFFIDAVIT OF NOTICE

The undersigned, J. Wayne Bailey, upon being duly sworn, deposes and states that:

1. My name is J. Wayne Bailey, and I am Division Landman of Bass Enterprises Production Co. of Fort Worth, Texas.

2. I caused the attached Notice regarding the Third and Fourth Revisions of the Atoka Participating Area, James Ranch Unit, Eddy County, New Mexico, mailed by Certified Express Mail, return receipt requested, to Enron Oil & Gas Company on April 2, 1996. A copy of said notice is attached hereto as Exhibit "A" and contains the undersigned's signature thereon.

Further affiant sayeth not.

  
\_\_\_\_\_  
J. WAYNE BAILEY  
Bass Enterprises Production Co.

J. WAYNE BAILEY, being first duly sworn, states on oath that all of the representations in this affidavit are true as far as affiant knows or is informed, and that such affidavit is true, accurate and complete to the best of affiant's knowledge and belief.

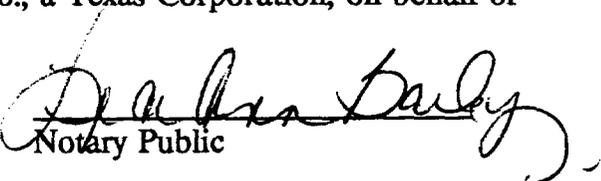
  
\_\_\_\_\_  
J. Wayne Bailey

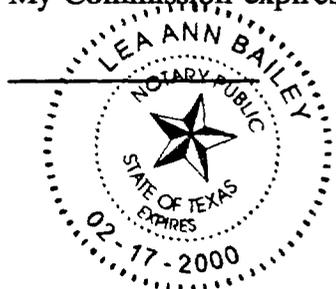
STATE OF TEXAS

COUNTY OF TARRANT

This instrument was acknowledged before me on April 4, 1996, by J. Wayne Bailey, Division Landman of Bass Enterprises Production Co., a Texas Corporation, on behalf of said corporation.

My Commission expires:

  
\_\_\_\_\_  
Notary Public



BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.  
FORT WORTH, TEXAS 76102-3131  
817/390-8400

April 2, 1996

CERTIFIED EXPRESS MAIL

Enron Oil and Gas Company  
P.O. Box 2267  
Midland, Texas 79702

Attention: Mr. Patrick Tower

Re: Notice of Participating Area Revisions  
Third and Fourth Revisions  
Atoka Participating Area  
James Ranch Unit  
Eddy County, New Mexico

Gentlemen:

As you are aware, as a result of the drilling and completion of the James Ranch Unit No. 70 Well, Bass, as Operator of the James Ranch Unit, on July 18, 1995 submitted an application for creation of an Atoka Participating Area around said well. Subsequent to the filing of said application, on November 2, 1995 Enron made an appearance before the BLM in opposition to Bass' plan and proposed changes which involved revisions and expansions of the existing Atoka Participating Area in the unit. Subsequently, in accordance with the BLM's guidelines, Bass revised its application to provide for the Third and Fourth Revisions of the Atoka Participating Area in the James Ranch Unit, copies of which are attached herewith for your reference. The Bureau of Land Management and the New Mexico Oil Conservation Division have approved the above revisions and a final approval is pending before the Commissioner of Public Lands.

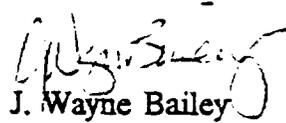
As you also aware, by letter dated March 28, 1996, the BLM requested that Bass provide Enron formal written notice of its revised proposal with respect to the Third and Fourth Revisions of the Atoka Participating Area in accordance with Articles 25 and 26 of the Unit Agreement. This letter shall constitute formal written notice in accordance with the BLM's letter dated March 28, 1996 and specifically notice of the Third and Fourth Revisions to the Atoka Participating Area which was submitted by Bass to the BLM by letter dated February 8, 1996, copy of which is attached herewith. Further, Bass will notify Enron in accordance with Articles 25 and 26 on future revisions to the James Ranch Unit Area as provided in the BLM's letter of March 28, 1996.

EXHIBIT "A"

Letter to Enron Oil and Gas Company  
April 2, 1996  
Page 2

If you have any questions, please call the undersigned at (817) 390-8671.

Very truly yours,

  
J. Wayne Bailey

JWB:sd

cc: Commissioner of Public Lands  
State of New Mexico  
P.O. Box 1148  
Santa Fe, NM 87504-1148  
Attn: Mr. Pete Martinez

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505  
Attn: Mr. William J. LeMay

Bureau of Land Management  
1717 W. 2nd Street  
Roswell, NM 88201  
Attn: Mr. Tony Ferguson

William F. Carr  
Campbell, Carr & Berge  
P.O. Box 2208  
Santa Fe, NM 87504-2208

Losee, Carson, Haas & Carroll  
311 W. Quay Ave.  
Artesia, NM 88211-1720



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201

LAND RECEIVED		
APR 01 1996		
WRS _____	Jwd <input checked="" type="checkbox"/>	TCS _____
DDC _____	HBF _____	WWC _____
HCM _____	JTW _____	SF _____

IN REPLY REFER TO:

James Ranch Unit  
NM-70965

MAR 28 1996

CERTIFIED--RETURN RECEIPT REQUESTED  
P 392 286 011

Mr. Wayne Bailey  
Bass Enterprises Production Company  
201 Main Street  
Fort Worth, Texas 76102-3131

Dear Mr. Bailey:

The Bureau of Land Management (BLM) has received a formal protest regarding the Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico from Enron Oil and Gas Company (Enron). Enron is a working interest owner in the James Ranch Unit and as such is recognized as an affected party.

Based upon information supplied by Enron and in accordance with Article 25 of the James Ranch Unit Agreement entered into as of April 22, 1953, Bass Enterprises Production Company (Bass) is required to adhere to the following:

Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior, the Commissioner of Public Lands and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the Commissioner or Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

Enron claims that Bass failed to provide notice of the proposed Third and Fourth Revisions to the Atoka Participating Area, prior to submittal of applications to the BLM, New Mexico Oil Conservation Division, and the Commissioner of Public Lands.

Therefore, the BLM hereby orders the following:

- (1) That Bass contact Enron and provide notice as specifically addressed under Articles 25 and 26 of the James Ranch Unit Agreement.
- (2) That Bass provide a statement to BLM within 15 days of receipt of this letter, specifically documenting that notification was served to Enron as per the James Ranch Unit Agreement.

(3) That Bass follow the notification procedures as outlined in Articles 25 and 26 on all future proposed revisions to the James Ranch Unit Area.

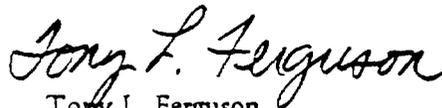
The Third and Fourth Revisions to the Atoka Participating Area, requires approval by the BLM, the Commissioner, and the Commission. The BLM and the New Mexico Oil Conservation Commission have approved the proposed revisions. The Commissioner of Public Lands, however, has not formally approved the revisions, thus final approval has not been issued. The BLM has contacted the Commissioner and has requested that final approval action be withheld until this issue between Bass and Enron has been resolved.

One of the major benefits of unitization is the streamlining of the approval process and the ability to work exclusively with and through the Unit Operator. It is advantageous to all affected parties that this dispute be resolved as soon as possible. As Unit Operator, it is Bass' responsibility to follow all requirements of the Unit Agreement.

If BLM does not receive the documentation as requested in item (2) above within the specified time frames, we will rescind the BLM approval and return the proposed revision package to Bass.

If you have any questions, please feel free to give me a call at (505) 627-0298.

Sincerely,



Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

February 8, 1996

Bureau of Land Management  
P. O. Box 1397  
Roswell, New Mexico 88201

Attention: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. William LeMay

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Ms. Jami Bailey

Re: Application for Approval of the Third Revision of the  
Initial Atoka Participating Area  
James Ranch Unit, No. 14-08-001-558  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as unit operator of the James Ranch Unit Agreement pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the selection of the following described lands to constitute the third revision to the Initial Atoka Participating Area. The revised participating area consists of 2,604.65 acres to be comprised of the lands indicated on the plat attached hereto and further described as follows:

E/2 Section 35, S/2 Section 36, T22S-R30E

S/2 Section 31, T22S-R31E

E/2, NE/4 NW/4 Section 1, T23S-R30E

W/2 W/2 Section 5, Section 6, W/2 Section 8, SW/4 Section 17, T23S-R31E

All in Eddy County, New Mexico and containing exactly 2,604.65 acres of land.

February 8, 1996

Page 2

In support of this application, the following numbered items are attached hereto and made a part hereof:

1. An ownership map (Exhibit "A") depicting the boundaries of the proposed third revision to the Initial Atoka Participating Area.
2. A schedule (Exhibit "B") identifying the lands entitled to participation in the revised participating area with the percentage of participation of each lease or tract indicated thereon.
3. A geological report with accompanying geological maps supporting and justifying the proposed selection of the revised area based on the results obtained from the Santa Fe 1-C Pure Gold Federal.

This proposed third revision to the Initial Atoka Participating Area is predicated upon the knowledge and information first obtained from the the Santa Fe 1-C Pure Gold Federal Well located in SE/4 SW/4 Section 17, T23S-R31E in December, 1982. According to Section 11 of the Unit Agreement, the effective date of the subject revision should be the first of the month in which the above information was obtained or December 1, 1982. Therefore, Bass respectfully requests your approval of the hereinabove described 2,604.65 acres of land to constitute the third revision of the Initial Atoka Participating Area, to be effective December 1, 1982.

