

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1. TYPE OF WELL: OIL ☐ GAS ☐ WELL ☐ DRY ☒ Other ☐

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP ☐ PLUG BACK ☐ DIRT ☐ REPAIR ☐ Other ☐

2. NAME OF OPERATOR

Shell Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 831 Houston, TX 77001 ATTN: P. G. KELLDORF

4. LOCATION OF WELL (Report location clearly and in accordance with instructions on reverse side)

At surface 1520' FNL + 1000' FEL Sec. 24

At top prod. interval reported below

At total depth 1232' FNL + 532' FEL

(27° DEVIATION AT TOTAL DEPTH)

OIL CONSERVATION DIVISION

14. PERMIT NO. SANTA FE DATE ISSUED
APR *30-001-20004 11-25-80

15. DATE SPUNDED

2-15-81

16. DATE T.D. REACHED

11-9-81

17. DATE COMPL. (Ready to prod.)

N.A. : Dry hole

18. ELEVATIONS (DF, RES, RT, GR, ETC.)*

5797' KB

19. ELEV. CASINGHEAD

5774' GL

20. TOTAL DEPTH, MD & TVD

19,350' MD

21. PLUG, BACK T.D., MD & TVD

19,204' MD

22. IF MULTIPLE COMPL., HOW MANY*

N.A.

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

25. WAS DIRECTIONAL SURVEY MADE

YES

26. TYPE ELECTRIC AND OTHER LOGS RUN

Beachlog sonic log, Compensated Newton/formation density/GR log, Resistivity log, DIAMETER SURVEY, CEMENT BOND LOG, CALIPER, SIDEWALLS

27. WAS WELL CORED

YES

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	CONDUCTOR	527'		CONDUCTOR	
13 3/8"	68#	5502'	17 1/2"	2050 SK (3230 ft ³)	
9 5/8"	47# + 53.5#	16,000'	12 1/4"	5176 SK (8280 ft ³)	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
7"	SURFACE	14,400'	1410 SK (2500 ft ³)	
5"	14,430'	19,360'	1640 SK (2900 ft ³)	

31. PERFORATION RECORD (Interval, size and number)

16,818 - 16,878	121 holes
17,097 - 17,134	75 holes
17,146 - 17,175	59 holes
18,600 - 18,746	585 holes
19,090 - 19,132	169 holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
19,090-19,132	4000 GALS 10% ACETIC ACID
18,600-18,146	12,000 GALS 10% ACETIC ACID
17,097-17,175	7,000 GALS 10% ACETIC ACID
SAME	3,500 Gals 2% KCL w/55,000 lbs BAUXITE

33.* DATE FIRST PRODUCTION N.A. PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) N.A.

WELL STATUS (Producing or shut-in)

Plugged + Abandoned

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR R.A.E.	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

N.A.

TEST WITNESSED BY

N.A.

35. LIST OF ATTACHMENTS

COMPLETION REPORTS FOR DURATION OF TESTING OPERATIONS

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

SIGNED

W. F. N. KELLDORF

TITLE Division Prod. Engineer

DATE 8-3-82

*(See Instructions and Spaces for Additional Data on Reverse Side)

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Dry hole digger.
19,000' Cretaceous Test
\$ M/\$
WI - 100%
GL 5778'
30" csg @ 52'

12-31-80
9/9//0. Status: Drilling.
Moved in, rigged up Dry hole digger 12-30-80.
Spud well 8:00 AM MST 12-31-80. Drilling
36" hole for 30" sub-conductor.
Location: 1520' FNL, 1000' FEL,
Section 24, T11N, R1E
Bernalillo County, New Mexico

1-2-81
52/43//. Status: Prep to cmt 30" csg.
Drilled to 52' on 12-31-80, set 64' 30"
sub conductor @ 52'. Shut down for holiday.
Will resume operations this date.

1-3, 4, 5-81
52/0//. Status: Drilling out 30" csg.
Gmt'd 30" cond w/Redi-Mix. Drld rathole &
mousehole. Shut down for weekend. Resumed
operation 8:00 AM 1-5-81. Drlg 20" hole w/
spudder rig.

1-6-81
Drlg 6" pilot hole from 52' to 67'.
Intermittent operations due to final location
construction.

1-7 & 1-8-81
Drlg 6" pilot from 67 to 113'.

1-9-81
Drlg 6" pilot hole from 113' - 130'.

1-10 thru 1-12-81
Rig repairs. SD rig over weekend.
Will resume operations 8 AM 1-12-81

1-13-81
Drilling pilot hole from 130' to 143' w/
spudder rig. Location 100% finished.

1-14-81
Drlg pilot hole from 143' - 152'.

1-15-81
Drlg pilot hole @ 152'.

1-16-81
Drlg pilot hole @ 152'.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24 1-17-81 thru 1-19-81
(WC) Brinkerhoff #15 Drlg pilot hole @ 152'.
19,000' Cretaceous Test
\$ M/\$ 1-20-81
WI - 100% Drlg pilot hole @ 152'.
GL 5778' 1-21-81
30" csg @ 52' Drlg pilot hole @ 152'.

1-22-81
Drlg pilot hole @ 152'.

1-23-81
Drlg pilot hole @ 152'.

1-24-81 thru 1-26-81
Drlg pilot hole @ 152'.

1-27-81
Drlg pilot hole @ 152'.

1-28-81
Drlg pilot hole @ 152'.

1-29-81
152/0//. Status: RD Spud rig.
Brinkerhoff #15 MIRT.

1-30-81
Status: MIRURT.

1-31 thru 2-2-81
Status: Rigging up Brinkerhoff #15

2-3-81
Status: MIRURT.

2-4-81
Status: MIRURT.

2-5-81
Status: RURT.

2-6-81
Status: RURT.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #15

19,000' Cretaceous Test

\$544

WI - 100%

GL 5778'

30" csg @ 52'

2-7 thru 2-9-81

Status: RURT.

2-10-81

Status: RURT.

2-11-81

Status: RURT.

2-12-81

Status: RURT.

2-13-81

Status: RURT. 90% rigged up.

2-14-81

Status: RURT.

2-15-81

150/150//0. Status: Mix mud.

Spud @ 12:01 AM 2/15/81 w/Brinkerhoff #15.

Dev. 1/2" @ 150'.

Mud: 8.5 x 35

2-16-81

354/104//1. Status: Drilling.

Mud: 8.5 x 40

2-17-81

529/175//2. Status: Opening hole to 26".

Dev. 1/2" @ 529'.

Mud: 8.5 x 42

2-18-81

529/0//3. Status: Running 20" csg.

Mud: (.463) 8.8 x 42 x 18.5

2-19-81

529/0//4. Status: W. O. C.

Ran 13 jts 20" csg to 527'.

Cmt w/1000 sx Class "B", 2% CACL, 1/4#/sx flocele. Tail in w/375 sx Class "B", 2% CACL.

2-20-81

530/0//5. Status: Nipple up.

