

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

June 15, 1978

Delta Drilling Company
P. O. Box 2012
Tyler, Texas

Attention: Mr. R. Dale Keadle

Re: 1978 Plan of Development
South Culebra Bluff Unit
Eddy County, New Mexico

Gentlemen:

Reference is made to your 1978 Plan of Development for the South Culebra Bluff Unit Area, received in this office June 14, 1978.

The plan, which calls for the drilling of two new wells and re-entry and final completion of Unit Well No. 1, is hereby given only partial approval.

We do not feel that the overall plan, which calls for re-entry and final completion of Unit Well No. 1 only after completion of Unit Well No. 2 but prior to December 31, 1978, is adequate.

You will recall that approval was given for "completion" of the Unit Well No. 1 in its present condition on January 26, 1978, for a period not to exceed six months. We anticipated at that time that six months of unrestricted production into the pipeline would lower the reservoir pressure to such level as would make killing the well and final completion possible, although you advised us that you thought this work could be done in the latter half of June, or within five months.

C
O
P
Y

-2-

Letter to Delta Drilling Company
June 15, 1978

From January 27 through June 7, the well has produced slightly in excess of 4 billion cubic feet of gas. By July 26, when the 6-month period for production in its present condition expires, the well should have produced an additional 1.1 billion cubic feet.

We cannot help but believe that over 5 billion feet of production into the pipeline plus the volume lost prior to bringing the well under control is more than adequate to make a safe workover possible.

For these reasons that portion of the plan of development calling for workover and final completion of Unit Well No. 1 only after completion of Well No. 2 but sometime prior to December 31, 1978, is not approved.

Very truly yours,

JOE D. RAMEY
Director

JDR/DSN/fd

cc: USGS, Roswell and Albuquerque
Paul Eaton Roswell
OCD Artesia
Case File 6117



DELTA DRILLING COMPANY
West Texas Exploration Division
Post Office Box 3467 • Midland, Texas 79701
(915) 682-4161

December 17, 1982

U.S. Geological Survey
Supervisor
Drawer 1857
Roswell, NM 88201

Energy and Mineral Dept.
Director of the Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Geologic Survey
South Central Region
P.O. Box 26124
Albuquerque, NM 87125

RE: Plan of Further Development and
Operation
South Culebra Bluff Unit,
October 10, 1977
Contract Number 14-08-0001-16067
Township 23 South, Range 28 East
N.M.P.M.
Eddy County, New Mexico

Case # 6117

Gentlemen:

Reference is made to the letter from Gene F. Daniel, Deputy Minerals Manager of the Minerals Management Service, dated October 28, 1982. The letter requested data on protecting the South Culebra Bluff Unit from possible drainage. Delta's reserve studies during the past year have shown that drainage of hydrocarbons from this Unit is not occurring and that any wells drilled within this Unit under current economic conditions would not be economical. Offset wells that were potential drainers of the Unit included the Delta Brantley #1 (SE/SW, Sec. 23, T23S, R28E), the Amoco Brantley "B" #1 (NW/SE, Sec. 24, T23S, R28E), and the Amoco Williams Gas Unit #1 (NE/NE, Sec. 25, T23S, R28E) (Tab 2). The following information has been gathered on these wells:

DELTA BRANTLEY NO. 1

- 1) D&C (Bone Spring) 12/81
- 2) IP 17 BOPD
- 3) Cumulative production as of 7/1/82: 872 BO and 8.5 MMCFG
- 4) Recoverable reserves: 26,048 BO on 80 acres

To date, the Delta Brantley No. 1 has drained 2.7 acres. Cost to drill and complete a SCBU offset would total \$750,000. If production in the offset were comparable to that of the Delta Brantley No. 1, the well would never pay out. (Tab 3)

AMOCO BRANTLEY "B" NO. 1

- 1) TD (Morrow) non-productive; recompleted to Bone Spring 7/80.
- 2) IP 18 BOPD
- 3) Cumulative production as of 7/1/82: 9980 BO
- 4) Recoverable reserves: 142,064 BO on 80 acres

This well has to date drained 4.05 acres. Cost to drill and complete a SCBU offset would be \$760,000 and, at production rates comparable to the Amoco Brantley "B" No. 1, the well would never pay out. (Tab 4)

AMOCO WILLIAMS GAS UNIT NO. 1

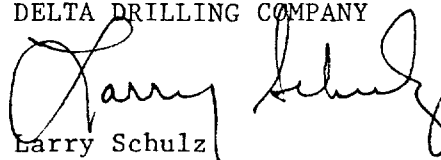
- 1) D&C (Morrow) 5/77
- 2) IP 2580 MCFGPD
- 3) Cumulative production as of 7/1/82: 307 MMCFG
- 4) Recoverable reserves: 10.6 BCFG on 160 acres

Total drainage for the well to date is 38.5 acres. D&C costs for a SCBU offset would be \$1,540,000. Using production from the Williams Gas Unit as a model, the SCBU offset well would never pay out. (Tab 5)

We conclude from this data that it is uneconomical to drill SCBU offsets to the above mentioned wells. Additionally, it is the opinion of Delta Drilling Company that the producing wells in question pose no threat of drainage of unitized lands.

Yours very truly,

DELTA DRILLING COMPANY


Larry Schulz
Exploration Manager

LS/WC/jw/ae

SCB DELTA BRANTLEY OFFSET

DATE:11/11/82
TIME:13:46:17
FILE: IN
FILE: SETYEAR
PROJ: 0

P R O J E C T D A T A

ITEM	SCHEDULING RATES			SCHEDULE UNTIL		PROCEDURE	
-----	-----	-----	-----	-----	-----	-----	-----
410 OIL	150.00	15.00 B/M		X	YRS	CPD	48.00
420 GAS/OIL	2.70	X M/B			LIFE	LIN	TIME
510 PRI/OIL	32.00	X \$/B			LIFE	SCH	FOIL
515 PRI/GAS	3.60	X \$/B			LIFE	PE	0.00
610 OPC/T	2600.00	X \$/M			LIFE	SCH	POC
710 LSE/WI	100.00	X %			LIFE		
715 LSE/RIC	19.00	X %			LIFE		
720 LSE/RIG	19.00	X %			LIFE		
INVESTMENT	TANGIBLES & INTANGIBLES			TIME		PROCEDURE	
-----	-----	-----	-----	-----	-----	-----	-----
810 SCB	248.00	512.00 M\$G		1/83	AD	PE	0.00

SCB DELTA BRANTLEY OFFSET

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

AS OF DATE: 1/1/1982

PERIOD ENDING	12-82	12-83	12-84	12-85	3.6 YR TOTAL
-----	-----	-----	-----	-----	-----
INVESTMENTS, M\$					

1) EXPENSED & RISK	0.000	512.000	0.000	0.000	512.000
2) DEPLETABLE	0.000	0.000	0.000	0.000	0.000
3) DEPRECIABLE	0.000	248.000	0.000	0.000	248.000
4) TOTAL	0.000	760.000	0.000	0.000	760.000
TAX CALCULATIONS, M\$					