Thank you very much for your cooperation in this regard and should you have any questions or comments concerning same, please do not hesitate to contact the undersigned.

Very truly yours,

  
J. Wayne Bailey  
Division Landman

JWB/WWC:sd

ACCEPTED AND AGREED this \_\_\_\_\_ day of \_\_\_\_\_, 1996.

BUREAU OF LAND MANAGEMENT

By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION DIVISION

By: \_\_\_\_\_

**EXHIBIT "B"**  
**Third Revision to Initial Atoka Participating Area**  
**James Ranch Unit**  
**Rddy County, New Mexico**

<u>Tract Lease No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
2	NM 02883-A Section 5, T23S-R31E; SW/4 NW/4, W/2 SW/4	120.00	4.6071	Bass Enterprises Production Co. - 100%
3	NM 02884-A Section 1, T23S-R30E; Lot 3	40.30	1.5472	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
3-A	NM 02884-B Section 1, T-23S-R30E; Lots 1 & 2, S/2 NE/4, SE/4	320.24	12.2949	Bass Enterprises Production Co. - 37.5093% Enron Oil & Gas Co. - 62.4906%
4	NM 02887-A Section 6, T23S-R31E; Lots 1 & 2, S/2 NE/4, NE/4 SE/4	199.92	7.6755	Bass Enterprises Production Co. - 74.9937% Enron Oil & Gas Co. - 25.0063%
4	NM 02887-D Section 6, T23S-R31E; Lots 3, 4, 5, SE/4 NW/4	161.08	6.1843	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
4-A	NM 02887-B Section 5, T23S-R31E; Lot 4	39.98	1.5350	Bass Enterprises Production Co. - 100%
6	NM 02952-C Section 35, T22S-R30E; NE/4	160.00	6.1429	Bass Enterprises Production Co. - 100%
6-A	NM 02952-A Section 35, T22S-R30E; SE/4	160.00	6.1429	Bass Enterprises Production Co. - 100%

**EXHIBIT "B"**  
**Third Revision to Initial Atoka Participating Area**  
 Page 2

Tract Lease No. No.	Description	Participating Acres	Percentage of Participation	Working Interest Owners
7	NM 02953-C Section 31, T22S-R31E; S/2	320.98	12.3233	Bass Enterprises Production Co. - 33.33333% Enron Oil & Gas Co. - 66.66667%
8	NM 04473 Section 6, T23S-R31E; Lots 6, 7, E/2 SW/4, W/2 SE/4, SE/4 SE/4	282.15	10.8325	Bass Enterprises Production Co. - 51.0554% Enron Oil & Gas Co. - 48.9445%
20	LC 071988-B Section 8, T23S-R31E; W/2 Section 17, T23S-R31E; NW/4	480.00	18.4286	Bass Enterprises Production Co. - 100%
21	E-5229-1 Section 36, T22S-R30E; SW/4	160.00	6.1429	Bass Enterprises Production Co. - 75% Enron Oil & Gas Co. - 25%
21	E-5229-2 Section 36, T22S-R30E; SE/4	160.00	6.1429	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
<b>TOTALS:</b>		2604.65	100%	
Total Federal Lands:		2284.65 Acres		
Total State Lands:		320.00 Acres		
Total Fee Lands:		<u>0.00</u> Acres		
Total:		2604.65 Acres		

BASS ENTERPRISES PRODUCTION CO.

201 MAIN ST.

FORT WORTH, TEXAS 76102-3131

817/390-8400

February 8, 1996

Bureau of Land Management  
P. O. Box 1397  
Roswell, New Mexico 88201

Attention: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

Attention: Mr. William LeMay

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Ms. Jami Bailey

Re: Application for Approval of the Fourth Revision of the  
Initial Atoka Participating Area  
James Ranch Unit, No. 14-08-001-558  
Eddy County, New Mexico

Gentlemen:

Bass Enterprises Production Co., as unit operator of the James Ranch Unit Agreement pursuant to the provisions of Section 11 thereof, respectfully submits for your approval the selection of the following described lands to constitute the fourth revision to the Initial Atoka Participating Area. The revised participating area consists of 2,844.50 acres to be comprised of the lands indicated on the plat attached hereto and further described as follows:

SW/4 NW/4 Section 7, T22S-R31E  
N/2 SE/4, SW/4 SE/4, S/2 SW/4 Section 12, T22S-R30E  
E/2 Section 35, S/2 Section 36, T22S-R30E  
S/2 Section 31, T22S-R31E  
E/2, NE/4 NW/4 Section 1, T23S-R30E  
W/2 W/2 Section 5, Section 6, W/2 Section 8, SW/4 Section 17, T23S-R31E

All in Eddy County, New Mexico and containing exactly 2,844.50 acres of land.

February 8, 1996

Page 2

In support of this application, the following numbered items are attached hereto and made a part hereof:

1. An ownership map (Exhibit "A") depicting the boundaries of the proposed fourth revision to the Initial Atoka Participating Area.
2. A schedule (Exhibit "B") identifying the lands entitled to participation in the revised participating area with the percentage of participation of each lease or tract indicated thereon.
3. A geological report with accompanying geological maps supporting and justifying the proposed selection of the revised area based on the results obtained from the Mitchell Energy-Apache Federal 13 No. 1.

This proposed fourth revision to the Initial Atoka Participating Area is predicated upon the knowledge and information first obtained from the Mitchell Energy-Apache Federal 13 No. 1 located in SE/4 NE/4 Section 13, T22S-R30E in July, 1993. According to Section 11 of the Unit Agreement, the effective date of the subject revision should be the first of the month in which the above information was obtained or July 1, 1993. Therefore, Bass respectfully requests your approval of the hereinabove described 2,844.50 acres of land to constitute the fourth revision of the Initial Atoka Participating Area, to be effective July 1, 1993.

Thank you very much for your cooperation in this regard and should you have any questions or comments concerning same, please do not hesitate to contact the undersigned.

Very truly yours,



J. Wayne Bailey  
Division Landman

JWB/WWC:sd

ACCEPTED AND AGREED this \_\_\_\_\_ day of \_\_\_\_\_, 1996.

BUREAU OF LAND MANAGEMENT

By: \_\_\_\_\_

COMMISSIONER OF PUBLIC LANDS

By: \_\_\_\_\_

NEW MEXICO OIL CONSERVATION DIVISION

By: \_\_\_\_\_

**EXHIBIT "B"**  
**Fourth Revision to Initial Atoka Participating Area**  
**James Ranch Unit**  
**Eddy County, New Mexico**

<u>Tract Lease No.</u>	<u>No.</u>	<u>Description</u>	<u>Participating Acres</u>	<u>Percentage of Participation</u>	<u>Working Interest Owners</u>
1	NM 0300	Section 12, T22S-R30E; N/2SE/4, SW/4 SE/4, S/2 SW/4	200.00	7.0311	Bass Enterprises Production Co. - 100%
2	NM 02883-A	Section 5, T23S-R31E; SW/4 NW/4, W/2 SW/4	120.00	4.2187	Bass Enterprises Production Co. - 100%
3	NM 02884-A	Section 1, T23S-R30E; Lot 3	40.30	1.4168	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
3-A	NM 02884-B	Section 1, T-23S-R30E; Lots 1&2, S/2 NE/4, SE/4	320.24	11.2582	Bass Enterprises Production Co. - 37.5093% Enron Oil & Gas Co. - 62.4906%
4	NM 02887-A	Section 6, T23S-R31E; Lots 1&2, S/2 NE/4, NE/4 SE/4	199.92	7.0283	Bass Enterprises Production Co. - 74.9937% Enron Oil & Gas Co. - 25.0063%
4	NM 02887-D	Section 6, T23S-R31E; Lots 3, 4, 5, SE/4 NW/4	161.08	5.6629	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
4-A	NM 02887-B	Section 5, T23S-R31E; Lot 4	39.98	1.4055	Bass Enterprises Production Co. - 100%
6	NM 02952-C	Section 35, T22S-R30E; NE/4	160.00	5.6249	Bass Enterprises Production Co. - 100%

**EXHIBIT "B"**  
**Fourth Revision to Initial Atoka Participating Area**  
 Page 2

Tract Lease No. No.	Description	Participating Acres	Percentage of Participation	Working Interest Owners
6-A	NM 02952-A Section 35, T22S-R30E; SE/4	160.00	5.6249	Bass Enterprises Production Co. - 100%
7	NM 02953-C Section 31, T22S-R31E; S/2	320.98	11.2842	Bass Enterprises Production Co. - 33.3333% Enron Oil & Gas Co. - 66.6667%
8	NM 04473 Section 6, T23S-R31E; Lots 6, 7, E/2 SW/4, W/2 SE/4, SE/4 SE/4	282.15	9.9191	Bass Enterprises Production Co. - 51.0554% Enron Oil & Gas Co. - 48.9445%
18	NM 69509 Section 7, T22S-R31E; SW/4 NW/4	39.85	1.4009	Bass Enterprises Production Co. - 100%
20	LC 071988-B Section 8, T23S-R31E; W/2 Section 17, T23S-R31E; NW/4	480.00	16.8747	Bass Enterprises Production Co. - 100%
21	E-5229-1 Section 36, T22S-R30E; SW/4	160.00	5.6249	Bass Enterprises Production Co. - 75% Enron Oil & Gas Co. - 25%
21	E-5229-2 Section 36, T22S-R30E; SE/4	160.00	5.6249	Bass Enterprises Production Co. - 50% Enron Oil & Gas Co. - 50%
<b>TOTALS:</b>		2844.50	100%	

Total Federal Lands: 2524.50 Acres  
 Total State Lands: 320.00 Acres  
 Total Fee Lands: 0.00 Acres  
 Total: 2844.50 Acres

CAMPBELL, CARR & BERGE, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
-----  
MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN  
-----  
JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

April 8, 1996

**VIA FACSIMILE AND U.S. MAIL**

United States Department of the Interior  
Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201

Attn.: Mr. Tony Ferguson

Re: *Application of Bass Enterprises Production Company for Approval of the Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico*

Dear Mr. Ferguson:

This letter is in further protest of Bass Enterprises Production Co. ("Bass")'s application for approval of the third and fourth revisions (the "Revisions") to the Atoka Participating Area in the James Ranch Unit, Eddy County, New Mexico. Enron's due process rights have been violated by the proceedings to date. Enron requests that the United States Department of the Interior, Bureau of Land Management ("BLM") rescind its approval of the Revisions so that Bass might provide Enron notice *prior to* any consideration of the Revisions, and so that the BLM might provide Enron an opportunity to be heard in connection with the proposed Revisions.