W. O. more cmt. Tag top of cmt @

120'. Cmt thru 1" w/250 sx Class "B", 1%

CACL. Good cmt returns.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$ 927M/\$
WI - 40%
GL 5778'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'

2-21-81
672/143//6. Status: Drilling.
Mud: (.447) 8.6 x 36 x 16.2

2-22-81
1338/666//7. Status: Drilling.
Dev. 1/2" @ 765', 1/2" @ 1065'.
Mud: (.452) 8.7 x 42 x 14.2

2-23-81
1804/466//8. Status: Drilling.
Dev. 1-1/2" @ 1433', 1-1/2" @ 1452',
1" @ 1553', 1-1/4" @ 1742'.
Mud: (.452) 8.7 x 43 x 14.6

2-24-81
2568/764//9. Status: Drilling.
Dev. 3/4" @ 1962', 1-1/4" @ 2088', 1-1/4" @ 2432'.
Mud: (.457) 8.8 x 41 x 14.2

2-25-81
3350/782//10. Status: Drilling.
Dev. 3/4" @ 2559', 3/4" @ 2875', 3/4" @ 3191'.
Mud: (.457) 8.8 x 43 x 13.8

2-26-81
3801/451//11. Status: Drilling.
Dev. 3/4" @ 3512'.
Magnaflux Dcs. Found one cracked box,
one washed pin, one lift sub cracked.
Mud: (.452) 8.7 x 40 x 13.6

2-27-81
4471/670//12. Status: Drilling.
Dev. 4266' Misrun, 2" @ 4291'.
Mud: (.452) 8.7 x 43 x 13.8

2-28-81
5272/801//13. Status: Drilling.
Dev. 1-1/4" @ 4537', 1-1/2" @ 4875',
2-1/4" @ 5168'.
Mud: (.452) 8.7 x 41 x 14

3-1-81
5500/228//14. Status: W.O. Schlumberger.
Mud: (.452) 8.7 x 41 x 13.4

3-2-81
5505/0//15. Status: RU cmt equipment.
Ran Dual Ind - SFL & BHC Sonic.
Ran 125 jts 13-3/8" J-55 68# ST & C csg.
to 5502'.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WCO) Brinkerhoff #15

19,000' Cretaceous Test

\$1138 M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

3-3-81

5505/0//16. Status: ND BOP.

Ran 125 jts 13-3/8" csg to 5502'. Cmt

1st stage w/1550 sx Lite, 1/4#/sx Flocele,

tail w/500 sx Class "B", .05 CFR2, 1/4#/sx Flocele.

Cmt 2nd stage w/900 sx Lite, 1/4#/sx Flocele, tail

w/500 sx Class "G", 1/4#/sx Flocele.

Mud: 8.7 x 41

3-4-81

5505/0//17. Status: NU BOP.

Cut 13-3/8" csg. Weld on csg head.

Mud: 8.7 x 41

3-5-81

5505/0//18. Status: TIH.

NU BOP. Test BOP, choke manifold & all mud lines.

Mud: 8.7 x 41

3-6-81

5505/0//19. Status: TIH w/RTTS Tool.

TIH to float shoe. Drilled plug. Test csg.

Drld shoe. Circ & cond mud. POOH. PU RTTS tool.

Mud: (.452) 8.7 x 43 x 20.2

3-7-81

6012/507//20. Status: Drilling.

Dev. 3/4" @ 5972'.

Mud: (.452) 8.7 x 42 x 18.4

3-8-81

6280/268//21. Status: Drilling.

Mud: (.452) 8.7 x 40 x 15.6

3-9-81

7051/771//22/244. Status: Running single shot.

Dev. 2" @ 6437'. 3/4" @ 6737'.

Mud: (.455) 8.7 x 42 x 14.8

3-10-81

7724/668//23/244. Status: Trip.

Dev. 1" @ 7043', 1-1/4" @ 7356'.

Mud: (.455) 8.7 x 43 x 14.6

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$1403M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'

3-11-81
8450/726//24/174. Status: Drilling.
Dev. 1-1/4" @ 8153'.
Mud: (.458) 8.8 x 40 x 14.8

3-12-81
8600/150//25/174. Status: Drilling.
Dev. 1-1/4" @ 8465'.
Mud: (.452) 8.7 x 42 x 15.6

3-13-81
8961/361//26/174. Status: Drilling.
Dev. 1-1/4" @ 8584'.
Mud: (.452) 8.7 x 44 x 15.4

3-14-81
9032/71//27/174. Status: Maniflux DCs.
Dev. 1-1/2" @ 9000'.
Mud: (.452) 8.7 x 44 x 15.6

3-15-81
9173/141//28/174. Status: Trip.
Dev. 1/2" @ 9124'.
Mud: (.452) 8.7 x 41 x 15.8

3-16-81
9240/67//29/174. Status: Drilling.
Looking for holes in pipe.
Mud: (.452) 8.7 x 41 x 13.6

3-17-81
9248/8//30/174. Status: Reaming.
Dev. 1" @ 9218'.
Mud: (.452) 8.7 x 39 x 13.8

3-18-81
9525/277//31/174. Status: Drilling.
Mud: (.452) 9.7 x 41 x 13.8

3-19-81
9668/143//31/174. Status: TIH.
Dev. 1/2" @ 9668'.
Mud: (.452) 8.7 x 41 x 12.2

3-20-81
10,010/342//32/174. Status: Drilling.
Mud: (.452) 8.7 x 40 x 12

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000 Cretaceous Test
\$1582 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'

3-21-81
10,231/221//34/174. Status: TOOH.
Dev. 1-1/2" @ 10,184'.
Mud: (.452) 8.7 x 42 x 12.6

3-22-81
10,410/179//35/174. Status: Drilling.
Mud: (.447) 9.6 x 43 x 12.8

3-23-81
10,849/439//36/174. Status: Circ for trip.
Mud: (.452) 9.7 x 43 x 12.6

3-24-81
10,860/11//37/174. Status: Drilling.
Dev. 1-1/2" @ 10,818'.
Mud: (.455) 8.7 x 42 x 13

3-25-81
11,159/299//38/174. Status: Drilling.
Mud: (.455) 8.7 x 41 x 12.6

3-26-81
11,262/103//39/174. Status: Drilling.
Mud: (.452) 8.7 x 43 x 12.2

3-27-81
11,549/287//40/174. Status: Drilling.
Mud: (.450) 8.6 x 41 x 10.6

3-28-81
11,630/81//41/174. Status: Drilling.
Dev. 1-1/2" @ 11,568'.
Mud: (.458) 8.8 x 42 x 10.4

3-29-81
11,833/203//42/174. Status: Drilling.
Mud: (.460) 8.8 x 40 x 10.8

3-30-81
11,836/3//43//174. Status: Logging.
Mud: (.455) 8.7 x 40 x 10.6

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #15

19,000' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

~~3-31-81~~

11,847/11//44/174. Status: Drilling.

Dev. 1" @ 11,800'.

Mud: (.463) 8.9 x 41 x 11.8

4-1-81

12,090/243//45/174. Status: Drilling.

Mud: (.463) 8.9 x 40 x 12

4-2-81

12,250/160//46/174. Status: Drilling.