5) GROSS REV. TO INTR.	46.009	25.776	14.463	5.296	91.543
6) - SEVERANCE TAX	0.000	0.000	0.000	0.000	0.000
7) - WPT TAX PAID	0.000	0.000	0.000	0.000	0.000
8) - OPR. COSTS & AD T	32.881	36.827	41.246	26.309	137.263
9) - OVERHEAD	0.000	0.000	0.000	0.000	0.000
10) - EXPENSED INV.	0.000	512.000	0.000	0.000	512.000
11) - DEPRECIATION	0.000	0.000	0.000	0.000	0.000
12) = NET	13.128	-523.051	-26.783	-21.013	-557.719
13) - DEPLETION	0.000	0.000	0.000	0.000	0.000
14) - INTEREST	0.000	0.000	0.000	0.000	0.000
15) = TAXABLE	13.128	-523.051	-26.783	-21.013	-557.719
16) * TAX RATE, %	46.0	46.0	46.0	46.0	46.0
17) - INVESTMENT CREDIT	0.000	0.000	0.000	0.000	0.000
18) - WPT REFUND	0.000	0.000	0.000	0.000	0.000
19) = F.I.T.	6.039	-240.603	-12.320	-9.666	-256.551
20) REVENUE-SEV-WPT	46.009	25.776	14.463	5.296	91.543
21) - OPR. COSTS & ATX	32.881	36.827	41.246	26.309	137.263
22) - F.I.T.	6.039	-240.603	-12.320	-9.666	-256.551
23) = A.F.I.T.	7.089	229.553	-14.463	-11.347	210.832
24) - LOAN REPAYMENT	0.000	0.000	0.000	0.000	0.000
25) - INTEREST	0.000	0.000	0.000	0.000	0.000
26) = NET INCOME	7.089	229.553	-14.463	-11.347	210.832
27) - INVESTMENTS & RSK	0.000	760.000	0.000	0.000	760.000
28) = A.F.I.T. NET	7.089	-530.447	-14.463	-11.347	-549.168
PRESENT WORTH @ 15.00 %					

30) NET INCOME	6.600	184.942	-10.083	-7.051	174.408
31) INVESTMENTS & RISK	0.000	657.653	0.000	0.000	657.653
32) A.F.I.T. NET	6.600	-472.711	-10.083	-7.051	-483.245
33) CUM. A.F.I.T. NET	6.600	-466.111	-476.194	-483.245	-483.245

SCB DELTA BRANTLEY OFFSET

DATE: 11/11/82
TIME: 13:46:17
FILE: IN
FILE: SETYEAR
PROJ: 0

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

AS OF DATE: 1/1/1982

	B.F.I.T. WORTH M\$-----	A.F.I.T. WORTH M\$-----	A.F.I.T. BONUS M\$-----
PRESENT WORTH PROFILE AND RATE-OF-RETURN VS. BONUS TABLE			
00.	-805.719	-549.168	-1016.978
5.	-762.369	-525.707	-928.716
10.	-722.621	-503.781	-854.884
15.	-686.063	-483.245	-792.051
20.	-652.343	-463.973	-737.809
25.	-621.158	-445.857	-690.415
30.	-592.248	-428.799	-648.580
35.	-565.385	-412.714	-611.325
40.	-540.370	-397.525	-577.897
50.	-495.214	-369.570	-520.271
60.	-455.624	-344.466	-472.239
70.	-420.689	-321.828	-431.504
80.	-389.686	-301.338	-396.470
90.	-362.030	-282.730	-365.995
100.	-337.243	-265.777	-339.232

RATE OF RETURN, PCT.	00.0	00.0
UNDISCOUNTED PAYOUT, YRS.	0.00	0.00
DISCOUNTED PAYOUT, YRS.	0.00	0.00
UNDISCOUNTED NET/INVEST.	-0.06	0.28
DISCOUNTED NET/INVEST.	-0.04	0.27

NOTES

DELTA DRILLING COMPANY

SCB DELTA BRANTLEY OFFSET

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

AS OF DATE: 1/1/1982

PERIOD ENDING	12-82	12-83	12-84	12-85	3.6 YR TOTAL
-----	-----	-----	-----	-----	-----
OWNERSHIP					

1) WORKING INTEREST, %	100.000	100.000	100.000	100.000	100.000
2) REVENUE INTEREST, %	81.000	81.000	81.000	81.000	81.000
INVESTMENTS, M\$					

3) BORROWED CAPITAL	0.000	0.000	0.000	0.000	0.000
4) EQUITY INVESTMENTS	0.000	760.000	0.000	0.000	760.000
5) RISK	0.000	0.000	0.000	0.000	0.000
6) TOTAL	0.000	760.000	0.000	0.000	760.000
OIL PHASE					

7) GROSS OIL, MB	1.321	0.687	0.357	0.123	2.488
8) NET OIL, MB	1.070	0.557	0.289	0.099	2.016
9) OIL REVENUE, M\$	35.606	20.367	11.650	4.330	71.953
10) OIL PRICE, \$/B	33.27	36.60	40.26	43.55	35.70
GAS PHASE					

11) GROSS GAS, MMF	3.567	1.855	0.965	0.331	6.718
12) NET GAS, MMF	2.890	1.503	0.781	0.268	5.442
13) GAS REVENUE, M\$	10.402	5.409	2.813	0.966	19.591
14) GAS PRICE, \$/MCF	3.600	3.600	3.600	3.600	3.600
ECONOMICS, M\$					

15) GROSS REV. TO INTR.	46.009	25.776	14.463	5.296	91.543
16) - SEV. TAX	0.000	0.000	0.000	0.000	0.000
17) - WPT TAX PAID	0.000	0.000	0.000	0.000	0.000
18) - AD VALOREM TAX	0.000	0.000	0.000	0.000	0.000
19) - OPERATING COSTS	32.881	36.827	41.246	26.309	137.263
20) - CAPITAL REPAYMENT	0.000	0.000	0.000	0.000	0.000
21) - INTEREST PAID	0.000	0.000	0.000	0.000	0.000
22) = NET INCOME	13.128	-11.051	-26.783	-21.013	-45.719
23) - INVESTMENTS & RSK	0.000	760.000	0.000	0.000	760.000
24) = BFIT NET	13.128	-771.051	-26.783	-21.013	-805.719
PRESENT WORTH @ 15.00 %					

30) NET INCOME	12.223	-8.903	-18.672	-13.057	-28.410
31) INVESTMENTS & RISK	0.000	657.653	0.000	0.000	657.653
32) BFIT NET	12.223	-666.556	-18.672	-13.057	-686.063
33) CUM BFIT NET	12.223	-654.333	-673.005	-686.063	-686.063

DATE: 11/08/82
TIME: 14:43:10

```
FILE: SETYEAR
PROJ: 0
```

```

DATE:11/08/82
TIME:14:48:10
FILE: INFIL
FILE: SETYEAR
PRGJ: 0