On April 5, 1996, Enron Oil & Gas Company received a letter, dated April 2, 1996, from Bass, informing Enron that Bass was in the process of obtaining approval for the Revisions. Bass sent that letter to Enron in an attempt to comply with the BLM's March 28, 1996 order to Bass to comply with Articles 25 and 26 of the James Ranch Unit Agreement. It is our understanding that a copy of that letter was provided to you. We emphasize to you that the

Mr. Tony Ferguson

April 8, 1996

Page 2

letter merely provided Enron with a legal description of the lands at issue. Despite Enron's repeated requests, the formal Requests and Bass's supporting data have never been provided to Enron.

The April 5, 1996 letter from Bass to Enron is insufficient to cure Bass's failure to notify Enron *prior to* seeking approval for the Revisions. Article 25 of the Unit Agreement provides that the unit operator may have the right to appear before the Department of the Interior, the New Mexico Commissioner of Public Lands, and the New Mexico Oil Conservation Commission (the "OCD") "*after notice to other parties.*" Instead of appearing after giving notice, Bass gave notice after appearing. Article 25 of the Unit Agreement further provides that Enron has a right to appear at any hearing in which Bass appears.

You have already issued approval to the Revisions, which approval is contingent to like approval from the State Land Office and the OCD. The OCD has likewise issued its approval. You have asked the State Land Office to withhold approval until the matter of Bass's failure to give notice to Enron is resolved.

Enron has a Constitutionally-protected property interest in its holdings in the James Ranch Unit. *Uhden v. N.M. Oil Conservation Comm'n*, 112 N.M. 528, 530, 817 P.2d 721, 723 (1991). The Revisions severely affect Enron's interests. Before an administrative agency such as the BLM may affect Enron's interest, it must afford Enron notice and the opportunity to be heard. *Id.* The right to be heard includes the right to present evidence and cross-examine the opposing party's witnesses. *Id.* Articles 25 and 26 of the James Ranch Unit Agreement are merely embodiments of Enron's due process rights, and the BLM still has the burden of ensuring that Enron's property interests are not affected without due process.

Bass has already made several appearances before the BLM and has provided its data supporting the Revisions to the BLM. Enron was not provided notice prior to those appearances and did not have the opportunity to present its own data concurrent with Bass's presentation or to critically examine Bass's supporting data. The decision to issue approval has already been made, and any presentation which Enron would make at this point would be insufficient to protect its property interests.

At this point, the only way that the BLM may provide Enron due process is to rescind its approval and order Bass to provide notice to Enron *prior to* submitting any additional requests for approval. Although it is likely that Enron will still be opposed to the proposed Revisions, Enron will at that point be able to appear before the BLM and make its case

Mr. Tony Ferguson  
April 8, 1996  
Page 3

against the proposed Revisions.

In its letter to Enron, a copy of which was provided to you, Bass states that "on November 2, 1995, Enron made an appearance before the BLM in opposition to Bass' [sic] plan and proposed changes which involved revisions and expansions of the existing Atoka Participating Area in the unit." This statement leads the reader to believe that Enron has been aware of the proposed Revisions and has already appeared before the BLM in connection with those Revisions.

In fact, Bass did not apply for approval of the Revisions until February 8, 1996, over two months *after* Bass represents that Enron appeared before the BLM in connection with the proposed Revisions. Enron has never appeared before the BLM in connection with the proposed Revisions. The November 2, 1995 appearance before the BLM, to which Bass refers, was made to repudiate Bass's efforts to establish a stand-alone 320-acre participating area for its James Ranch Unit #70 well. At no time were the boundaries of the proposed Revisions discussed, and no technical data which Bass has submitted in support of the proposed Revisions has ever been provided to Enron, despite Enron's repeated requests for that data.

Concurrent with this correspondence, we are requesting that the State Land Office continue to withhold approval of the Revisions until this matter is resolved.

Very truly yours,



WILLIAM F. CARR  
PAUL R. OWEN

/mb

cc: Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

Mr. Tony Ferguson

April 8, 1996

Page 4

New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. Roy E. Johnson

Mr. Patrick J. Tower  
Enron Oil & Gas Company  
Post Office Box 2267  
Midland, Texas 79702

Ernest L. Carroll, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
Post Office Box 1720  
Artesia, New Mexico 88211-1720  
Attorneys for Bass Enterprises Production Co.

**CAMPBELL, CARR & BERGE, P.A.**  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

ENRON OIL CONSERVATION DIVISION  
P.O. BOX 2208  
APR 8 52 JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

April 8, 1996

**VIA FACSIMILE AND U.S. MAIL**

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, new Mexico 87504-1148

Attn.: Ms. Jami Bailey

Dear Ms. Bailey:

Enclosed please find Enron's further protest to the United States Department of the Interior, Bureau of Land Management ("BLM") of the application of Bass Enterprises Production Co. ("Bass")'s application for approval of the third and fourth revisions (the "Revisions") to the Atoka Participating Area in the James Ranch Unit, Eddy County, New Mexico.

The BLM and the New Mexico Oil Conservation Division ("OCD") have already issued approval to the Revisions, which approval is conditioned upon like approval from the New Mexico State Land Office. The due process concerns which Bass has with the proceedings to date also apply to any approval from the State Land Office. The administrative proceedings by which the State Land Office might approve the proposed revisions must afford Enron due process. *Uhdén v. N.M. Oil Conservation Comm'n*, 112 N.M. 528, 530, 817 P.2d 721, 723 (1991).

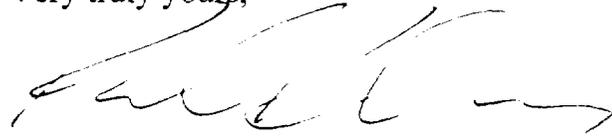
Ms. Jami Bailey

April 8, 1996

Page 2

We request that you continue to withhold approval of the proposed revisions until Enron's due process rights are satisfied.

Very truly yours,



WILLIAM F. CARR

PAUL R. OWEN

/mb

Enclosure

cc: New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. Roy E. Johnson

United States Department of the Interior  
Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201  
ATTENTION: Mr. Tony Ferguson

Mr. Patrick J. Tower  
Enron Oil & Gas Company  
Post Office Box 2267  
Midland, Texas 79702

Ernest L. Carroll, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
Post Office Box 1720  
Artesia, New Mexico 88211-1720  
Attorneys for Bass Enterprises Production Co.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
ROSSELL DISTRICT OFFICE  
1717 West Second Street  
Roswell, New Mexico 88202



IN REPLY REFER TO:

James Ranch Unit  
NM-70965

APR 16 1996

Mr. Paul Owen  
Campbell, Carr & Berge, P.A.  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208

Dear Mr. Owen:

We received your letter on behalf of Enron Oil and Gas Company (Enron) dated April 8, 1996 regarding the continued protest of the application of Bass Enterprises Production Company (BEPCO) for approval of the Third and Fourth Revisions to the Atoka Participating Area in the James Ranch Unit. After careful review and coordination with our solicitor, we would like to respond to the following issues that have been raised:

(1) Due process rights

The James Ranch Unit Agreement is viewed as a contract between the Bureau of Land Management and the Unit Operator. In this case, the Unit Operator (BEPCO) is totally responsible for meeting all the requirements of the Unit Agreement. Any technical or philosophical differences between the Unit Operator and working interest owners must be resolved outside the Unit Agreement. The Unit Agreement contains no provisions for resolution of differences. This matter is normally addressed through a Unit Operating Agreement of which the BLM is not a party. Therefore, the issue of due process rights will not be considered by the BLM and we recommend that a solution be sought outside of the Unit Agreement arguments.

(2) Notification requirements

As per the Unit Agreement language, there are no requirements for the Unit Operator to provide working interests owners any supporting data when notification is served. If there are no objections from BEPCO, the BLM will allow Enron to review the technical data that has been submitted thus far. If Enron wishes to pursue this, please provide the BLM with some type of approval from BEPCO or have BEPCO contact the BLM by telephone.