Mud: (.463) 8.9 x 41 x 11.2

4-3-81

12,399/149//47/174. Status: Tripping for bit.

Mud: (.463) 8.9 x 41 x 11

4-4-81

12,481/82//48/174. Status: Drilling.

Dev. 3/4" @ 12,399'.

Mud: (.463) 8.9 x 41 x 10.8

4-5-81

12,634/153//49/174. Status: Drilling.

Mud: (.463) 8.9 x 41 x 12

4-6-81

12,779/145//50/174. Status: Drilling.

Mud: (.463) 8.9 x 42 x 11.4

4-7-81

12,919/140//51/174. Status: Drilling.

Mud: (.463) 8.9 x 43 x 10.6

4-8-81

12,929/10//52/174. Status: Inspect BHA.

Mud: (.463) 8.9 x 39 x 11.2

4-9-81

12,910 Corr/-19//53/174. Status: Drilling.

Mangaflux BHA, found cracked Pin on

IBS, Box on Dc & two cracked pins on HWDP.

TIH Picked up 75 jts new 16.60 E pipe.

Wash & ream 150' to bottom.

Mud: (.463) 8.9 x 43 x 12

4-10-81

12,955/45//54/174. Status: TIH.

Mud: (.463) 8.9 x 42 x 12.4

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$1967 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'

4-11-81
13,122/167//55/174. Status: Drilling.
Mud: (.463) 8.9 x 42 x 12

4-12-81
13,321/199//56/174. Status: Drilling.
Mud: (.463) 8.9 x 41 x 12.2

4-13-81
13,501/180//57/174. Status: Drilling.
Mud: (.458) 8.8 x 43 x 12

4-14-81
13,740/239//58/174. Status: Drilling.
Mud: (.458) 8.8 x 42 x 12.4

4-15-81
13,904/164//59/174. Status: Down for repairs.
Mud: (.460) 8.8 x 41 x 12.6

4-16-81
13,904/0//60/174. Status: POOH.
W. O. Brake bands & blocks, change out same.
Mud: (.452) 8.8 x 40 x 11.6

4-17-81
13,977/71//61/174. Status: Drilling.
Mud: (.460) 8.8 x 41 x 12.2

4-18-81
14,107/130//62/174. Status: Pull for washout.
Mud: (.460) 8.8 x 42 x 12.6

4-19-81
14,107/0//63/174. Status: POOH.
Lost bottom collar, RWP, short DC, RWP
Shock sub, 5 pt R and bit in hole.
W. O. Fishing tools. Was over top & latch
onto fish, pulled fish free. POOH w/fish.
Mud: (.458) 8.8 x 43 x 12

4-20-81
14,162/55//64/174. Status: Drilling.
Trip out w/fish.
Mud: (.460) 8.8 x 43 x 12.2

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #18

19,000' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

4-21-81

14,315/153//65/174. Status: Drilling.

Mud: (.468) 9 x 40 x 12.6

4-22-81

14,429/114//66//174. Status: Trip for bit.

Mud: (.465) 8.9 x 42 x 11.8

4-23-81

14,430/1//67/174. Status: Drilling.

Tested choke, kill & mud lines, blind & pipe rams, stand pipe, kelly, upper and lower kelly cocks.

Dev. 1⁰ @ 14,440'.

Mud: (.463) 8.9 x 41 x 11.4

4-24-81

14,589/159//68/174. Status: Drilling.

Mud: (.468) 9 x 42 x 11.6

4-25-81

14,734/145//69/174. Status: Drilling.

Mud: (.465) 8.9 x 42 x 11.2

4-26-81

14,848/114//70/174. Status: Drilling.

Mud: (.468) 9 x 41 x 11.4

4-27-81

14,867/19//71/174. Status: Trip in.

Mud: (.463) 8.9 x 42 x 11

4-28-81

14,963/96//72/174. Status: Drilling.

Dev. 1/2⁰ @ 14,840'.

Mud: (.468) 9 x 41 x 11.8

4-29-81

14,985/22//73/174. Status: Trip in.

Mud: (.463) 8.9 x 41 x 10.6

4-30-81

15,066/81//74/174. Status: Drilling.

Mud: (.465) 8.9 x 44 x 11.4

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$2449 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'

5-1-81
15,071/5//75/174. Status: Ream to btm.
Reaming 14,979' to 14,999'.
Mud: (.468) 9 x 42 x 10.6

5-2-81
15,106/35//76/174. Status: Drilling.
Ream 14,979' to 15,071'.
Mud: (.484) 9.3 x 41 x 10.2

5-3-81
15,235/129//77/174. Status: Drilling.
Mud: (.491) 9.4 x 41 x 10

5-4-81
15,354/119//78/174. Status: Drilling.
Mud: (.484) 9.3 x 42 x 10.4

5-5-81
15,405/41//79/174. Status: Manguflux DCs.
Mud: (.489) 9.4 x 43 x 10.2

5-6-81
15,457/52//80/174. Status: Drilling.
Mud: (.489) 9.4 x 45 x 10

5-7-81
15,525/68//81/174. Status: Drilling.
Mud: (.494) 9.5 x 42 x 10.2

5-8-81
15,574/49//82/174. Status: POOH.
Mud: (.494) 9.4 x 41 x 10.6

5-9-81
15,611/37//33/174. Status: Drilling.
Dev. 1-3/4" @ 15,574'.
Mud: (.494) 9.5 x 45 x 10

5-10-81
15,683/72//84/174. Status: Drilling.
Mud: (.491) 9.4 x 41 x 9.8

5-11-81
15,698/15//85/174. Status: Making up BA.
Circ bottoms up. POOH. Magnaflux DCs.
Mud: (.494) 9.5 x 42 x 9.2

5-12-81
15,698/0//86/174. Status: Pulling up to shoe.
Ream from 15,628' to 15,690'.
Mud: (.497) 9.5 x 44 x 9

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$ M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'

5-13-81
15,714/16//87/174. Status: Drilling.
Mud: (.494) 9.5 x 42 x 9.2

5-14-81
15,857/143//88/174. Status: Drilling.
Mud: (.491) 9.4 x 40 x 8.9

5-15-81
16,000/143//89/174. Status: Circ & cond mud.
Mud: (.491) 9.4 x 43 x 8.7

5-16-81
16,000/0//90/174. Status: Logging.
Ran DIL-FDC-CNL logs.
Dev. 2-3/4" @ 16,000'
Mud: (.491) 9.4 x 44 x 8.5

5-17-81
16,000/0//91/174. Status: Pulling D.A.
Logging. BHC/Sonic and PML logs.
Mud: (.489) 9.4 x 45 x 8.4

5-18-81
16,000/0//92/174. Status: Logging
BHC-Sonic and Dipmeter.

5-19-81
16,000/0//93/174. Status: TIH.
Logging, reran Dipmeter.