```

AS OF DATE: 1/1/1982

PERIOD ENDING	12-82	12-83	12-84	12-85	12-86	12-87	5.2 YR TOTAL
OWNERSHIP							
1) WORKING INTEREST, %	100.000	100.000	100.000	100.000	100.000	100.000	100.000
2) REVENUE INTEREST, %	100.000	100.000	100.000	100.000	100.000	100.000	100.000
INVESTMENTS, M\$							
3) BORROWED CAPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4) EQUITY INVESTMENTS	0.00	760.00	0.00	0.00	0.00	0.00	760.00
5) RISK	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6) TOTAL	0.00	760.00	0.00	0.00	0.00	0.00	760.00
OIL PHASE							
7) GROSS OIL, MB	3.96	2.06	1.07	0.56	0.29	0.05	7.99
8) NET OIL, MB	3.96	2.06	1.07	0.56	0.29	0.05	7.99
9) OIL REVENUE, M\$	131.88	75.43	43.15	24.68	14.12	2.46	291.71
10) OIL PRICE, \$/B	33.27	36.60	40.26	44.28	48.71	51.93	36.50
GAS PHASE							

11) GROSS GAS, MMF	10.70	5.57	2.89	1.50	0.78	0.13	21.58
12) NET GAS, MMF	10.70	5.57	2.89	1.50	0.78	0.13	21.58
13) GAS REVENUE, M\$	38.53	20.03	10.42	5.42	2.82	0.46	77.67
14) GAS PRICE, \$/MCF	3.600	3.600	3.600	3.600	3.600	3.600	3.600
ECONOMICS, M\$							

15) GROSS REV. TO INTR.	170.40	95.47	53.56	30.10	16.93	2.92	369.38
16) - SEV. TAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17) - WPT TAX PAID	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18) - AD VALOREM TAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19) - OPERATING COSTS	32.88	36.83	41.25	46.20	51.74	13.88	222.76
20) - CAPITAL REPAYMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21) - INTEREST PAID	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22) = NET INCOME	26.13	11.14	2.12	-16.10	-34.81	-10.96	-22.48
23) - INVESTMENTS & RSK	0.00	760.00	0.00	0.00	0.00	0.00	760.00
24) = BIT NET	26.13	-748.86	2.12	-16.10	-34.81	-10.96	-782.48
PRESNET WORTH @ 15.00 %							

30) NET INCOME	24.33	8.98	1.48	-9.71	-18.17	-5.22	1.68
31) INVESTMENTS & RISK	0.00	657.65	0.00	0.00	0.00	0.00	657.65
32) BIT NET	24.33	-648.68	1.48	-9.71	-18.17	-5.22	-655.98
33) CUM BIT NET	24.33	-624.35	-622.87	-632.59	-650.76	-655.98	-655.98

1
SCB AMOCO BRANTLEY OFFSET

AFTER TAX ECONOMICS

AS OF DATE: 1/1/1982

PERIOD ENDING	12-82	12-83	12-84	12-85	12-86	12-87	5.2 YR TOTAL
---------------	-------	-------	-------	-------	-------	-------	--------------

INVESTMENTS, M\$							
1) EXPENSED & RISK	0.00	512.00	0.00	0.00	0.00	0.00	512.00
2) DEPLETABLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3) DEPRECIABLE	0.00	248.00	0.00	0.00	0.00	0.00	248.00
4) TOTAL	0.00	760.00	0.00	0.00	0.00	0.00	760.00
TAX CALCULATIONS, M\$							

5) GROSS REV. TO INTR.	170.40	95.47	53.56	30.10	16.93	2.92	369.38
6) - SEVERANCE TAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7) - WPT TAX PAID	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8) - OPR. COSTS & AD T	32.88	36.83	41.25	46.20	51.74	13.88	222.76
9) - OVERHEAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10) - EXPENSED INV.	0.00	512.00	0.00	0.00	0.00	0.00	512.00
11) - DEPRECIATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12) = NET	26.13	-500.86	2.12	-16.10	-34.81	-10.96	-534.48
13) - DEPLETION	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14) - INTEREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15) = TAXABLE	26.13	-500.86	2.12	-16.10	-34.81	-10.96	-534.48
16) * TAX RATE, %	46.0	46.0	46.0	46.0	46.0	46.0	46.0
17) - INVESTMENT CREDIT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18) - WPT REFUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19) = F.I.I.	12.02	-230.39	0.97	-7.41	-16.01	-5.04	-245.86
20) REVENUE-SEV-WPT	170.40	95.47	53.56	30.10	16.93	2.92	369.38

DATE: 11/03/82
TIME: 14:48:10
FILE: INFI
FILE: SETYEAR
PROD: 0

21) - OPR. COSTS & ATX 32.88 36.83 41.25 46.20 51.74 13.88 222.76
 22) - F.I.T. 12.02 -230.39 0.97 -7.41 -16.01 -5.04 -245.86
 23) = A.F.I.T. 14.11 241.54 1.14 -8.69 -18.79 -5.92 223.38
 24) - LOAN REPAYMENT 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 25) - INTEREST 0.00 0.00 0.00 0.00 0.00 0.00 0.00
 26) = NET INCOME 14.11 241.54 1.14 -8.69 -18.79 -5.92 223.38
 27) - INVESTMENTS & RSK 0.00 760.00 0.00 0.00 0.00 0.00 760.00
 28) = A.F.I.T. NET 14.11 -518.46 1.14 -8.69 -18.79 -5.92 -536.62
 PRESENT WORTH @ 15.00 %

30) NET INCOME 13.14 194.60 0.80 -5.24 -9.81 -2.82 190.65
 31) INVESTMENTS & RISK 0.00 657.65 0.00 0.00 0.00 0.00 657.65
 32) A.F.I.T. NET 13.14 -463.06 0.80 -5.24 -9.81 -2.82 -467.00
 33) CUM. A.F.I.T. NET 13.14 -449.92 -449.12 -454.37 -464.18 -467.00 -467.00

SCB ANDCO BRANTLEY OFFSET

DATE: 11/08/82
 TIME: 14:48:10
 FILE: INFL
 FILE: SETYEAR
 PROJ: 0

ECONOMIC INDICATORS

AS OF DATE: 1/1/1982

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

00.	-782.475	-536.617	-993.734
5.	-735.592	-511.248	-896.636
10.	-693.697	-488.162	-818.378
15.	-655.977	-466.999	-753.707
20.	-621.793	-447.476	-699.162
25.	-590.632	-429.372	-652.374
30.	-562.083	-412.510	-611.671
35.	-535.810	-396.744	-575.839
40.	-511.536	-381.955	-543.974
50.	-468.100	-354.928	-489.562
60.	-430.327	-330.806	-444.582
70.	-397.165	-309.125	-406.597
80.	-367.820	-289.531	-373.988
90.	-341.682	-271.742	-345.627
100.	-318.269	-255.531	-320.700

RATE OF RETURN, PCT. 00.0 00.0
 UNDISCOUNTED PAYOUT, YRS. 0.00 0.00
 DISCOUNTED PAYOUT, YRS. 0.00 0.00
 UNDISCOUNTED NET/INVEST. -0.03 0.29
 DISCOUNTED NET/INVEST. 0.00 0.29

PROJECT DATA

ITEM	SCHEDULING RATES	SCHEDULE UNIT	PROCEDURE
410 GAS	22000.00 300.00 M/M	10.00 YRS	CPD 50.00
510 FRI/OIL	0.00 X \$/B	LIFE	SCH POIL
515 FRI/GAS	3.21 3.21 X	LIFE	
610 OPG/T	1800.00 X \$/M	LIFE	SCH POC
710 LSE/WI	100.00 X %	LIFE	
720 LSE/NPI	81.00 X %	LIFE	
INVESTMENT	TANGIBLES & INTANGIBLES	TIME	PROCEDURE
810 SCB	542.00 998.00 M/G	1/83 AD	PE/A 0.00

```
DATE:11/08/82
TIME:14:56:21
FILE: INFIL
FILE: SETYEAR
PROJ: 0
```