(3) Approval conditions and rescinding of BLM approval

We are enclosing a copy of the approval letter that was sent to BEPCO from the BLM dated March 4, 1996, which states "...This approval is conditioned on concurrent approval from the New Mexico Oil Conservation Division and the New Mexico Commissioner of Public Lands." This statement is consistent with the Unit Agreement language in Article 11 regarding approvals and the BLM's approval in this situation, is not viewed as a final agency decision until all approving offices have approved. As you are aware, the BLM has requested the Commissioner of Public Lands to suspend any additional processing on this application. The BLM ordered BEPCO to notify Enron and BEPCO has provided documentation of this to the BLM. As per the language in Article 25 on

appearances, we will allow Enron to make a presentation to all three agencies regarding the proposed Third and Fourth Revisions to the Atoka Participating Area. This presentation, however, will not afford Enron the opportunity to cross-examine BEPCO, but to present technical data only. Therefore the BLM will not reconsider its approval dated March 4, 1996, until after such appearance, at which time we will review the information presented and allow the approval to stand or amend as necessary.

(4) Clarification of prior meetings with Enron

A review of BLM records indicates that representatives from Enron appeared before the BLM on November 2, 1995, regarding proposed revisions to the Atoka Participating Area. In fact, Enron left geological maps including structural interpretations of the area with BLM which are consistent with the proposed revisions as presented by BEPCO. These maps had also been utilized in a hearing before the New Mexico Oil Conservation Division. Enron contacted BLM personnel requesting a status report on the Atoka Participating Area and were fully informed of the proposed revisions. Enron requested that BLM allow them an opportunity to present technical data and BLM allowed Enron to appear. Your statements on page 3 of the letter dated April 8th are correct in that the actual applications from BEPCO for the Revisions were submitted on February 8, 1996. Your statements, however, are incorrect in that the previous meeting on November 2, 1995, with BEPCO and Enron involved proposed revisions to the Atoka Participating Area for the James Ranch Unit #70 well.

(5) State Director Review

The Roswell District Office of the BLM has the delegated authority to approve and administer the Unitization program for the Roswell District. By this letter, we are requesting that the New Mexico State Office of the BLM reconsider its acceptance of your appeal and request for a State Director Review dated March 27, 1996. We feel that an appeal and request for State Director Review by Enron is premature at this time in that the approval is not final until all three agencies grant approval. We deem that to date there has been no affect on Enron and any appeal rights would only be appropriate after the approval is finalized by the office of the Commissioner of Public Lands. Enron would then have the opportunity, if so chosen, to file an appeal asking for a State Director Review.

If there are any questions or you would like to schedule a time for appearing as addressed in issue (4) please give me a call at 505-627-0298.

Sincerely,

**(Orig Sdg) Tony L. Ferguson**

Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

Enclosure

cc:  
Commissioner of Public Lands  
State of New Mexico  
Attn: Mr. Pete Martinez  
P.O. Box 1148  
Santa Fe, NM 87504-1148

New Mexico Oil Conservation Division  
Attn: Mr. Bill LeMay  
2040 South Pacheco Street  
Santa Fe, NM 87505

Enron Oil & Gas Company  
Attn: Mr. Patrick Tower  
P.O. Box 1720  
Midland, TX 79702

Bass Enterprises Production Co.  
Attn: Mr. Wayne Bailey  
201 Main Street  
Fort Worth, TX 76102-3131

Losee, Carson, Haas & Carroll, P.A.  
Attn: Mr. Jim Haas  
P.O. Box 1720  
Artesia, NM 88211-1720

NM(93200, R. Wymer)

7710guson 3/4/96



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
 ROSWELL DISTRICT OFFICE  
 1717 West Second Street  
 Roswell, New Mexico 88202



*J. Smith* 3/4/96

IN REPLY REFER TO:  
 3180 (06200)  
 14-08-001-5558

MAR 4 1996

Bass Enterprises Production Co.  
 Attention: Mr. Wayne Bailey  
 201 Main Street  
 Fort Worth, TX 76102-3131

Re: Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico

Gentlemen:

Your application of February 8, 1996, requesting approvals of the Third and Fourth Revision of the Atoka Participating Area, James Ranch Unit, are hereby approved on this date and are effective December 1, 1982, and July 1, 1993, respectively. This approval is conditioned on concurrent approval from the New Mexico Oil Conservation Division and the New Mexico Commissioner of Public Lands.

The Third Revision of the Atoka Participating Area contains 1,683.13 acres more or less and is described as follows:

T. 22 S., R. 30 E., NMPM, Eddy County, New Mexico

sec. 35, E $\frac{1}{2}$ ;  
 sec. 36, W $\frac{1}{2}$ SW $\frac{1}{4}$ .

T. 23 S., R. 31 E., NMPM, Eddy County

sec. 5, Lot <sup>4</sup> 3; SW $\frac{1}{4}$ NW $\frac{1}{4}$  and W $\frac{1}{2}$ SW $\frac{1}{4}$ ;  
 sec. 6, all;  
 sec. 8, W $\frac{1}{2}$ ;  
 sec. 17, NW $\frac{1}{4}$ .

The third revision is based on DST data from the Pure Gold "C" No. 1 well and well data from the James Ranch Unit No. 7 well located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ , sec. 17, and the SW $\frac{1}{4}$ NE $\frac{1}{4}$ , sec. 7, T. 23 R., 31 E., NMPM, Eddy County, respectively. The DST data from the Pure Gold "C" No. 1 well, provided positive data as to the extent of the reservoir as did the well data from the J. R. U. no. 7 well. This data supported BEPCO's mapping of the reservoir in late 1982.

The Fourth Revision of the Atoka Participating Area contains 238.54 acres more or less and is described as follows:

T. 22 S., R. 30 E., NMPM, Eddy County

sec. 12, S $\frac{1}{2}$ SW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$  and SW $\frac{1}{4}$ SE $\frac{1}{4}$

T. 22 S., R. 31 E., NMPM, Eddy County

sec. 7, lot 2.

The fourth revision is based on well log correlations and DST data obtained from the drilling of the Apache "13" No. 1 well located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ , sec 13, T. 22 S., R. 30 E., NMPM. The date of the DST was July 23, 1993, and the DST provided positive data as to the extent of the reservoir.

Copies of the approved applications are being distributed to the appropriate offices and one copy is returned herewith. You are requested to furnish all interested principals with the appropriate evidence of this approval.

If you have any questions please contact John S. Simitz at (505) 627-0288 or the Division of Minerals at (505) 627-0272.

Sincerely,

~~(Orig Sig)~~ Tony L. Ferguson

Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

Enclosure

cc:

Commissioner of Public Lands

MMS (3110)

NM (94354)

NM (06200, B. Lopez)

NM (06780, E. Inman)

LAW OFFICES

LOSEE, CARSON, HAAS & CARROLL, P. A.

MARY LYNN BOGLE  
ERNEST L. CARROLL  
JOEL M. CARSON  
DEAN B. CROSS  
JAMES E. HAAS

OF COUNSEL  
A. J. LOSEE

311 WEST QUAY AVENUE  
P. O. BOX 1720  
ARTESIA, NEW MEXICO 88211-1720

TELEPHONE  
(505) 746-3505

FACSIMILE  
(505) 746-6316

April 17, 1996

**VIA FACSIMILE AND FIRST CLASS MAIL**

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87504-1148

Attn: Mr. Pete Martinez, Oil and Gas Division

Re: Application of Bass Enterprises Production Co. for Approval of  
the Third and Fourth Revisions to the Atoka Participating  
Area, James Ranch Unit Area, Eddy County, New Mexico

Dear Mr. Martinez:

Please be advised that this firm represents Bass Enterprises Production Co. ("Bass") with respect to the referenced matter. By letter dated April 8, 1996, Mr. Paul R. Owen of Campbell, Carr and Berge, P. A. wrote to Jami Bailey on behalf of Enron Oil and Gas Company enclosing a copy of their protest to the United States Department of Interior, Bureau of Land Management. Mr. Owen further made certain representations concerning the process by which Bass Enterprises Production Co. has followed in the processing of the referenced matters. Additionally, in that letter Mr. Owen requested that the Commissioner continue to withhold approval of the proposed revisions until Enron's due process rights are satisfied.

To date, there has been a flurry of letter-writing on behalf of Enron by various members of the Campbell, Carr and Berge law firm. Attached hereto is a copy of a letter addressed to Mr. Roy E. Johnson of the New Mexico Department of Energy, Minerals, and Natural Resources, Oil Conservation Division. Said letter deals with the many misrepresentations made in the various letters written to date and should adequately address all but the issue raised in the April 8, 1996, letter to you concerning the applicability of the Uhden v. N.M. Oil Conservation Comm'n case. 112 N.M. 528, 530, 817 P.2d 721, 723 (1991). As you should well understand, the only obligations and rights of the parties in this situation stem from the unit agreement itself. This is a contractual situation. Approval by the Commissioner is not an exercise of the rule-making authority or adjudicatory authority of either the Oil Conservation Commission or the Commissioner of Public Lands. Rather, the

Commission is being asked to approve or disapprove in its role as an interested contracting party. Uhden v. N.M. Oil Conservation Comm'n has no applicability to the issues at hand, based upon that one factual distinction. It is apparent from the attempt by Enron's lawyers to inundate the Commissioner, the Commission and the BLM with letters that Enron is trying to create rights where it has none and its only hope at success is by the mass confusion that it can create.