5-20-81
16,000/0//94/174. Status: POOH to run csg.
Wash 130'. Circ.
Mud: (.491) 9.4 x 46 x 8.2

5-21-81
16,000/0//95/174. Status: Running 9-5/8" csg.
Mud: (.491) 9.4 x 46 x 8.2

5-22-81
16,000/0//96/174. Status: Circ 9-5/8" csg.
Ran 9-5/8" csg to 16,000'.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #15

19,000' Cretaceous Test

\$3878 M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

5-23-81

16,000/0//97/174. Status: Nipple up.

Ran 426 jts 9-5/8" csg to 16,000'. Cmt

First stage w/5176 sx Lite,.5% LWL, HR12

Second stage w/600 sx Class "H", 35% SSA-1,
.75% CFR-2, .8% Halad 2.

5-24-81

16,000/0//98/174. Status: GIH w/DCs.

Nipple up BOPS. Test w/yellow jacket.

Tested Hydriil 2500#, mud lines, stand pipe,

kelly, upper & lower kelly cocks & rig kill

lines to 5000#. Tested Blind & pipe rams, kill

line valves & choke manifold to 10,000#.

Pick up DCs.

5-25-81

16,000/0//99/174. Status: Drilling cmt.

GIH w/DCS. Tag cmt top @ 15,279'.

5-26-81

16,000/0//100/174. Status: Drilling cmt.

Mud: (.437) 8.4 x 42 x 8.8

5-27-81

16,000/0//101/174. Status: Running Gyro survey

Mud: (.437) 8.4 x 42 x 8.8

5-28-81

16,019/19//102/174. Status: Drilling.

Ran Gyrosurvey,

Mud: (.437) 8.4 x 42 x 8.8

5-29-81

16,322/303//103/174. Status: Drilling.

Mud: (.436) 8.4 x 43 x 5.6

5-30-81

16,457/135//104/174. Status: Drilling.

Mud: (.437) 8.4 x 42 x 6.8

5-31-81

16,463/6//105/174. Status: Circ for core #1.

Mud: (.437) 8.4 x 42 x 6.8

6-1-81

16,466/3//106/174. Status: POOH w/core #1.

Core #1, 16,463' to 16,466'.

Mud: (.437) 8.4 x 42 x 6.8

6-2-81

16,510//44//107/174. Status: Drilling.

Lay down core #1, Cut & rec. 3'.

Mud: (.437) 8.4 x 47 x 6.4

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$4049 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'
9-5/8" csg @ 16,000'

6-3-81
16,668/158//108/174. Status: Circ bottoms up.
Swivel packing washed out. Pulled 8 stands
to shoe. Replaced washpipe & packing. Ran back
8 stands. Lost 50 bbls. Check for flow, circ
bottoms up at 16,668'. Added 10 sx walnut
hulls.
Mud: (.4368) 8.4 x 44 x 6

6-4-81
16,674/6//109/174. Status: Pick up core bbl.
Fin. circ bottoms up. Build mud wt from 8.5 to
8.7 for coring.
Mud: (.4524) 8.7 x 45 x 4.4

6-5-81
16,705/31//110/174. Status: POOH.
Finished picking up Core bbl tools.
Found bridge at 16,484', washed down 6 singles
to TD. Core #2, 16,705' to 16,731'.
Mud: (.452) 8.7 x 46 x 4.8

6-6-81
16,735/30//111/174. Status: POOH for log.
Finished POOH w/core #2, recovered 29'.
Ream out core hole 16,674' to 16,704'.
Mud: (.452) 18.7 x 45 x 6.4

6-7-81
16,735/0//112/174. Status: Running bond log.
Run #1 DIL-GR, Run #2 FDC-CNL GR-CAL,
Run #3, BHC-Sonic GR-CAL, tools failed, had
to rerun. Run #4, Bond log.

6-8-81
16,735/0//113/174. Status: RIH.
Running bond log. Tools failed on 1st, 2nd,
and 3rd run. Tools failed on 3rd run also. Trying
to log going down, gave up logging.
Mud: (.452) 18.7 x 45 x 6.4

6-9-81
16,735/0//114/174. Status: POOH for DST.
Circ & cond hole for DST. POOH, change test tools
couldnt get tools here soon enough. RIH.
Circ & cond hole for DST.
Mud: (.458) 8.8 x 47 x 6

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$ 4183 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'
9-5/8" csg @ 16,000'

6-10-81
16,735/0//115/174. Status: Hook up DST manifold.
POOH for DST #1. PU DST tools, DCS & DP.
Pumped 2 drums of Ammonium Hypozide down DP.
GIH, Ammonia started gassing out of DP. Pumped
14 bbls water down DP. GIH. Hook up head
& manifold.
Mud: (.454) 8.8 x 47 x 6.0

6-11-81
16,735/0//116/174. Status: POOH.
Finish hooking up test manifold. Pumped Nitrogen
cushion down DP. Started getting bubbles in
annulus @ 3100 psi, bled off to 2900# & pressure
held. Set packers, open tool for 9 min & bleed off
@ 2175 psi, packers failed, picked up & shut in
tool. Pressure rose to 2400 psi. RD Nitrogen &
set up & blow nitrogen down. Reverse out cushion.
DST tools stuck on bottom jar on tools, back
off saftey jt. Circ.
Mud: (.463) 8.9 x 47 x 4.8

6-12-81
16,835/0//117/174. Status: POOH.
POOH. Lay down test tools, Left lower half
of safety jnt, X0, 2 - 6-1/2" DCS, X0,
23' Perfs & bottom recorder. Top of fish @
16,646'. Pick up overshot, 3 - 6-1/2" DCS,
DAT Jars, 3 - 6-1/2" DC, 15 HWDP. Layed down
24 jts 20# X-95. GIH, Cut drilling line. GIH.
Work over fish. Mix pill & POOH
Mud: (.463) 8.9 x 47 x 4.8

6-13-81
16,735/0//118/174. Status: GIH w/washpipe.
POOH, overshot had 6" x 12" piece of packer inside.
Lay down overshot. Pick up washpipe & GIH.
Mud: (.463) 8.9 x 47 x 4.8

6-14-81
16,735/0//119/174. Status: GIH w/overshot.
GIH w/washpipe, wash over fish. Circ Pull up in
casing. Circ rubber out of hole. POOH w/washpipe.
Set back washpipe & pick up overshot. GIH w/8-1/8"
overshot w/5-3/4" grapples, bumper sub & jars.
Mud: (.458) 8.8 x 47 x 6.8

6-15-81
16,735/0//120//174. Status: GIH w/overshot.
GIH. Circ Attempt to get over fish. POOH.
Change overshot to 6-1/2" grapples & GIH.
Mud: (.458) 8.8 x 47 x 6.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24 6-16-81
(WC) Brinkerhoff #15 16,735/0//120//174. Status: GIH w/overshot.
19,000' Cretaceous Test GIH w/overshot. Workover fish. Change out overshot.
\$4332 M/\$ Mud: (.468) 9.0 x 44 x 7.2
WI - 40%
GL 5774', KB 5796' 6-17-81
30" csg @ 52' 16,735/0//121/174. Status: Fishing.
20" csg @ 527' Finish in hole w/overshot. Circ & work over &
13-3/8" csg @ 5502' latch onto fish & jar on same. RU Homco wireline
9-5/8" csg @ 16,000' tools. Made dummy run, tagged fill @ 16,715'.
Started in hole w/free point & tool failed now
repairing free point tool.
Mud: (.468) 9.0 x 45 x 7.8