RESERVES AND ECONOMICS

AS OF DATE: 1/1/1982

	PERIOD ENDING	12-82	12-83	12-84	12-85	12-86	12-87	12-88	12-89	12-90	12-91	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
2) REVENUE 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
INVESTMENTS, M\$												
3) BORROWED CAPITAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4) EQUITY INVESTMENTS	0.00	1540.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1540.00
5) RISK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6) TOTAL	0.00	1540.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1540.00
OIL PHASE												
7) GROSS OIL, MB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8) NET OIL, MB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9) OIL REVENUE, M\$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10) OIL PRICE, \$/B	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GAS PHASE												
11) GROSS GAS, MMF	214.62	139.68	90.91	59.17	38.51	25.06	16.31	10.62	6.91	4.50	606.29	
12) NET GAS, MMF	214.62	139.68	90.91	59.17	38.51	25.06	16.31	10.62	6.91	4.50	606.29	
13) GAS REVENUE, M\$	688.94	448.38	291.82	189.93	123.61	80.45	52.36	34.08	22.18	14.43	1946.18	
14) GAS PRICE, \$/MCF	3.210	3.210	3.210	3.210	3.210	3.210	3.210	3.210	3.210	3.210	3.210	
ECONOMICS, M\$												

15) GROSS REV. TO INTR.	688.94	448.38	291.82	189.93	123.61	80.45	52.36	34.08	22.18	14.43	1946.18
16) - SEV. TAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17) - WPT TAX PAID	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18) - AD VALOREM TAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19) - OPERATING COSTS	22.76	25.50	28.55	31.98	35.82	40.12	44.93	50.32	56.36	63.13	399.47
20) - CAPITAL REPAYMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21) - INTEREST PAID	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22) = NET INCOME	126.57	80.35	50.02	30.01	16.68	7.66	0.88	-16.25	-34.18	-48.69	213.06
23) = INVESTMENTS & RSK	0.00	1540.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1540.00
24) = BFIT NET	126.57	1459.65	50.02	30.01	16.68	7.66	0.88	-16.25	-34.18	-48.69	1326.94
PRESENT WORTH @ 15.00 %											
30) NET INCOME	117.84	64.73	34.87	18.10	8.71	3.46	0.35	-5.50	-10.01	-12.33	220.24
31) INVESTMENTS & RISK	0.00	1332.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1332.61
32) BFIT NET	117.84	1267.88	34.87	18.10	8.71	3.46	0.35	-5.50	-10.01	-12.33	1112.38
33) CUM BFIT NET	117.84	1150.03	1115.16	1097.06	1088.35	1084.89	1084.54	1090.04	1100.04	1112.38	1112.38

1
SCB AMOCO WILLIAMS

DATE: 11/03/82
TIME: 14:56:21
FILE: INFILE
FILE: SETYEAR
PROJ: 0

AFTER TAX ECONOMICS
AS OF DATE: 1/1/1982

PERIOD ENDING	12-82	12-83	12-84	12-85	12-86	12-87	12-88	12-89	12-90	12-91	10.0 YR TOTAL
INVESTMENTS, M\$											
1) EXPENSED & RISK	0.00	998.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	998.00
2) DEPLETABLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3) DEPRECIABLE	0.00	542.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	542.00
4) TOTAL	0.00	1540.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1540.00
TAX CALCULATIONS, M\$											
5) GROSS REV. TO INTR.	688.94	448.38	291.82	189.93	123.61	80.45	52.36	34.08	22.18	14.43	1946.18
6) - SEVERANCE TAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7) - WPT TAX PAID	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8) - CPR. COSTS & AD T	22.76	25.50	28.55	31.98	35.82	40.12	44.93	50.32	56.36	63.13	399.47
9) - OVERHEAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10) - EXPENSED INV.	0.00	998.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	998.00
11) - DEPRECIATION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12) = NET	126.57	-917.65	50.02	30.01	16.68	7.66	0.88	-16.25	-34.18	-48.69	-784.94
13) - DEPLETION	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14) - INTEREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15) = TAXABLE	126.57	-917.65	50.02	30.01	16.68	7.66	0.88	-16.25	-34.18	-48.69	-784.94
16) * TAX RATE, %	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
17) - INVESTMENT CREDIT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18) - WPT REFUND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19) = F.I.T.	58.22	-422.12	23.01	13.80	7.67	3.53	0.41	-7.47	-15.72	-22.40	-361.07
20) REVENUE-SEV-WPT	688.94	448.38	291.82	189.93	123.61	80.45	52.36	34.08	22.18	14.43	1946.18
21) - CPR. COSTS & ATX	22.76	25.50	28.55	31.98	35.82	40.12	44.93	50.32	56.36	63.13	399.47
22) = F.I.T.	58.22	-422.12	23.01	13.80	7.67	3.53	0.41	-7.47	-15.72	-22.40	-361.07
23) = A.F.I.T.	68.35	502.47	27.01	16.21	9.01	4.14	0.48	-8.77	-18.46	-26.29	574.13
24) - LOAN REPAYMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25) - INTEREST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26) = NET INCOME	68.35	502.47	27.01	16.21	9.01	4.14	0.48	-8.77	-18.46	-26.29	574.13

30) NET INCOME	63.64	404.82	18.83	9.78	4.70	1.87	0.19	-2.97	-5.40	-6.66	488.79
31) INVESTMENTS & RISK	0.00	1332.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1332.61
32) A.F.I.T. NET	63.64	-927.79	18.83	9.78	4.70	1.87	0.19	-2.97	-5.40	-6.66	-843.82
33) CUM. A.F.I.T. NET	63.64	-864.16	-845.33	-835.55	-830.85	-828.98	-828.79	-831.76	-837.16	-843.82	-843.82

```
DATE:11/08/82
TIME:14:56:21
FILE: INFL
FILE: SETYEAR
PROJ: 0
```

AS OF DATE: 1/1/1982

-----M\$-----

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

00.	-1326.941	-965.868	-1788.645
5.	-1242.518	-918.879	-1568.204
10.	-1172.558	-878.993	-1410.350
15.	-1112.376	-843.821	-1290.177
20.	-1059.110	-811.938	-1194.325
25.	-1010.977	-782.478	-1115.082
30.	-966.836	-754.908	-1047.724
35.	-925.936	-728.885	-989.219
40.	-887.761	-704.190	-937.538
50.	-818.235	-658.219	-849.414
60.	-756.305	-616.213	-776.126
70.	-700.739	-577.693	-713.592
80.	-650.651	-542.302	-659.283
90.	-605.346	-509.744	-611.510
100.	-564.247	-479.756	-569.078

RATE OF RETURN, PCT.	00.0	00.0
UNDISCOUNTED PAYOUT, YRS.	0.00	0.00
DISCOUNTED PAYOUT, YRS.	0.00	0.00
UNDISCOUNTED NET/INVEST.	0.14	0.37
DISCOUNTED NET/INVEST.	0.17	0.37

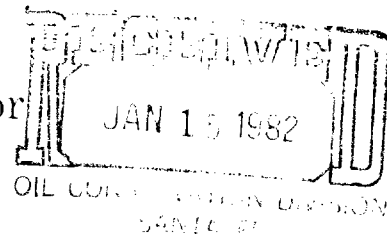
NOTES

DELTA DRILLING COMPANY



United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125



JAN 14 1982

Delta Drilling Company
Attention: Andrew Lattu
P. O. Box 3467
Midland, Texas 79702

Gentlemen:

Your 1982 Plan of Development for the South Culebra Bluff Unit, Eddy County, New Mexico, has been received by this office.