Even if the Uhden case were applicable, under the factual situation existing, Enron would have lost all claim of any further redress of its rights. A reading of the Uhden case shows that once Ms. Uhden became aware of the proceeding and had a chance to contest the proceeding, the decision made by the Oil Conservation Division was found binding against her from the date of her actual notice. On November 2, 1995, Enron was fully aware of the fact that new information had become available and that the unit agreement required the operator to submit that information to the appropriate authorities. In fact, on that very day Enron appeared at the offices of the BLM to discuss the very matters raised by the referenced applications. Enron, like Ms. Uhden, has no further claim for redress for the notice issue once it became aware of the proceedings involved.

Once you sit back and let the smoke clear, it becomes apparent that this is not an issue of notice, but rather an attempt by Enron to influence the information the operator is required under the unit agreement to submit to the three governmental authorities. Enron's real complaint is that it has no right to dictate the content of the information to be considered by those governmental authorities. As operator, Bass has a duty to submit the data. The governmental authorities then must make their decisions based on that data. Enron would have a right to appeal those decisions once they are made. It is quite apparent that Enron knows that the information submitted requires changes in the participation areas and allocation formulas. What Enron wants to do is to unduly influence those changes by controlling the information submitted prior to action by the three governmental authorities. That is improper under the terms of the unit agreement and Bass stands by its actions as being in strict compliance with the unit agreement.

Because the procedural claims of Enron are inappropriate under the terms of the unit agreement and the Uhden case has no applicability, Enron's request for the Commissioner to withhold a decision on this matter is insupportable. In fact, there is no good reason why the Commissioner should withhold its approval of the subject revisions. The Commissioner has a contractual obligation to render his approval upon the submission of technical data by the operator. There is no obligation of the operator to seek an agreement from the other working interest owners as to the meaning of that data prior to

Commissioner of Public Lands  
April 17, 1996  
Page 3

the submission to the BLM, the Commission and the Commissioner. Bass has met the strict guidelines of the contractual wording of the Unit Agreement; now the Commissioner must likewise act in conformance with the strict guidelines of the unit agreement and render its approval based upon the technical data submitted to it. Since the Commissioner has before him all of the data required under the Unit Agreement, it is now necessary that he make his decision as a party to that Unit Agreement, as both the BLM and the Oil Conservation Commission have done. Bass requests that the Commissioner expedite his approval so that rights of appeal which any of the parties, including Enron, might have may attach and that this matter be finally resolved so that the proper allocations can be made.

Your consideration of these matters is appreciated.

Very truly yours,

LOSEE, CARSON, HAAS & CARROLL, P.A.



Ernest L. Carroll

ELC:kth

xc: United States Department of the Interior  
Bureau of Land Management  
P. O. Box 1397  
Roswell, NM 88201  
Attn: Mr. Tony Ferguson

Mr. Roy E. Johnson  
New Mexico Department of Energy  
Minerals and Natural Resources  
Oil Conservation Division  
2040 S. Pacheco Street  
Santa Fe, NM 87505

Commissioner of Public Lands  
April 17, 1996  
Page 4

Mr. J. Wayne Bailey  
Bass Enterprises Production Co.  
First City Bank Tower  
201 Main St., Suite 2900  
Fort Worth, TX 76102

Mr. William F. Carr  
Campbell, Carr & Berge, P. A.  
P. O. Box 2208  
Santa Fe, NM 87504-2208

LAW OFFICES

LOSEE, CARSON, HAAS & CARROLL, P. A.

MARY LYNN BOGLE  
ERNEST L. CARROLL  
JOEL M. CARSON  
DEAN B. CROSS  
JAMES E. HAAS

311 WEST QUAY AVENUE  
P. O. BOX 1720  
ARTESIA, NEW MEXICO 88211-1720

TELEPHONE  
(505) 746-3505

FACSIMILE  
(505) 746-6316

OF COUNSEL  
A. J. LOSEE

April 17, 1996

**VIA FACSIMILE AND FIRST CLASS MAIL**

Mr. Roy E. Johnson  
New Mexico Department of Energy  
Minerals and Natural Resources  
Oil Conservation Division  
2040 S. Pacheco Street  
Santa Fe, NM 87505

Re: Application of Bass Enterprises Production Co. for Approval of  
the Third and Fourth Revisions to the Atoka Participating  
Area, James Ranch Unit Area, Eddy County, New Mexico

Dear Mr. Johnson:

Please be advised that this firm represents Bass Enterprises Production Co. with respect to the referenced matter. By letter dated April 3, 1996, Mr. William F. Carr wrote to you on behalf of Enron Oil & Gas Company making certain representations concerning the process by which Bass Enterprises Production Co. has followed in the processing of the referenced application and further requested that the Oil Conservation Division withdraw its approval of Bass' application.

A number of the representations made in that letter which are argued as support for the withdrawal of the OCD's approval are, at best, misrepresentations of not only the content of the unit agreement but also of the facts concerning the occurrences that have transpired up to this date. Although it seems apparent from the various actions taken by Enron in their protestations to the various administrative agencies that Enron had actual knowledge of the proposed revisions, Bass is willing to send notice to Enron of the proposed revisions. In the interim, we also plan to offer to Enron the opportunity to review the pertinent geological data upon which the proposed revisions are based. It is our firm belief that the geological data indicates that the proposed revisions are totally appropriate and required under the language of the Unit Agreement.

It should not be forgotten that what we are dealing with here is a situation controlled by contract. This is not a hearing pursuant to some rule, statute, OCD or Commission order or other governmental edict which calls into play the whole gamut of procedural requirements. Bass' obligations and Enron's rights stem solely from a contract, that being

Mr. Roy Johnson  
April 17, 1996  
Page 2

the unit agreement. A determination of what is proper can only come from within the four corners of that document.

Paragraph 11, entitled, "Participation After Discovery," states the following:

...The Unit Operator shall submit for approval by the Director, the Commissioner and the Commission a schedule.... Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective.... The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, and the percentage of allocation shall also be revised accordingly.

The above quoted language is the sum total of pertinent language in the unit agreement which addresses this issue. Nowhere in the unit agreement is there a contractual requirement that the unit operator give notice to any of the other working interest owners, lessees or lessors who might be affected. Furthermore, there is no requirement that any of the information so submitted be first submitted to the other working interest owners, lessees or lessors. Lastly, nowhere in paragraph 11 are the working interest owners, lessees or lessors given a contractual right to a hearing before the Director, the Commissioner or the Commission prior to their approval or disapproval. For Enron to be able to assert rights to such, those rights must be granted to them in the unit agreement. They are not granted in the unit agreement, therefore Enron has no claim to them. It is a basic premise of law, not only in New Mexico but throughout the United States, that a party cannot rewrite a contract at some later date just because he finds out at that later date he may have made a deal which is not advantageous to him, nor can he unilaterally add burdens and responsibilities to the other contracting parties at that later date.

Much to-do has been made about paragraph 25 and the notice provision therein. The very first thing that should be looked at is the title of paragraph 25. The title is "APPEARANCES." It is extremely important to note what this paragraph is about, and it deals only with appearances and not notices. The unit operator may not at any hearings before the BLM, the Commissioner, or the Commission appear on behalf of other parties

Mr. Roy Johnson  
April 17, 1996  
Page 3

unless and until it has given notice to the other parties that it intends to do so. Paragraph 25, however, does not nullify Bass' obligations as an operator to submit information when it is discovered which should or could lead to changes in the participating areas or allocations of costs within those areas. If Bass is not appearing on behalf of anyone other than itself, no notice is required under paragraph 25.

The most interesting aspect of this case is the fact that Enron had actual notice of the fact that information would be submitted to the BLM and, in fact, on November 2, 1995, Enron themselves met with the BLM concerning these very same matters. The lack of formal written notice is at best a technicality; nonetheless, Bass has complied with the BLM's directive to provide Enron with written notice of these revisions and future revisions in the James Ranch Unit. It should not take one long to realize that in matters concerning the participating areas and participation formulas dealing with lands belonging to the United States and the State of New Mexico, those who negotiated the unit agreement on behalf of the governmental entities did not desire to create a situation wherein the working interest owners who were developing these properties would be required to meet and arrive at decisions concerning information to be submitted to the governmental areas where that information could be compromised. The unit agreement provides a procedure whereby the information is to be submitted, unadulterated and uncompromised, for their review and action. Once the initial decisions were made by the governmental entities with respect to that information, then any of the parties would have a right to appeal those decisions, and under the terms of the unit operating agreement the unit operator could only represent those working interest owners they gave notice to that they were going to so represent them.

Enron has tried to raise much smoke concerning the violation of its rights. Once you blow all that smoke away and analyze the true situation, Enron's real claim of damage here is that it envisions that it has lost the right to influence the information required to be submitted by the operator prior to that information going to the BLM, the Commissioner and the Commission. Enron does not have that right and the Commission should see through those attempts and deny Enron's request to withdraw its approval and grant a hearing. If Enron has a legitimate complaint, once all three of the entities have made their decision it may then appeal such decision to the BLM State Director. It is hoped after the statements made in this letter are reflected upon, Enron's real motive will be detected, and that is that it wants to influence the evidence prior to the submission to the governmental entities. The unit agreement does not give Enron that right and in fact, Bass would be derelict in its duties as unit operator if it acceded to such demands. It is regretted that Bass' actions in following the strict letter of the unit agreement and the guidance of the BLM has

Mr. Roy Johnson  
April 17, 1996  
Page 4

created such a furor and avalanche of letters, however, Bass maintains the propriety of the Commission's actions and intends to defend those actions.

Your consideration of the matters contained in this letter are appreciated.