6-18-81
16,735/0//122/154. Status: Repair stripper matic.
Repair Homco freepoint tools. Ran freepoint, pipe
free to perfs. Run string shot & back off. LD
wireline tools. POOH. LD fish. recovered bottom
half of Howco safety jt, X-0 sub & 1 DC.
Mud: (.468) 9.7 x 45 x 7.8

6-19-81
16,735/0//123/174. Status: POOH.
Repair strip - o - matic. PU fishing tools. GIH.
Mix & pump pill. Finish in hole. Wash over fish
w/8-1/8" WP w/Homco Cerus type spear. POOH.
Mud: (.468) 9 x 45 x 7.8

6-20-81
16,735/0//124/174. Status: TIH.
Finish OOH. Recover and Lay down fish & fishing
tools & load out same. Magnaflux DCs & HWDP, found
two cracked pins. TIH.
Mud: (.486) 9 x 44 x 7.8

6-21-81
16,923/188//125/174. Status: Drilling.
Finish in hole. LD 16 jts X-95 20#. Wash 40'
to bottom.
Mud: (.468) 9 x 43 x 9.2

6-22-81
17,140/217//126//174. Status: Drilling.
Mud: (.473) 9.1 x 45 x 8.6

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #15

19,000' Cretaceous Test

\$ 4465 M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

6-23-81

17,335/195//127/174. Status: Drilling.

Mud: (.478) 9.2 x 44 x 10

6-24-81

17,381/46//128//174. Status: Test BOPs.

Mud: (.473) 9.1 x 43 x 10.2

6-25-81

17,432/51//129//174. Status; Drilling.

Test Hydril to 2500#, MudLines, Kill lines, standpipe, kelly, upper & lower kelly cocks, floor valve & inside BOP to 5000#. Blind rams, choke lines & manifold, kill line to 10,000#. All okay. Change out strip-o-matic assembly.

Change out 6 pt reamer & GIH.

Mud; (.478) 9.2 x 43 x 10.6

6-26-81

17,556/124//130/174. Status: POOH for core #3.

Mud: (.478) 9.2 x 45 x 10

6-27-81

17,586/30//131/174. Status: Circ after core #3.

Core #3 interval 17,556' to 17,586'.

Mud: (.473) 9.1 x 44 x 10.2

6-28-81

17,590/4//132/174. Status: Drilling.

Running core #3. Cut 30', recovered 28'.

Mud: (.473) 9.1 x 44 x 10.2

6-29-81

17,737/147//133/174. Status: Drilling.

Mud: (.478) 9.2 x 43 x 9.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24 6-30-81
(WC) Brinkerhoff #15 17,893/156//134/174. Status: Drilling.
19,000' Cretaceous Test Mud: (.484) 9.3 x 43 x 9.8
\$4558 M/\$
WI - 40% 7-1-81
GL 5774', KB 5796' 17,949/56//135/174. Status: Circ out short trip.
30" csg @ 52' Mud: (.484) 9.3 x 43 x 9.4
20" csg @ 527'
13-3/8" csg @ 5502' 7-2-81
9-5/8" csg @ 16,000' 17,956/7//136/174. Status: Drilling.
POOH. Rig service, check BOP. Cut drill line.
Change out DC. TIH.
Mud: (.489) 9.4 x 48 x 11

7-3-81
18,028/72//137/174. Status: Drilling.
Down working on mud logger unit.
Mud: (.504) (.7 x 44 x 12.6

7-4-81
18,150/122//138/174. Status: Drilling.
Mud: (.504) 9.7 x 40 x 12.4

7-5-81
18,228/78//139/174. Status: Drilling.
Mud: (.494) 9.9 x 42 x 11.8

7-6-81
18,260/32//140/174. Status: POOH.
Circ.
Mud: (.520) 10 x 42 x 11.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #15

19,000' Cretaceous Test

\$ M/\$

WI - 40%

GL, 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

7-7-81

18,351/91//141/174. Status: Drilling.

Mud: (.525) 10.1 x 44 x 11.8

7-8-81

18,552/201//142/174. Status: Drilling.

Mud: (.536) 10.3 x 44 x 11

7-9-81

18,760/208//143/174. Status: Circ for logs.

Mud: (.541) 10.4 x 43 x 10

7-10-81

18,760/0//144/174. Status: Logging.

Ran DIL & CNL-FDC.

Dev. 6" @ 18,720'.

Mud: (.541) 10.4 x 43 x 10.8

7-11-81

18,760/0//145/174. Status: Test BOP's.

Run Sonic log.

Mud: (.541) 10.4 x 43 x 10.8

7-12-81

18,827/67//146/175. Status: Drilling.

Mud: (.551) 10.6 x 49 x 9.6

7-13-81

18,927/145//147/174. Status: Circ for trip.

Mud: (.536) 10.3 x 43 x 11.2

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24

(WC) Brinkerhoff #15

19,000' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

7-14-81

18,972/0//148/174. Status: GIH.

Circ. Short trip. Circ. POOH.

Magniflux kelly, lift sub & DC, all ok.

Lay down Monei DC. Pick up 6-1/2" DC & GIH.

Mud: (.541) 10.4 x 44 x 12.2

7-15-81

19,069/97//149/174. Status: Drilling.

TIH w/bit #39. Wash & ream 45' to btm.

Mud: (.551) 10.6 x 48 x 11.8

7-16-81

19,089/20//150/174. Status: Trip out to core.

Mud: (.562) 10.8 x 44 x 11.6

7-17-81

19,097/8//150/174. Status: Circ for trip.

Fin 00H. PU 30' Core bbl. Cut drill line.

TIH. Ream 60' to btm & cir. Core 19,087' to

19097', bbl jammed. Circ for trip.

Mud: (.562) 10.8 x 60 x 14.2

7-18-81

19,107/10//152/174. Status: Drilling.

LD core, recovered 6.5'.

Mud: (.562) 10.8 x 53 x 11.9

7-19-81

19,272/165//153/174. Status: Drilling.

Mud: (.567) 10.9 x 44 x 11.4

7-20-81

19,286/14//154/174. Status; POOH to log.

Circ for logs.

Dev. 7" @ 19,286'.