The plan as submitted proposes the drilling of unit wells #8, #9, #10, and #11. This plan is approved, however, you are requested to re-examine the unit for drainage of unitized substances by the following wells:

No. 1 Carrasco Com. in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 23 S., R. 28 E., N.M.P.M.

No. 1 Brantley "B" in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 23 S., R. 28 E., N.M.P.M.

No. 1 Williams Gas Com. in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 23 S., R. 28 E., N.M.P.M.

Sincerely yours,

(GEN. S. D. 17-1-1982)

FOR Gene F. Daniel
Deputy Conservation Manager
Oil and Gas

Enclosure

cc:
NMOCD, Santa Fe
Comm. of Public Lands, Santa Fe

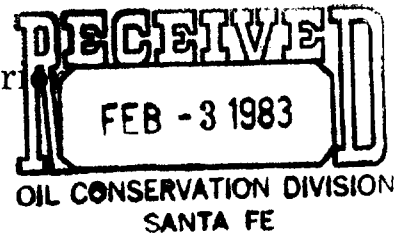


IN REPLY
REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

505 MARQUETTE AVENUE, N.W., SUITE 815
ALBUQUERQUE, NEW MEXICO 87102



FEB

#6117

Delta Drilling Company
Attention: Larry Schulz
P. O. Box 3467
Midland, Texas 79701

Gentlemen:

An approved copy of your 1983 plan of development for the South Culebra Bluff unit area, Eddy County, New Mexico, is enclosed. Such plan, proposing further reservoir and completion studies with no proposed drilling at this time, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Your letter of December 17, 1982 stated that the South Culebra Bluff Unit does not require drainage protection. We are evaluating your justification and all other pertinent data in detail so as to reach a final conclusion as to the necessity of protective wells. We will inform you of the results of our evaluation as soon as possible.

Sincerely yours,

(OWG: [illegible])

FOR Gene F. Daniel
Deputy Minerals Manager
Oil and Gas

Enclosure

CC:
NMOCD

TD 2893

M. Dyer
Marks
TD 2892

Amoco
Sr "60" Gas Com.
TD 12,900'
WOCU
Willis
Martin
TD 2730

BLOCK 2

D.H. Stoltz
Marks
TD 2825

Delta Drig.
A. Onsurez
Pan Amer.
Pardue
TD 2780
Delta Drig. Co.
Fed "11" Amoco

BLOCK 1

Delta Drig Co.
Carrasco
TD 13,200'
A Drig. Cement

Amoco
Teledyne Gas
TD 13,200

Delta Drig. Co.
So. Culebra Bluff

Delta Drig. Co.
So. Culebra Bluff

Amoco
Teledyne
Drilling 10,888'

Delta Drig Co.
So. Culebra Bluff
Delta Drig
Donaldson
WO Comp Rig

Amoco
Brantley

Maddox Ener.
Pardue Farms
Amoco
Pardue Fms.



DELTA DRILLING COMPANY
West Texas Division

So. CULEBRA BLUFF AREA
Eddy County, New Mexico
LAND PLAT

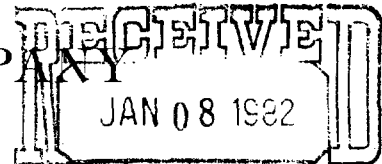
1" = 2000'

12/82

DELTA DRILLING COMPANY

WEST TEXAS DIVISION

P. O. BOX 3467 • TELEPHONE 915/682-4161
MIDLAND, TEXAS 79702



OIL CONSERVATION DIVISION
LARRY L. SCHULZ
Santa Fe
Land Manager

ANDREW C. LATTU
Exploration Manager

December 31, 1981

6117

U.S. Geological Survey
Supervisor
Drawer 1857
Roswell, New Mexico 88201

Energy and Minerals Department
Director of the Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Geologic Survey
South Central Region
P.O. Box 26124
Albuquerque, New Mexico 87125

Re: Plan of Further Development and
Operation
South Culebra Bluff Unit,
October 10, 1977
Contract Number 14-08-0001-16067
Township 23 South, Range 28 East N.M.P.M.
Eddy County, New Mexico

Gentlemen:

Reference is made to the Plan of Further Development and Operation dated December 30, 1980, and the subsequent letter dated March 17, 1981, submitted by Delta Drilling Company as operator of the South Culebra Bluff (SCB) Unit covering the time period December 31, 1980 to December 31, 1981.

The plan called for the drilling of the #7, #8, and #9 Unit wells, and the completion testing of the #6 Unit well.

The SCB #6 has been completed as a producing Bone Spring well.

The SCB #7, drilled in the NW/NE of Section 14 has also been completed as a producing Bone Spring well with a Total Depth of 7500'.

The drilling of Unit well #8 in 1981 was postponed in order to complete reservoir studies from offset Bone Spring wells.

The drilling of Unit well #9 in 1981 was postponed in order to complete an Atoka Sand study for a possible deeper Total Depth for a Unit well.

Further development of the unitized area is proposed as follows:

- A). Evaluation: Complete reserve studies of Unit wells.
- B). Drilling: (1) Current plans are to drill the #8 Unit well in the SW/SE of Section 14.
 - (2) The #9 Unit well will be drilled in the SW of Section 24. This well may be drilled to the Atoka contingent on present geologic studies.
 - (3) Additional drilling in 1982 will include the #10 Unit well in the SE of Section 23, and #11 Unit well in W $\frac{1}{2}$ of Sec. 13.
- C). Operating practices for proper conservation of natural resources will be continued.

Approval of this plan is respectfully requested.

Sincerely yours,



Andrew C. Lattu
West Texas Exploration Manager

AL:WC:kr

Enclosure

Amoco
St. Go Gas Com.

Willis
Martin
TD 2730

BLOCK 2

Delta Drlg.
Amoco
3-30-81

Delta Drlg.
Amoco
12-30-79

D.H. Stoltz
Marks
TD 2825

Delta Drlg.
A. Onsurez

Texas Pacific
11-11-82

Pan Amer.
Pardue
TD-2780

Delta Drlg. Co.
Amoco Fed.