Very truly yours,

LOSEE, CARSON, HAAS & CARROLL, P.A.



Ernest L. Carroll

ELC:kth

xc: United States Department of the Interior  
Bureau of Land Management  
P. O. Box 1397  
Roswell, NM 88201  
Attn: Mr. Tony Ferguson

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, NM 87504-1148  
Attn: Mr. Pete Martinez

Mr. J. Wayne Bailey  
Bass Enterprises Production Co.  
First City Bank Tower  
201 Main St., Suite 2900  
Fort Worth, TX 76102

Mr. William F. Carr  
Campbell, Carr & Berge, P. A.  
P. O. Box 2208  
Santa Fe, NM 87504-2208

APR 24 11 05 52

SDR 96-13  
3165.3 (932)

APR 25 1996

Mr. William Carr  
Campbell, Carr, Berge & Sheridan  
P.O. Box 2208  
Santa Fe, NM 87504-2208

Re: State Director Review, Appeal by Enron Oil and Gas Company, Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit, Eddy, County, New Mexico

Dear Mr. Carr:

Within the last few days, you should have received a letter from our Roswell District Office (RDO) dated April 16, 1996. In that letter our RDO requests we reconsider our acceptance of Enron Oil and Gas Company's (Enron) appeal to our State Director. The RDO argues that Enron's appeal was prematurely filed because RDO's approval does not become final until all of the required agencies (State Land Office (SLO), NM Oil Conservation Division (NMOCD) and RDO) have agreed to the participating area revisions.

A recent conversation with a representative of the SLO confirms that they are withholding approval pending protests filed at their office, NMOCD and RDO. Enron's protest to NMOCD may lead to a formal hearing by that agency. We believe that Enron has not yet been adversely affected by RDO's approval and that RDO would be a better venue for the Bureau to hear Enron's protest. Should NMOCD grant a hearing, the RDO may consider evidence submitted at such a hearing. The overall goal is a unified decision that meets the terms and conditions expressly written in participating area revision clause (Section 11) of the James Ranch Unit Agreement.

Based on the preceding determinations, we hereby dismiss Enron's appeal as premature. Enron would certainly have the right of appeal to the State Director, when a unified decision is made by all three agencies. Please direct any questions concerning this action to Rick Wymer at (505) 438-7411.

Sincerely,

/s/ ROBERT E. ARMSTRONG

Richard A. Whitley  
Deputy State Director  
Resource Planning, Use and  
Protection

cc:

Enron Oil and Gas Company  
Attention: Mr. Patrick Tower  
P.O. Box 2267  
Midland, TX 79702

Bass Enterprises Production Company  
Attention: Mr. Wayne Bailey  
201 Main Street  
Fort Worth, TX 76102-3131

Commissioner of Public Lands  
State of New Mexico  
Attention: Mr. Pete Martinez  
P.O. Box 1148  
Santa Fe, NM 87504-1148

✓ New Mexico Oil Conservation Commission  
Attention: Mr. Bill LeMay  
2040 South Pacheco Street  
Santa Fe, NM 87505

NM060 (Minerals Support Team - NMNM70965)

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

May 6, 1996

**VIA FACSIMILE AND U.S. MAIL**

Ernest L. Carroll, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
311 West Quay Avenue  
Post Office Box 1720  
Artesia, New Mexico 88211-1720

Re: ***Application of Bass Enterprises Production Company for Approval of the  
Third and Fourth Revisions to the Atoka Participating Area, James Ranch  
Unit Area, Eddy County, New Mexico***

Dear Mr. Carroll:

We are in receipt of several of your letters to the various governmental agencies regarding the referenced dispute.

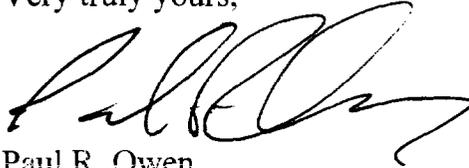
In your April 17, 1996 letter to Mr. Roy E. Johnson, you state that you plan to offer to Enron the opportunity to review the data upon which the proposed revisions are based. On several occasions, Enron has requested that Bass allow them to review that data. We request that you immediately send us copies of all data which Bass submitted in support of the proposed revisions to the Department of the Interior, Bureau of Land Management, the State Land Office, or the New Mexico Oil Conservation Division.

We anticipate that Enron will have completed its preparation for a presentation to the BLM in opposition to the proposed revisions by the last week of June. Accordingly, we expect that hearing to take place at that time.

Ernest L. Carroll, Esq.  
May 6, 1996  
Page 2

We anticipate your response.

Very truly yours,



Paul R. Owen

PRO:mb

cc: Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. Roy E. Johnson

Mr. Patrick J. Tower  
Enron Oil & Gas Company  
Post Office Box 2267  
Midland, Texas 79702

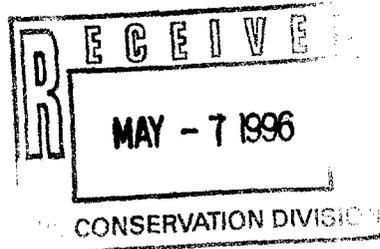
United States Department of the Interior  
Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201  
ATTENTION: Mr. Tony Ferguson

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL



JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

May 6, 1996

United States Department of the Interior  
Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201

Attn.: Mr. Tony Ferguson

Re: *Application of Bass Enterprises Production Company for Approval of the Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico*

Dear Mr. Ferguson:

We are in receipt of your letter of April 16, 1996, in which you respond to several issues that have been raised in this dispute. We appreciate your prompt response to our inquiries. There are several issues that need to be discussed at this point.

First, Enron is in the process of compiling the data needed to support a presentation in opposition to Bass's proposed revisions to the Atoka Participating Area in the James Ranch Unit. Enron anticipates that it will be ready to present this data in the last week in June. We trust that this timeframe for a presentation by Enron will be acceptable to you. We will contact you in order to arrange the date for the presentation. Because Enron has not yet reviewed the relevant information in Bass's possession or that which Bass submitted to you, we are not yet sure how long that presentation will last.

Second, we are in the process of attempting to review the data upon which Bass has based its applications for referenced revisions to the Atoka Participating Area in the James Ranch Unit. We would also like to review the documents and data that were submitted by Bass to you. We will arrange for representatives from Enron to review that data at your convenience.

Mr. Tony Ferguson  
May 6, 1996  
Page 2

Third, as to the format of the presentation in which Enron will present data in opposition to the proposed revisions, we emphasize that when Bass presented its data, Enron was not present and was not allowed the opportunity to critically examine Bass's data. We trust that the upcoming presentation will be consistent with Bass's presentation in that Bass will not be allowed to cross-examine Enron.

Fourth, we wish to respond to your statement of your understanding of the November 2, 1995 meeting in which representatives from both Bass and Enron were present. While you are correct in your statement that revisions to the Atoka Participating Area were discussed generally at that meeting, we emphasize that the specific proposed revisions were not discussed. At no time were the boundaries of the proposed Revisions discussed, and no technical data which Bass has submitted in support of the proposed Revisions was discussed. Enron has never had the opportunity to present any information in opposition to the proposed revisions.

Finally, we reiterate the point that Enron's due process rights must be protected by all governmental agencies that are charged with authority over the proposed revisions. Enron's property rights are severely affected by the proposed revisions. Neither the Department of the Interior nor any other governmental agency may affect those rights without affording Enron due process of law. While the James Ranch Unit Agreement makes those due process rights a contractual obligation of Bass, it does not and cannot abrogate the government's constitutional duties.

We will contact you soon in order to arrange a date and time for Enron's presentation. Please contact us with any concerns or questions that this letter raises.

Very truly yours,



WILLIAM F. CARR  
PAUL R. OWEN

/mb

Mr. Tony Ferguson

May 6, 1996

Page 3

cc: Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. Roy E. Johnson

Mr. Patrick J. Tower  
Enron Oil & Gas Company  
Post Office Box 2267  
Midland, Texas 79702

Ernest L. Carroll, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
Post Office Box 1720  
Artesia, New Mexico 88211-1720  
Attorneys for Bass Enterprises Production Co.

RECEIVED

MAY 23 1996



United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
ROSWELL DISTRICT OFFICE  
1717 West Second Street  
Roswell, New Mexico 88201

IN REPLY REFER TO:  
James Ranch Unit  
NM-70965

MAY 21 1996

Mr. Paul Owen  
Campbell, Carr & Berge, P.A.  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208

Dear Mr. Owen:

We received your letter on behalf of Enron Oil and Gas Company (Enron) dated May 6, 1996, and would ask that all future correspondence be addressed as indicated above on the letterhead. Several issues have been raised and we would like to address each issue.

First, in response to your proposed time frame for a presentation of the data, BLM is concerned with the amount of time requested for preparation and presentation of the data. This issue has been on-going since November 1995 with very little, if any, new data becoming available. In light of the longevity of this issue we are requesting that any presentation be scheduled and completed by June 19, 1996. This date is consistent with the notification dated April 1, 1996 by our New Mexico State Office in response to your request for State Director Review. If this request is not honored, we will proceed by requesting that the Commissioner of Public Lands approve the proposed revisions to the Atoka Participating Area in the James Ranch Unit as submitted by Bass Enterprises Production Company (BEPCO).

Second, in response to your continued reference to inspection of data and documents submitted by Bass, the BLM has not received any authorization from BEPCO as specifically addressed in item #2 of the BLM letter of April 16, 1996 to Enron. The BLM position has not changed in this area and we will not allow an inspection of data and records without the requested approval documents.