Mud: (.562) 10.8 x 43 x 12.4

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$ 5013 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'
9-5/8" csg @ 16,000'

7-21-81
19,286/0//155/174. Status: TIH.
W. O. Schlumberger. RU Schlumberger & run,
BHC Sonic & unable to run Compensated Sonic.
Ran DIL & tool failed both times hitting bridge
& tight spot @ 19,120' & fill @ 19,220'.
Rig down Schlumberger. TIH for clean out
& cond.
Mud: (.562) 10.8 x 54 x 11.6

7-22-81
19,286/0//156/174. Status; Build mud volume.
Ream 19,112 to 19,226'. Lost circ @ 19,226'.
Lost approx 550 bbls mud.
Mud: (.562) 10.8 x 45 x 8.6

7-23-81
19,286/0//156/174. Status: Circ.
Mud: (.556) 10.7 x 45 x 8.0

7-24-81
19,286/0//157/174. Status: Logging.
Ran DIL, had temp failure on CNL. Rerunning CNL.
Mud: (.551) 10.6 x 45 x 9.5

7-25-81
19,286/0//158/174. Status: Logging.
Sonic after 4 runs. Trying to run Dipmeter.
Mud: (.551) 10.6 x 45 x 9.4

7-26-81
19,286/0//159/174. Status: GIH.
Attempt to run Dipmeter, tool would not work properly.
Pick up BHA. Cut drilling line. TIH, Break circ,
15,000 - 17,000 - 18,000 - 18,500'. Wash last 160'
to btm. Found bridge @ 18,600' and last 60' of
hole.
Mud: (.551) 10.6 x 45 x 9.4

7-26-81
19,286/0//160/174. Status: Logging.
Attempting to run Dipmeter, tool not working
properly.
Mud: (.556) 10.7 x 42 x 10.5

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24
(WC) Brinkerhoff #15
19,000' Cretaceous Test
\$5338 M/\$
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'
9-5/8" csg @ 16,000'

7-28-81
19,286/0//161/174. Status: Pull on stuck logging tool.
Ran Dipmeter, shot sidewall samples. Schlumberger ran 2000' of wireline on ground, unspool mess, respool and pull up slack, stuck tool, pulling 2000# over with no movement of tool. Tool "probably" stuck on bottom.
Mud: (.556) 10.7 x 42 x 10.5

7-29-81
19,286/0//162/174. Status: GIH.
Shoot sidewall samples. Hole got sticky. RD Schlumberger. W. O. Yellow jacket. Test BOP, Hydri to 2500 PSI. Rams & K & C Lines, & floor valves to 10000 PSI, Upper kelly valve & mud lines to 5000 psi. Installed wear bushing.
Mud: (.551) 10.6 x 45 x 9.4

7-30-81
19,286/0//163/174. Status: POOH.
TIH, broke circ @ 12,000' & 14,000'. Circ out @ 17,500'. Circ & cond mud. POOH.
Mud: (.561) 10.8 x 43 x 10.2

7-31-81
19,286/0//164/174. Status: Circ.
Fin OOH. RU Schlumberger, Ran SWS Gun, RD Schlumberger. Trip BHA in hole. Fin in hole. Broke circ @ 12,000', 16000' & circ out @ 17,500'. Wash to btom 3' fill.
Mud: (.561) 10.8 x 42

8-1-81
19,286/0//165/174. Status: TIH.
Circ @ 19,286, while W.O. Orders.
TOOH.
Mud: (.556) 10.7 x 42

8-2-81
PBDT 16,900/0//166/174. Status: Plugging back.
Set plugs as follows: #1, 90 sx Class "G", 40% SSA2, 1.2 HR20 @ 18,975' to 19,125'. #2, 50 sx Class "G", 40% SSA2, 1% HR-20, #3, 50 sx Class "G", 40% SSA2, 1% HR-20, 17,200' to 17,300'. #4, 90 sx Class "G", 40% SSA-2, 1% HR-12, 16,900' to 17,050'.
Mud: (.556) 10.7 x 43 x 11

8-3-81
PBDT 15,950/0//167/174. Status: TIH.
Plug #5, 16,675' to 16,775', w/65 sx Class "G", 40 SSA-2, 1% HR-12. Pulled to 16,050' & circ. #6, 15,950' to 16,050', w/40 sx Class "G", 40% SSA -2, 1% HR-12.
Mud: (.556) 10.7 x 43

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 8-4-81

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$5499 M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

15,907/0//168/174. Status: PU Whipstock.
TOOH. LD 41 jts pipe. RU Homco wireline,
set Baker DWI Pkr @ 15,907'. Orient for
Whipstock.

Mud: (.566) 10.7 x 43 x 11

8-5-81

15,907/0//169/174. Status: Tripping.
Make up BHA. Trip in w/whipstock. Check BOPs.
TIH, sting into packer @ 15,906'. Milling.
TOOH w/mill, starting cut from 15,895' to 15,897'.
Mud: (.548) 10.5 x 46 x 11.5

8-6-81

15,907/0//170/174. Status: TOOH w/mill.
TOOH w/starting mill. Change BHA. TIH w/Diamond
speed mill. Mill on csg. Bottom of mill
15,902', top of window @ 15,895'. Working to free
stuck pipe. Circ in an attempt to overcome
excessive circ press.
Mud: (.551) 10.5 x 45 x 11.5

8-7-81

15,907/0//171/174. Status: Pulling mill.
TOOH w/Diamond mill. Change BHA. Trip in w/
window mill. Mill on csg. Bottom of mill @ 15,905'
Mill quit cutting, unable to get any torque.
TOOH w/window mill.
Mud: (.543) 10.4 x 44 x 9.8

8-8-81

15,907/0//172/174. Status: Trip out w/speed mill.
TOOH w/mill. Change out BHA. Trip in w/speed mill.
Milled one foot 15,905' to 15,906', lost torque
& quit cutting. Mixed & pumped down pill.
Mud: (.551) 10.6 x 45 x 10

8-9-81

15,907/0//173/174. Status: Cutting drilling line.
TOOH w/window mill. Change bottom hole assembly.
TIH w/tapered mill. Milling. Circ.
Lay down 51 jts 20# X95 DP. Trip out w/tapered
Mill. Mill wear indicated having been riding on Lodg
of Whipstick, unable to kick off.
Mud: (.540) 10.5 x 45 x 10

8-10-81

15,874/0//173/174. Status: Trip in open ended.
W. O. Tools. Unload & make up tools. Run &
set 9-5/8" DWI packer on wireline @ 15,874' by
Homco. Attempted run survey, unable to get survey
Trip in w/DP & DC to circ off top of pkr.
Mud: (.556) 10.7 x 50 x 10

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 8-11-81

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

15,874/0//174/174. Status: Trip out w/open ended DP. Trip in w/open ended DP. Repair pumps. Circ on top of packer at 15,874'. Run survey unable to get in packer. Circ on top of packer. Run survey unable to get in packer. Circ. Trip out to set another packer.
Mud: (.540) 10.4 x 49 x 10

8-12-81

15,829/0//175/174. Status: Milling window. W. O. Tools. RU Homco, set Baker DWI packer @ 15,840' Orientation surveys. Make up whipstock & orient for N 70° E & WIH. Set whipstock & milling w/starting mill.
Mud: (.540) 10.4 x 49 x 10

8-13-81

15,832/6//177/174. Status: Milling window. Milling w/satrtting mill. Circ. POOH. Replace strippper rubber. TIH. Milling window.
Mud: (.540) 10.4

8-14-81

15,834/6//178/174. Status: POOH. Drilling w/spud mill. Circ. POOH. Clean out flowline to trip tank. POOH. TIH. Mill out Window. Curc & drop totco.
Mud: (.541) 10.4 x 40 x 12.6