Delta Drlg.
Amoco
3-14-79

BLOCK 1

Delta Drlg.
Amoco
3-13-78
(HBU)

Delta Dr.
Amoco
3-13-78
(HBU)

Amoco
3-14-79

Delta
Amoco
3-23-81

Delta Drlg.
Amoco
10-24-80
11-1-78
7-19-78

Amoco
Teledyne Gas
TD 13,200

Getty

Delta Drlg. Co.
So. Culebra Bluff
Delta Amoco
4-13-81
2-22-81

Delta Amoco
10-24-80
(HBP)
11-1-78
(HBP)
7-19-81

Delta
Amoco
3-13-78
(HBU)

Gulf
10-1-84

Delta Drlg.
(HBP)

Delta Drlg.
Amoco
4-9-78
(HBP)

Delta Drlg.
Amoco
10-24-80 (HBP)
11-1-78 (HBP)
7-19-81

Delta
Amoco
3-27-81
(HBP)

Delta Drlg. Co.
So. Culebra Bluff

Delta Drlg.
Donaldson

Delta
Amoco
10-17-79
(HBP)

Delta
Amoco
3-30-81 (HBP)
3-31-81 (HBP)

Delta Drlg.
Amoco
3-30-81
(HBP)

Amoco
Brantley

Delta
Amoco
3-30-81
(HBP)

Delta
Amoco
4-3-81
(HBP)

Amoco
Ingalls Gas

Amoco
Brantley Gas Unit

Amoco
Williams

Maddox Ener.
Pardue Farms

Amoco
Pardue Fms.

Maddox Ener.
Pardue Farms

HNG Oil
Williams Com.

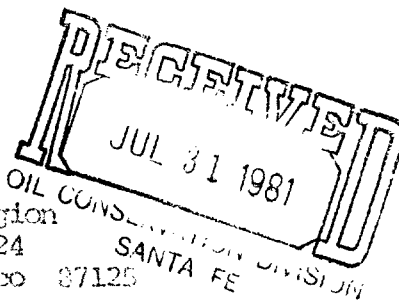
DELTA DRILLING COMPANY

West Texas Division

Proposed Bone Spring Locations 1982-83
So. CULEBRA BLUFF AREA
Eddy County, New Mexico

LAND PLAT

1" = 2000'



South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

6117

JUL 30 1981

Delta Drilling Company
Attn: Andrew Jatta
P. O. Box 2012
Tyler, Texas 75710

Enclosure:

One approved copy of your amended 1981 plan of development for the South Culobra Bluff unit area, Mora County, New Mexico is enclosed. Such plan, proposing to drill unit well No. 9, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SGD.) JAMES W. SHELTON

FOR Gene P. Daniel
Deputy Conservation Manager
Oil and Gas

Enclosure

cc:
EMOCD, Santa Fe
Comm of Pub Lands, Santa FE
DS, Roswell District (w/encl)



United States Department of the Interior

RECEIVED
MAR 06 1981
GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125
OIL CONSERVATION DIVISION
SANTA FE

05 MAR 1981

6117

Delta Drilling Company
Attention: J. R. King
P. O. Box 3467
Midland, Texas 79702

Gentlemen:

Your 1981 Plan of Development for the South Culebra Bluff unit, Eddy County, New Mexico, has been reviewed by this office.

The 1981 plan as submitted proposes to drill wells Nos. 7 and 8 to test the Bone Spring formation. Such plan is hereby approved on this date; however, you are requested to re-examine the SW $\frac{1}{4}$ sec. 24 for drainage of unitized substances from the Bone Spring and the Morrow formations.

It is further requested that you report to this office within 60 days your finding of such examination as a supplement to your 1981 Plan of Development. Two approved copies are enclosed.

Sincerely yours,

ORIGINAL SIGNED BY:

Gene F. Daniel
Deputy Conservation Manager

Enclosures

cc:
NMOC, Santa Fe (ltr only)

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 17, 1981

Delta Drilling Company
Box 2012
Tyler, Texas 75710

Attention: J. R. King

Re: Case No. 6117
South Culebra Bluff Unit
1981 Plan of Development
and Operation

Gentlemen:

We hereby approve the 1981 Plan of Development and Operation for the South Culebra Bluff Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

Two approved copies of the Plan of Development are returned herewith.

Yours very truly,

JOE D. RAMEY
Director

JDR/EP/fd
enc.

cc: U.S.G.S. - Albuquerque
Commissioner of Public Lands

C
O
P
Y

DELTA DRILLING COMPANY

Box 2012 TELEPHONE 214 595-1911

TYLER, TEXAS 75710

ADDRESS REPLY TO

West Texas Exploration Division
P. O. Box 3467
MIDLAND, TEXAS 79702

6117

OK
2/6/81

December 30, 1980

Supervisor
U.S. Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Director
Oil Conservation Division
Energy & Minerals Department
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Plan of Further Development & Operation
South Culebra Bluff Unit,
October 10, 1977
Contract Number 14-08-0001-16067
Township 23 South, Range 28 East, N.M.P.M.
Eddy County, New Mexico

Gentlemen:

Reference is made to the Plan of Further Development and Operation dated December 31, 1979, submitted by Delta Drilling Company as operator of the South Culebra Bluff Unit covering the time period December 31, 1979 to December 31, 1980.

The plan called for the completion of the #4 and #5 Unit wells and drilling of the #6, #7, and #8 Unit wells.

The #4 Unit well has been completed from Bone Spring perforations preparatory to official potential.

The #5 Unit well was drilled to a total depth of 13,171 feet and tests revealed the Morrow Gas Pay to be non commercial. The #5 has now been completed in the Upper Atoka as a gas well.

The #6 Unit well was drilled as a Bone Spring test to 9500 feet. The #6 Unit well has been cased and is presently being tested through perforations.

The drilling of unit wells #7 and #8 in 1980 was postponed in order to accumulate additional test and production data from offset Bone Spring wells.

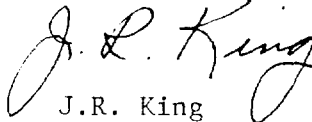
Further development of the unitized area is proposed as follows:

- A). Evaluation: Complete testing and evaluation of the #6 Unit well.
- B). Drilling: (1) Current plans are to drill the #7 Unit well in the SW SE Section 14 and the #8 Unit well in the NE SE Section 14. Both wells will be 9800 foot Bone Spring Tests.

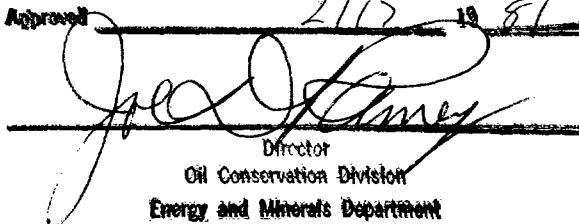
(2) Additional drilling during 1981 is contingent on economic success of existing and planned completions.
- C). Operating practices for proper conservation of natural resources will be continued.

Approval of this plan is respectfully requested.

Sincerely yours,


J.R. King

JRK:dc

Approval 2/12 1981

Director
Oil Conservation Division
Energy and Minerals Department

THIS APPROVAL GRANTED SUBJECT TO LIKE APPROVAL
BEING GRANTED BY THE UNITED STATES GEOLOGICAL
SURVEY AND THE COMMISSIONER OF PUBLIC LANDS
OF THE STATE OF NEW MEXICO.