Third, the BLM has no objections or concerns with the format of the presentation as proposed by Enron.

Fourth, we agree that Enron has never had a formal opportunity to present any information in opposition to the proposed revisions. We do, however, feel that ample time has been allowed and as referenced above the opportunity to present opposing data and interpretations should occur in a timely manner.

Finally, the issue of due process rights has been previously addressed in the BLM letter of April 16, 1996 to Enron.

If there are any questions or you would like to schedule a time prior to June 19, 1996 for your presentation, please give me a call at (505) 627-0298.

Sincerely,

**(Orig Sdg) Tony L. Ferguson**

Tony L. Ferguson  
Assistant District Manager,  
Minerals Support Team

cc: Commissioner of Public Lands  
State of New Mexico  
Attn: Mr. Pete Martinez  
P.O. Box 1148  
Santa Fe, NM 87504-1148

✓ New Mexico Oil Conservation Division  
Attn: Mr. Bill LeMay  
2040 South Pacheco Street  
Santa Fe, NM 87505

Mr. Patrick Tower  
Enron Oil & Gas Company  
P.O. Box 1720  
Midland, TX 79702

Mr. Wayne Bailey  
Bass Enterprises Production Co.  
201 Main Street  
Fort Worth, TX 76102-3131

Mr. Jim Haas  
Losee, Carson, Haas & Carroll, P.A.  
P.O. Box 1720  
Artesia, NM 88211-1720

NM(93200, R. Wymer)

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

June 3, 1996

**VIA FACSIMILE**  
**AND U.S. MAIL**

James E. Haas, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
311 West Quay Avenue  
P.O. Box 1720  
Artesia, New Mexico 88211-1720

Re: ***Application of Bass Enterprises Production Company for Approval of the Third and Fourth Revisions to the Atoka Participating Area, James Ranch Unit Area, Eddy County, New Mexico***

Dear Mr. Haas:

We are in receipt of your May 20, 1996 letter. In that letter, you address several pending issues regarding the above-referenced dispute. In particular, you state that "Bass would be happy to provide Enron any well or production information which Enron has been unable to locate through public records or conventional sources." We appreciate Bass's willingness to provide that data to Enron.

Pursuant to your May 20 letter, Randy Cate from Enron has attempted to obtain from Bass production data relating to the James Ranch Unit No. 70 Well. Representatives from Bass requested that this firm make a formal request for that data. Accordingly, we request that Bass provide to Enron by Friday, June 7, 1996, the following data, relating to the James Ranch Unit No. 70 Well:

James E. Haas, Esq.  
Artesia, New Mexico  
Page -2-

1. A complete set of logs, including mud logs and any cased-hole logs;
2. Any pressure build-up data, or static pressure recordings;
3. A history of flowing-tubing pressure and shut-in pressures during curtailment periods; and
4. The drilling and completion report.

We understand that the above data is available in Bass's Midland, Texas office. Enron will send representatives to review that data as soon as it is made available.

We anticipate your response.

Very truly yours,



Paul R. Owen

cc: Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87504-1148  
ATTENTION: Ms. Jami Bailey

New Mexico Department of Energy,  
Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
ATTENTION: Mr. Roy E. Johnson

Mr. Patrick J. Tower  
Enron Oil & Gas Company  
Post Office Box 2267  
Midland, Texas 79702

James E. Haas, Esq.  
Artesia, New Mexico  
Page -3-

Ernest L. Carroll, Esq.  
Losee, Carson, Haas & Carroll, P.A.  
Post Office Box 1720  
Artesia, New Mexico 88211-1720  
Attorneys for Bass Enterprises Production Co.

United States Department of the Interior  
Bureau of Land Management  
Post Office Box 1397  
Roswell, New Mexico 88201  
ATTENTION: Mr. Tony Ferguson

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN

MICHAEL H. FELDEWERT  
TANNIS L. FOX  
TANYA M. TRUJILLO  
PAUL R. OWEN

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE: (505) 988-4421  
TELECOPIER: (505) 983-6043

June 11, 1996

**VIA HAND DELIVERY OR  
FEDERAL EXPRESS**

Bureau of Land Management  
1717 West 2nd Street  
Roswell, New Mexico 88201  
Attn: Mr. Tony Ferguson

New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505  
Attn: Mr. William J. LeMay

Commissioner of Public Lands  
State of New Mexico  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Re: *Application for Approval of the Third and Fourth Revisions of the Initial Participation Area James Ranch Unit, No. 14-08-001-558, Eddy County*

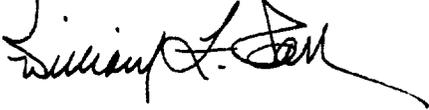
Gentlemen:

Enclosed is a summary of the information Enron Oil and Gas Company will present in opposition to the above-referenced expansion of the Initial Atoka Participating Area in the James Ranch Unit.

Bureau of Land Management  
Attn: Mr. Tony Ferguson  
New Mexico Oil Conservation Division  
Attn: Mr. William J. LeMay  
Commissioner of Public Lands  
State of New Mexico  
June 11, 1996  
Page 2

We look forward to our meeting with you at 10:30 a.m. on June 17, 1996.

Very truly yours,

A handwritten signature in black ink, appearing to read "William F. Carr". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

WILLIAM F. CARR  
ATTORNEY FOR ENRON OIL AND GAS COMPANY

WFC:mlh

Enclosures

cc: Jim Haas, Esq. (w/o enclosures)

## **James Ranch Unit Atoka PA Revision**

---

### **INTRODUCTION:**

Enron Oil & Gas has performed a detailed geologic and engineering study of the James Ranch Atoka sand to determine which acreage should rightfully be included in the Atoka Participating Area and at what date any revision should occur.

Normally Bass Enterprises performs this duty as outlined in the Unit Operating Agreement and did in fact propose the third and fourth revisions to the Atoka PA by letter dated February 22 1996 after their attempt to create a 320 acre PA around the JRU No. 70 was rejected by the BLM. Enron was compelled to perform its study because it was clear that Bass had grossly misinterpreted the commercial extent of the sand by excluding critical Atoka sand tests, basic log calculations showing high water saturations in the southern portion of the field, and seismic data showing Section 35-20S-30E faulted down, which would separate any Atoka sand, if present, from the main Atoka sand reservoir. Bass also made an erroneous assumption that pressure communication implies commerciality. Had Bass considered Enron's findings prior to filing its proposed revisions perhaps the matter could have been resolved before involving the regulatory agencies.

Enron presents the following data and conclusions and believes it will be clear that the Bass proposals are without merit. Enron offers the appropriate "Third Revision" based on all knowledge and information that we have acquired to date.

### **GEOLOGIC EXHIBITS AND DISCUSSION:**

The Atoka sand reservoir of Pennsylvanian age in the James Ranch/Los Medanos area is interpreted as a marine sand body whose trend and producibility was influenced by structural movement during Pennsylvanian time. Three maps being a net Atoka sand isopach, an Atoka sand porosity isopach and a structure map on the Atoka sand were prepared using digitized log analysis data, conventional log correlations and seismic. Also included is Table 1 which outlines the digital data that was used in the geologic maps and other maps used in the engineering discussion.

As interpreted, the Atoka sand lies on the up-thrown side of a faulted structural ridge and follows the fault trend south-southeast. Several lines of seismic were incorporated in defining the fault trace and one line (E72 GSI \* JRH-2) through Section 35-23S-30E shows that section down faulted (refer to structure map). The net sand map for the Atoka identifies a continuous sand body from north to south attaining a maximum thickness of 16'. The

Atoka porosity isopach is based on a cut-off of 4% in the sand and illustrates the variability within the reservoir. Based on the two isopach maps there is not a clear correlation between sand thickness and porosity.

### **ENGINEERING DISCUSSION:**

The Engineering portion of the Atoka sand study centered on verifying the geologic interpretation and determining commercial production qualifications.

Table 2 shows the well tests and production to date for the Atoka sand study area. The northern portion of the reservoir is characterized by high flow rate drill stem tests and subsequent proven commercial production. The southern region is characterized by relatively low DST flow rates, produced water, and subsequent proven non-commercial production. Bass reasons that pressure communication between the northern and southern regions proves commerciality. A closer look shows that the communication that does exist is minor. For example, the Pure Gold C-17 No. 1 recorded a FSIP of approximately 7800 psia in 8/82 when the Atoka PA wells were showing pressures of 2,500 - 2,800 psia. When the C-17 No. 1 was production tested in 8/93 it still had over 7,000 psia bottom hole based on recorded SITP of 4,580 psig. This is not significant depletion. After 2.5 years the well has only produced 0.1 BCF and 20,000 BBL water; clearly non-commercial. Very low reservoir permeabilities (< 0.2 md) calculated from build-up tests explains the production results. It should be noted that the C-17 No. 1 calculates 54% water saturation and is directly offset by other water production tests. Had the southern region of the sand had a high mobile gas saturation, the pressures would have been much lower in the south.

The high water saturation portion of the reservoir was first tested in 1973 and 1974 with the drilling of the JRU Nos. 4 and 7. Both calculate above 50% water saturations. The wells are over 150' updip to the Pure Gold C-17 No. 1, the well which Bass credits with proving the area to be commercial 10 years later. As one would expect, given the high water saturations in the No. 4 well, tests failed to establish commercial production. Yet, Bass has deemed this well commercial.