8-15-81

15,834/9//179/174. Status: POOH. Left 8-3/8" tapered mill, string mill and Totco wireline tool in hool. Ran grapple in wireline and attempt to pick up Totco tool with no success. Ran overshot w/grapple and attempt to work over fish. POOH.
Mud: (.541) 10.4 x 45

8-16-81

15,834/0//179/174. Status: POOH. Finish out of hole - no recovery. Trip in hole w/5-3/4 overshot dressed w/3' ext and 1-5/16" grapple. Attempt to get by top of whipstock without success. POOH.
Mud: (.541) 10.4 x 45

8-17-81

15,834/0//180/174. Status: W. O. tools. POOH w/overshot. Inspect DP, DC and subs. Test BOP w/yellow jacket. W. O. tools. Top of whipstock was 10-1/2" inside guide of overshot.
Mud: (.541) 10.4 x 45

NEW MEXICO

ALBUQUERQUE BASIN

Shell West Mesa Federal 1-24A 8-18-81

(WC) Brinkerhoff #15

18,875' Cretaceous test

\$ 5869

WI - 40%

GL 5774', KB 5796'

30" csg at 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 16,000'

15,834/0//181/174 Status: Trip in hole.

Mud: (.541) 10.4 x 45

15,752/0//181/174. Status: POOH w/mill.

Mill on csg 15,752 - 15,756; not cutting properly.

POOH.

Mud: (.510) 9.8 x 54 x 9.8

8-20-81

15,752/0//183/174. Status: Clean out hole.

Change out mill & jars. Mill on casing.

Clean metal cutting out of hole - mill was hanging up.

Mud: (.515) 9.9 x 54 x 10.6

8-21-81

15760/0//184/174. Status: POOH w/mill.

Mud: (.499) 9.6 x 56 x 8

8-22-81

15,760/0//185/176. Status: Mix mud.

POOH w/mill. Work on mill. GIH w/mill.

Mud: (.510) 9.8 x 84 x 10.2

8-23-81

15,768/0//186/174. Status: Circ cuttings out.

Milling. Cmt fell in on tools packed off & stuck

pipe, worked free. Circ. Attempt to pull into

casing, not able to get tool inside the casing stub.

Circ & clean out flowline. Mill up. Circ &

clean out flowline. Mill up. Work pipe free.

Milled 15,740' to 15,769', 29'.

Mud: (.5096) 9.8 x 97 x 9.8

8-24-81

15,768/0//187/174. Status: TIH.

Circ & clean out flowline. Mill up. Circ hole clea

to 15,770'. POOH. Dress mill & change out jars.

GIH w/mill.

Mud: (.510) 9.8 x 94 x 9.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 8-25-81

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,793'

15,781/13//187/174. Status: Mill out window.
Trip in hole to 10,000', started loosing mud.
Break circ & thin mud. Stage in & cond mud.
Clean out window. Mill window @ 15,781'.
(Window now 15,740' - 15,781', 41'.)
Mud: (.520) 10 x 86 x 6.8

8-26-81

15,793/0//189/174. Status: Attempt to burn off knives.
Milling to 15,790'. Circ. Attempt to pull into
csg. Attempt to mill knives off section mill.
(Window 15,733' to 15,793')
Mud: (.504) 9.7 x 88 x 10

8-27-81

15,793/0//190/174. Status: TIH.
Burn knives off mill. Circ. Chain out of hole
& LD milling tools. PU DP & rabbit same.
Mud: (.504) 9.7 x 38 x 10

8-28-81

15,793/0//191/174. Status: Circ & cond mud.
TIH, broke circ @ 10,000' & 15,000'.
Mud: (.489) 9.4 x 46 x 5.2

8-29-81

15,793/0//192/174.. Status: BOP test.
Circ & cond mud. RU Howco & Cmt w/200 sx Class "H",
20% SSA-2, 1% CFR-2, 1/2 of 1% HR-12. Plug in place
@ 7:00 PM. TOC @ 15,238'. Pull 10 stands
& circ. POOH, lost 27' of mule shoe. Jet cellar
& testing BOP. (Top of SEc. 15,733', Top of fish
15,751', bottom of sec. 15,793', Bottom of fish
15,778'.)
Mud: (.468) 9 x 40 x 7.8

8-30-81

15,500 cmt/0//193/174. Status: Circ & drill cmt.
Test w/yellow jacket. PU BHA & TIH. LD 15 jts
PD. Circ @ 15,403'. Drill cmt to 15,500'.
(Tag cmt @ 15,403', Firm cmt @ 15,437')
Mud: (.468) 9 x 40 x 8.4

8-31-81

15,735 Cmt/0//194/174. Status: RU I tool.
Drill cmt to 15,650'. Circ & W. O. C. Drill
cmt to 15,735', circ out. POOH. RU Navi drill
& Monel. Run BHA in hole. RU I tool
Mud: (.468) 9 x 44 x 7.6

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 9-1-81

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,793'

15,740/5//195. Status: Drilling.

Drift to BHA w/eye tool. Run wt. pipe in hole. string up new drill line. FIH. RU Scientific drilling contractors. Orient w/Navit drill. Drill w/navit drill.

Mud: (.473) 9.1 x 46 x 8

9-2-81

15,828/88//196. Status: W/O parts for Scientific eye.

Drill w/navit drill to 15,828'. Got stuck trying to make a connection. Hangs up @ 15,815', free below but catches when pulling up. Full circ. Scientific eye broke down.

Mud: (.458) 8.9 x 40 x 7.6

9-3-81

15,838/0//197. Status: Trip out.

Circ & work pipe whole waiting on "eye" truck to replace broken shaft. Pull wireline out of hole leaving eye tool in bent sub. Work pipe loose. Chain out of hole.

Mud: (.484) 9.3 x 44 x 7.0

9-4-81

15,828/0//198. Status: GIH w/mill.

POOH, change out jars, LD Navitdrill & Monel DC. Strap mill & string reamer to BHDC. Magniflux DCs, lift subs, x-o subs, HWDP & full length of kelly. Found 1 cracked pin in HWDP. GIH w/mill break circ @ 10,000'.

Mud: (.484) 9.3 x 44 x 7

9-5-81

15,724/0//199. Status: Trip.

Circ @ 15,695'. Clean hole to 15,812'. W. O. cementing equip. to replug section 15,733' to 15,793' POOH.

Mud: (.473) 9.1 x 44 x 8.8

9-6-81

15,733/0//200. Status: W. O. C.

TIH. Circ & hook up Halliburton. Cmt @ 15,793' w/200 sx Class "H", 20% SSA-1, 20% SSA-2, 1% CFR-2, .5% HR-12. RD Halliburton. Circ.

Mud: (.468) 9 x 46 x 10.2

9-7-81

15,733/0//201. Status: Circ.

W.O.C.

Mud: (.468) 9 x 46 x 10.2

9-8-81

15,735/0//202. Status: Trip.

Circ. Drld cmt to 15,735'.