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Box 26124

Albuquerque, New Mexico 87125

FEB 07 1980

Delta Drilling Company
Attention: R. D. Keadle
Box 2012
Tyler, Texas 75710

6117

Gentlemen:

On this date, your 1980 plan of development and operation for the South Culebra Bluff unit area, Eddy County, New Mexico, wherein you propose to evaluate wells No. 4 and No. 5, and to drill wells Nos. 6, 7, and 8 to test the Bone Spring formation, was approved. Such approval is subject to like approval by the appropriate State officials. Two approved copies are enclosed.

Sincerely yours,

(ORIG. SCD.) JAMES W. SUTHERLAND

James W. Sutherland
Oil and Gas Supervisor, SRMA

Enclosures 2

cc:

NMOCD, Santa Fe
Comm. Public Lands, Santa Fe

RECEIVED
FEB 10 1980
U.S. GEOLOGICAL SURVEY
SANTA FE



ONE HUNDRED YEARS OF EARTH SCIENCE IN THE PUBLIC SERVICE

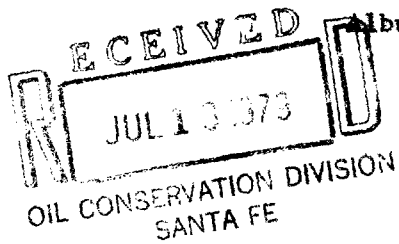


United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Box 26124

Albuquerque, New Mexico 87125



JUL 13 1979

6117

Delta Drilling Company
Attention: Mr. R. D. Keadle
P. O. Box 3467
Midland, Texas 79702

Gentlemen:

Two approved copies of your revised 1979 plan of development for the South Culebra Bluff unit area, Eddy County, New Mexico, proposing to drill a well to test the Bone Spring and a well to test the Morrow, are enclosed. Such plan was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

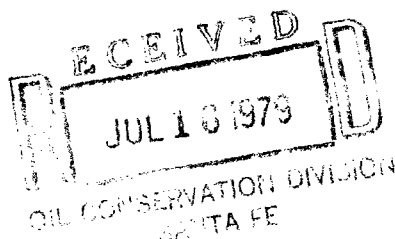
Sincerely yours,

(ORIG. 100.) CENE S. 10011

for Oil and Gas Supervisor, SRMA

Enclosures (2)

cc;
NMOCD, Santa Fe (ltr. only)
Com. Pub. Lands, Santa Fe (ltr. only)



OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

April 5, 1979

Delta Drilling Company
P. O. Box 3467
Midland, Texas 79702

Attention: Mr. Dale Keadle

Re: Case No. 6117
South Culebra Bluff Unit
Designation of Participating
Area

Gentlemen:

We hereby approve the Designation of Participating Area for the South Culebra Bluff Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

One approved copy of the Designation is returned herewith.

Yours very truly,

JOE D. RAMEY
Director

JDR/LT/fd
enc.

cc: U.S.G.S. - Roswell
Commissioner of Public Lands

C

O

P

Y

DELTA DRILLING COMPANY

Box 2012 TELEPHONE 214 505-1911

TYLER, TEXAS 75701

March 30, 1979

ADDRESS REPLY TO

Mr. Dale Keadle
P. O. Box 3467
Midland, TX 79702

United States Department of the Interior
Geological Survey
P. O. Drawer 1857
Roswell, NM 88201

New Mexico Oil Conservation Division
P. O. Box 2088
Land Office Building
Santa Fe, NM 87501

Approve
No. 6117

Re: Designation of Participating Area,
South Culebra Unit Well No. 2,
South Culebra Bluff Unit,
Eddy County, New Mexico
No. 14-08-0001-16067

Gentlemen:

Reference is made to the Unit Agreement for the South Culebra Bluff Unit Area which has been approved by the New Mexico Oil Conservation Division and the United States Geological Survey.

Delta Drilling Company, as Unit Operator, has drilled the South Culebra Bluff Unit Well No. 2 at a location 1722' FSL and 2032' FEL of Section 14, T23S, R28E, Eddy County, New Mexico, which well was drilled to a depth of 13,130' below the surface and is presently completed as a producing well from the Atoka Lime Formation.

The subject Unit Agreement provides, in Paragraph 11 thereof, that upon completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for approval a schedule of all land reasonably proved to be productive in paying quantities, such land to constitute a participating area under the terms of such Unit Agreement. Delta submits that the 320 acres of land comprising the E/2 of Section 14, T23S, R28E, Eddy County, New Mexico, has been reasonably proved to be productive of gas in

*make
no note
in Nov 1978*

RECEIVED
11 02 13
OIL CONSERVATION DIVISION
SANTA FE

United States Department of the Interior
Geological Survey
New Mexico Oil Conservation Division
March 30, 1979
Page 2

paying quantities and respectfully requests that the New Mexico Oil Conservation Division and the United States Geological Survey approve such designation effective as of November 20, 1978.

Attached hereto are the following Exhibits:

- (a) Exhibit "A": Plat showing the outline of the 1280 acres included in the South Culebra Unit, the location of the South Culebra Bluff Unit Well No. 2 and the acreage which, Delta submits, should be designated as the Participating Area for the subject well, being the E/2 of Section 14, T23S, R28E, Eddy County, New Mexico, comprising 320 acres of land.
- (b) Exhibit "B": Schedule describing the acreage proposed to be included in such Participating Area and a description of the leases covering such acreage.
- (c) Exhibit "C": Schedule setting forth the allocation of unitized production within such proposed initial Participating Area together with the working ownership thereof.
- (d) Exhibit "D": Structural map.
- (e) Exhibit "E": Cross-Section.
- (f) Exhibit "F": Summary of engineering data supporting this request.

Your consideration in designating the proposed Participating Area described above as the Participating Area for the subject Well will be appreciated very much.

Very truly yours,

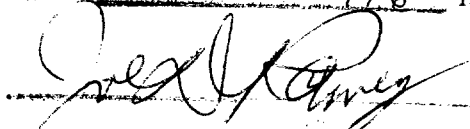
DELTA DRILLING COMPANY

By:



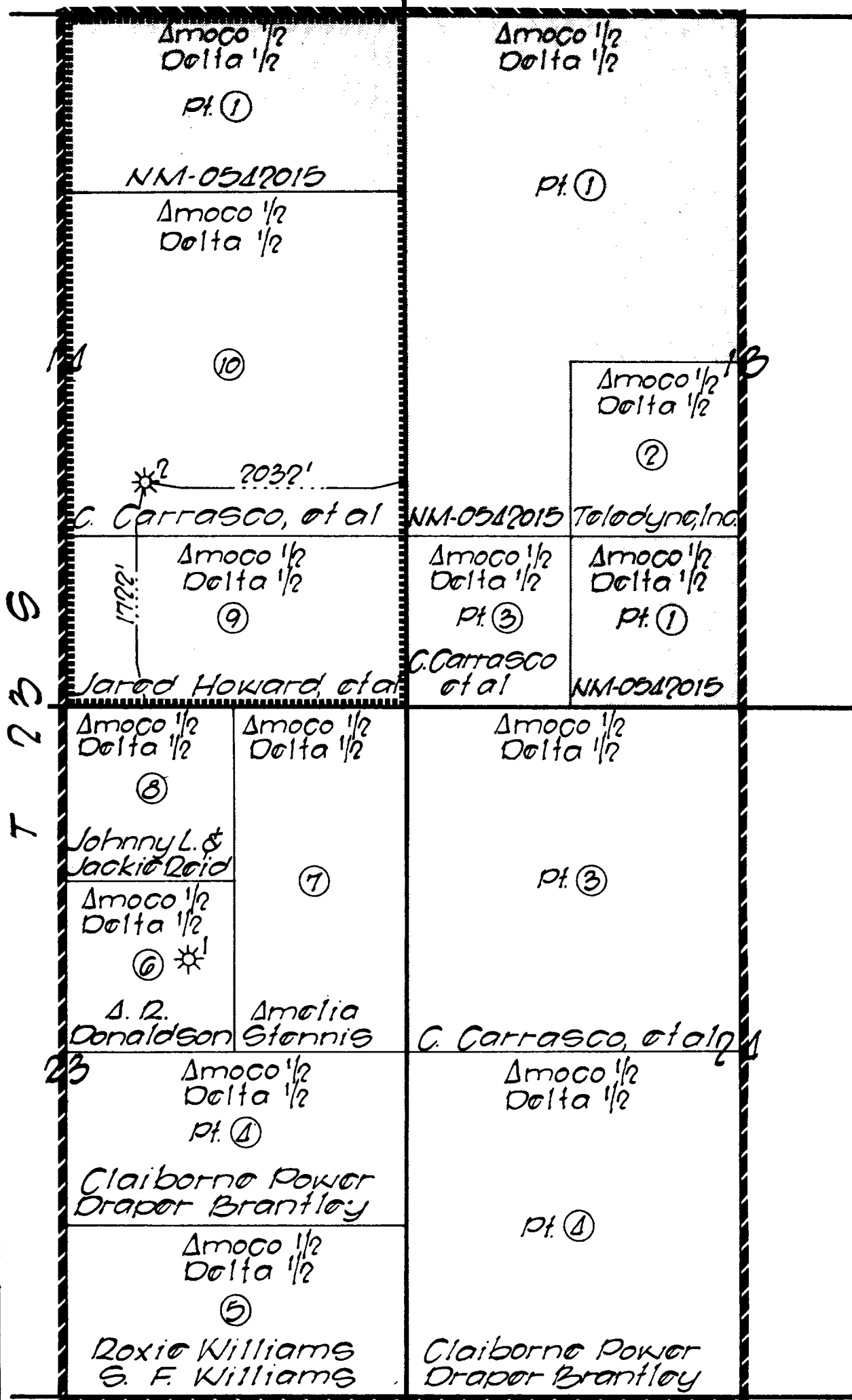
Approved R. Dale Keadle 4/6 19 79

cc: U.S.G.S.
505 Marquette, N.W.
Suite 815
Albuquerque, NM 87102



Energy and Minerals Division

12 28 E



NOTE:

Total Federal Acreage 320
Total Fee Acreage 960
Total Acreage in Unit 1280

LEGEND

- Federal Land
- Fee Land
- ⑤ - Tract Number
- Unit Boundary
- Participating Area
- NM-0542015 - Federal Lease

EXHIBIT 'A'

SOUTH CULEBRA BLUFF
UNIT, EDDY COUNTY,
NEW MEXICO.

PROPOSED PARTICIPATING AREA
SOUTH CULEBRA BLUFF UNIT
EDDY COUNTY, NEW MEXICO

UNIT TRACT NO.	ACREAGE DESCRIPTION	LEASE DESCRIPTION	PARTICIP ACRE
1 (Part)	T23S, R28E, N.M.P.M. Sec. 14: N/2 of NE/4	NM 0542015 - Oil and Gas Lease dated May 1, 1964, executed by United States of America to H. P. McIish, recorded in Book 143, Page 323, Miscellaneous Records, Eddy County, New Mexico	80.0
10	T23S, R28E, N.M.P.M. Sec. 14: S/2 NE/4 and N/2 SE/4	Oil and Gas Lease dated July 19, 1973, executed by Candelario Carrasco to Amoco Production Company, recorded in Book 105, Page 512, Miscellaneous Records, Eddy County, New Mexico	160.0
		Oil and Gas Lease dated November 1, 1977 executed by Agula Cattle Co., Inc. to Clifton Wilderspin, recorded in Book 152, Page 388, Miscellaneous Records, Eddy County, New Mexico	
		Oil and Gas Lease dated October 24, 1977 executed by Crocker National Bank, Trustee under the Will of Albert Berger, deceased, to Amoco Production Company, recorded Book 151, Page 831, Miscellaneous Records of Eddy County, New Mexico.	
		Oil and Gas Lease dated October 24, 1977 executed by Saul Baker et ux to Amoco Production Company, recorded in Book 151, Page 789, Miscellaneous Records, Eddy County, New Mexico.	
9	T23S, R28E, N.M.P.M. Sec. 14: S/2 SE/4	Oil and Gas Lease dated April 13, 1973 executed by Jared Howard to Amoco Production Company, recorded in Book 100, Page 415, Miscellaneous Records, Eddy County, New Mexico.	80.0
		Oil and Gas Lease dated April 13, 1973 executed by Frieda Howard to Amoco Production Company, recorded in Book 100, Page 417, Miscellaneous Records, Eddy County, New Mexico.	

EXHIBIT "B"

UNIT TRACT NO.	ACREAGE DESCRIPTION	LEASE DESCRIPTION	PARTICIPATING ACRES
9 (Continued)		<p data-bbox="1208 1293 1336 2061">Oil and Gas Lease dated March 6, 1978 executed by Seaborn W. Price to Amoco Production Company, recorded in Book 155, Page 553, Miscellaneous Records, Eddy County, New Mexico.</p> <p data-bbox="987 1293 1174 2061">Oil and Gas Lease dated April 13, 1973 executed by Betty R. Howard, Indv. and Indep. Exec. of Estate of Reginald George Howard, Deceased, to Amoco Production Company, recorded in Book 100, Page 421, Miscellaneous Records, Eddy County, New Mexico.</p> <p data-bbox="823 1293 951 2061">Oil and Gas Lease dated February 22, 1978, executed by Harvey R. Hicks to Amoco Production Company, recorded in Book 100, Page 423, Miscellaneous Records, Eddy County, New Mexico.</p> <p data-bbox="660 1293 789 2061">Oil and Gas Lease dated April 13, 1973 executed by David R. Howard et ux to Amoco Production Company, recorded in Book 100, Page 425, Miscellaneous Records, Eddy County, New Mexico.</p>	

ALLOCATION SCHEDULE
 SOUTH CULEBRA BLUFF UNIT
 PROPOSED PARTICIPATING AREA
 EDDY COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION	PARTICIPATING AREA	PERCENT OF PARTICIPATING AREA	WORKING INTEREST OWNERS
1 (Part)	T23S, R28E, N.M.P.M. Sec. 14: N/2 NE/4	80.00	25	Delta Drilling Company - 50% Amoco Production Company - 50%
10	T23S, R28E, N.M.P.M. Sec. 14: S/2 NE/4 and N/2 SE/4	160.00	50	Delta Drilling Company - 50% Amoco Production Company - 50%
9	T23S, R28E, N.M.P.M. Sec. 14: S/2 SE/4	80.00	25	Delta Drilling Company - 50% Amoco Production Company - 50%