By contrast the northern portion of the field was proven to be effectively communicated with the PA wells by the drilling of the Apache "25" No. 1, Apache "13" No. 1, and JRU No. 70. The pressure differential was less than 1,200 psia over 4 miles away. This is the result of a high mobile gas saturation between the areas. Clearly these pressures, and the subsequent proven commercial production, indicate the direction of effective communication.

A three-dimensional simulation model of the field was developed to validate the above

conclusions and to investigate the limits of commercial production within the Atoka sand. The model was based upon the Atoka sand structure, isopach and porosity maps described earlier.

The data in Table 1 show that there is a good correlation of higher calculated water saturations with increasing depth. Based on this information, a water saturation map was prepared and is shown in Figure 1. Analysis and modeling of initial four-point flow tests from Atoka sand wells showed a good correlation of reservoir permeability to porosity. Using this correlation, a map of reservoir permeability was constructed for the Atoka sand and used in the simulation model. A comparison of the porosity and permeability distributions for the sand is shown in Figure 2.

The key to constructing a rigorous simulation model of the James Ranch Atoka sand is being able to successfully match:

- 1) The historical pressure performance in the following areas,
  - current Atoka PA (JRU 1, JRU 10, JRU 13 wells)
  - Apache "25" No. 1 and Apache "13" No. 1 region to the north of the Participating Area
  - area of high water saturation to the south of the Participating Area
- 2) Historical well performance in the same three regions

Figure 3 shows the comparison of predicted pressures (model) and actual pressures measured in the current Atoka Participating Area. In all three wells the match is quite good. Notice that from about 1987 onward, reservoir pressures were approximately 2000 psia or less.

Figure 4 shows a comparison of model predicted reservoir pressure and the actual measured pressures upon initial completion and testing for the Mitchell Apache 13 and 25 wells. These wells are located in the region to the north of the current Atoka Participating Area. Again the match is very good. The reservoir pressure in 1993 is in the range of 2500-3000 psia. This confirms the existence of a high mobile gas saturation and good pressure communication between the current Atoka Participating Area region and this area to the north.

Listed below is the comparison of model and actual pressures for the high water saturation area located to the south of the current Atoka Participating Area. Much of this region is included in the Third and Forth revisions to the Atoka Participating Area proposed by Bass.

<u>Date</u>	<u>Well</u>	<u>Measured (psia)</u>	<u>Model Predicted (psia)</u>
6/82	P.G. C-17 No. 1	FSIP = 7781	7604
10/89	P.G. C-17 No. 2	FSIP = 7356 P* = 7425	7629
4/90	P.G. 8 No. 1	FSIP = 6899	7170
9/93	P.G. C-17 No. 1	P <sub>est</sub> = 6425	6490

Once again, the model is in excellent agreement with the actual measured data. Of particular importance is the fact that the pressures are significantly higher than the other regions, as discussed earlier. In fact, the pressures are much closer to virgin reservoir pressure than they are to current pressures in the current Atoka Participating Area. This behavior confirms the interpretation that this southern region is an area of high water saturations (> 50%) and low mobile gas saturations. Enron does not dispute the fact that there is some limited pressure communication to the south. However, if the southern area had higher mobile gas saturations, such as those necessary for commercial production, the measured reservoir pressures would be much lower and closer to the pressure in the current Atoka Participating Area.

Finally, the issue of well productivity and commerciality in the area to the south of the Atoka Participating Area needs to be addressed. Clearly, commercial production has been established in the current Atoka Participating Area and the area to the north in the vicinity of the Apache 13 No. 1 and JRU No. 70. These productive rates were matched in the simulation model.

Figure 5 shows a comparison of model predicted and actual data for the Pure Gold C-17 No. 1 well. Notice that the model was able to duplicate the instantaneous 5000 Mcfd rate obtained on the 1982 DST. However, when put on long term production in 1993, the model and the actual field data show the well to be non-commercial. A projected EUR for this well is less than 0.5 Bcf.

Figure 5 also shows that the C-17 No. 1 well produces approximately 30 B/D of water. The simulation model confirms this. This is consistent with the behavior we would expect for a well completed in a transition zone with high water saturations. While the instantaneous DST flow rate is impressive, because of the multi-phase production, the long term performance is very poor. This behavior is shown repeatedly in actual well tests in this southern area.

The reservoir simulation model was also used to investigate well commerciality in the entire region to the south of the current Atoka Participating Area. These tests showed that there is no justification to extend the Participating Area to the south. Calculated water saturations throughout this area are approximately 50% and predicted well performance is non-commercial.

**CONCLUSION:**

Enron believes the Atoka sands (and similarly Morrow sands) are very risky as a drilling prospect due to the high variation of thickness, porosity, and water saturation in this reservoir. One cannot reasonably quantify undrilled spacing units as proven commercial until they are completed with long term production rates. There are several undrilled spacing units in the southern portion of the field that Bass believes to be commercial. Enron recommends that Bass first drill these spacing units to prove them commercial. There is still approximately 4,000 - 7,000 psig reservoir pressure remaining in that area which is more than adequate to yield commercial production if gas saturated. At that time a PA revision to include that acreage would be warranted.

Enron believes that the only unit acreage justified to be added in the Third Revision is that from the 320 acre spacing unit around the James Ranch Unit No. 70. The date of first production from the JRU No. 70 is the only appropriate date of revision and follows the unit agreement guidelines. Enron appreciates having the opportunity to present its findings and conclusions.

***Questions or request for additional data may be addressed to the following Enron personnel:***

Geological	Barry Zinz	(915) 686-3732
Land	Patrick Tower	(915) 686-3758
Reservoir Model	Tim Hower	(303) 628-2529
Engineering	Randall Cate	(915) 686-3698

**Table 1****James Ranch Unit Atoka PA Revision  
Digitized Log Analyses Values; Depth of Top of Sand**

---

<u>Well Name</u>	<u>H (ft.)</u>	<u>φ (%)</u>	<u>SW (%)</u>	<u>Top sand</u>
James "A" No. 1	0.5	5	72	-9,234
James "E" No. 1	0	-	-	-9,265
Troporo Campana No. 1	0	-	-	-9,280
McKnight Campana No. 1	2	-	-	-9,378
JRU No. 70	7.25	11	16	-9,394
Llama "ALL No. 1	5.5	9	34	-9,474
Apache "13" No. 1	8.50	9	7	-9,475
JRU No. 11	10.25	11	33	-9,537
Apache "24" No 1	6.75	6	44	-9,560
Hudson Fed. No. 1	1.0	5	36	-9,564
JRU No. 18	6.25	7	45	-9,568
JRU No. 10	5.5	10	27	-9,582
JRU No. 3	2	8	40	-9,585
Apache "25" No. 1	10.75	7	22	-9,589
JRU No. 4	3.75	6	53	-9,593
JRU No. 1	10.75	11	NA	-9,596
JRU No. 13	6.0	6	NA	-9,613
Apache "25" No. 2	6.0	7	26	-9,614
JRU No. 14	1.0	5	35	-9,676
JRU No. 7	7.75	11	55	-9,727
JRU No. 15	6.0	8	46	-9,765
Pure Gold "C" 17 No. 1	12.5	8	54	-9,879
North Pure Gold "8" No. 1	6.0	9	79	-9,892
Pure Gold "C" 17 No. 2	11.5	13	54	-9,909
Pure Gold "B" No. 2	8.25	13	42	-9,916
Medano "VA" No. 2	14.75	9	53	-9,917
Pure Gold "4" No 1	15.75	7	52	-9,959
Arco St. "16" No. 1	11	8	NA	-10,014

**Table 2****Comparison of Commercial vs  
Non-commercial Well Tests**

---

<u>Well Name</u>	<u>Date</u>	<u>Type</u>	<u>MCFPD</u>	<u>Prod. MMCF as of 11/1/95</u>
<u>PROVEN COMMERCIAL</u>				
JRU No. 70	3/95	Compl.	9,584	1,058
Apache "13" No. 1	8/93	DST	9,500	--
	9/93	Compl.	10,514	3,718
JRU No. 1	3/58	Compl.	8,945	25,985
JRU No. 10	3/80	DST	10,000	--
	4/80	Compl.	3,948	6,250
JRU No. 13	9/82	Compl.	3,000	6,119
<u>POSSIBLE COMMERCIAL</u>				
Apache "25" No. 1	10/93	Comp.	1,900	575
	8//93	DST	2,400	--
Llama Fed. No. 1	12/94	Compl.	1,772	296
JRU No. 11	6/81	Compl.	2,100	1,177
<u>PROVEN NON-COMMERCIAL</u>				
Hudson Fed. No. 1	6/81	Compl.	100-200	0; abandoned
JRU No. 4	7/73	DST	3,400	--
	8/73	Compl.	1,000	0; abandoned

**Comparison of Commercial vs  
Non-commercial Well Tests**

<u>Well Name</u>	<u>Date</u>	<u>Type</u>	<u>MCFPD</u>	<u>Prod. MMCF as of 11/1/95</u>
<u>PROVEN NON COMMERCIAL</u>				
Pure Gold C-17 No.	16/82	DST	5,258	--
	9/93	Compl.	367 + 31 BW	82 MMCF + 19 MBW
Pure Gold "8" No. 1	4/90	DST	1,182 MCF + 461 BW	--
Pure Gold B No. 2	9/93	Compl.	1,000 MCF + 90 BW	248 abandoned 4/95
Medano VA No. 2	8/90	DST	31 BW	--