Mud: (.489) 9.4 x 43 x 8.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$6351 M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,793'

9-9-81

15,738/3//203. Status: Drilling w/dyna drill.

PU BHA. RU wireline, RIH & orient dyna drill.

Mud: (.489) 9.4 x 45 x 8.4

9-10-81

15,758/20//203. Status: Drilling w/dyna drill.

Mud: (.478) 9.2 x 42 x 7.1

9-11-81 .

15,783/25//205. Status: Trip for BHA.

Drilled w/dyna drill. Trip out w/wireline.

Mud: (.473) 9.1 x 42 x 7.3

9-12-81

15,783/0//206. Status: Trip for Bit & BHA.

Fin OOH & LD dyna drill. PU Sec. hole opener &

3 pt. roller reamer & strap same. Trip DC in hole.

FIH. Ream 14,733' to 15,783'. RD Homco.

Dev. 15,733' 5° N31E

Mud: (.473) 9.1 x 45 x 7

9-13-81

15,783/0//207. Status: Trip for BHA.

Make up BHA, strap watermelon mill. TIH. Attempt to drill. Unable to rotate w/wt on bit.

Circ & mix pill. Trip out for BHA change.

Mud: (.489) 9.4 x 44 x 7.8

9-14-81

15,926/143//208. Status: Drilling.

FIH.

Dev. 14,733' 5° N31E

Mud: (.478) 9.2 x 44 x 7.5

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 9-15-81
(WC) Brinkerhoff #15 16,074/147//209. Status: Trip for bit.
18,875' Cretaceous Test Dev. 14,932' 9-1/4" N27E
\$ M/\$ Mud: (.478) 9.2 x 44 x 7.5
WI - 40%
GL 5774', KB 5796'
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'
9-5/8" csg @ 15,733'

9-16-81
16,073/0//210. Status: GIH.
POOH, LD 24 jts + 18 jts "E" pipe. Pull wear
bushing. PU BHA & GIH w/bit #47 @ 16,073'.
Mud: (.478) 9.2

9-17-81
16,251/178//211. Status: Drilling.
Mud: (.489) 9.4 x 46 x 8.8

9-18-81
16,424/173//212. Status: Surveying.
Dev. 16,250' 12-3/4" N-21E
Mud: (.494) 9.5 x 43 x 9

9-19-81
16,550/126//213. Status: POOH.
Dev. 14" @ N22E @ 16,405'.
Mud: (.499) 9.5 x 42 x 9.4

9-20-81
16,680/130//214. Status: Drilling.
Mud: (.494) 9.5 x 44 x 7.8

9-21-81
16,896/216//215. Status: Drilling.
Dev. 14-1/2" N21E @ 16,535'.
Mud: (.494) 9.5 x 40 x 8.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A
(WC) Brinkerhoff #15
18,875' Cretaceous Test
\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

9-22-81

16,950/54//216. Status: PU core bbl.

Circ for loggers. POOH for core bbl.

Mud: (.510) 9.8 x 41 x 9.2

9-23-81

16,975/25//217. Status: TOOH w/core bbl.

PU core bbl. TIH, ream from 16,505' to

16,595', 70' tight hole. TIH. Wash to btm, no fill,

Core #5, 16,950' to 16,975', bbl jammed. Circ

btms up. TOOH w/core #5.

Mud: (.504) 9.7 x 40 x 7

9-24-81

17,003/28//218. Status: Trip out w/core bbl.

Trip out w/ core bbl. LD core, 25' cored, 25'

recovered. TIH w/core bbl, core #6, 16,975' to

17,003'.

Mud: (.507) 9.8 x 46 x 7

9-25-81

17,086/23//219. Status: Running survey.

TOOH w/core bbl, cored 28', rec. 28'.

Mud: (.509) 9.8 x 41 x 8.4

9-26-81

17,105/79//220. Status: TOOH for core bbl.

Mud: (.525) 10.1 x 43 x 9.6

9-27-81

17,112/7//221. Status: Circ. btms up.

TOOH to collars. Magnaflux BHA. PU 60' core bbl.

Trip in collars & replace Drlg jars. TIH.

Wash & ream 60' to btm, no fill. Coring bbl jamed

after 7'.

Mud: (.520) 10 x 44 x 10.4

9-28-81

17,119/7//222. Status: Coring.

Circ btms up. Pump pill TOOH. LD core,

Cored 7', rec 6-1/2'. Wash & ream 50' to btm.

Mud: (.530) 10.2 x 52 x 13

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 9-29-81

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

17,151/38//223. Status: Press test stack.

Core 38', recovered 38'.

Mud: 10.1 x 43

9-30-81

17,187/36//224. Status: Drilling.

Mud: (.525) 10.1 x 42 x 11.6

10-1-81

17,213/26//225. Status: Tripping in.

Circ & survey, broke wireline. TOOH, retrieved wireline, could not work survey instrument free. Finally broke wireline right on top of instrument. TOOH, survey bbl & neat shield were collapsed flat making the tool too wide to pass thru our BHA.

Mud: (.525) 10.1 x 42 x 11.6

10-2-81

17,297/84//226. Status: Drilling.

Mud: (.536) 10.3 x 42 x 9.8

10-3-81

17,398/101//227. Status: Drilling.

Mud: (.546) 10.5 x 42 x 10.6

10-4-81

17,422/24//228. Status: TIH w/new BHA.

Mud: (.546) 10.5 x 43 x 11.5

10-5-81

17,493/71//229. Status: Drilling.

Mud: (.541) 10.4 x 49 x 10.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 10-6-81

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

17,582/89//230. Status: Working stuck pipe. Started to btm w/survey instrument while working pipe up & down, pipe stuck. Retrieved survey instrument and jarred on pipe, no luck, no movement.

Mud: (.551) 10.6 x 42 x 11.4

10-7-81

17,582/0//231. Status: SLM 00H.

Work stuck pipe. RU Homco Wireline Freepoint pipe. pipe free to top of jars, partially free to top of monel, made back off @ 16,918'. RD Homco. Pull into csg.

Mud: (.551) 10.6 x 42 x 11.4

10-8-81

17,582/0//232. Status: POOH w/fish.

TIH to top of fish. Circ on top of fish, screw into fish & jar fish free.

Mud: (.551) 10.6 x 55 x 10.8

10-9-81

17,582/0//233. Status: TIH.

TOOH w/fish. Fin. 00H & LD fishing tools. Magnaflux BHA, LD Monel, had cracked pin.

LD 6-1/2" DCs & Stabilizers. PU BHA. TIH.

Mud: (.551) 10.6 x 55 x 10.8

10-10-81

17,582/0//233. Status: Logging w/Schlumberger.

Wash 120' to btm, no fill. Circ & cond mud.

POOH. Logging.

Mud: (.551) 10.6 x 52 x 10.8

10-11-81

17,582/0//234. Status: Logging w/Schlumberger.

Logging w/Schlumberger.

Mud: (.551) 10.6 x 55 x 11.8

10-12-81

17,582/0//235. Status: Strap in hole.

Wireline logging. RD Schlumberger. Run BHC Sonic.

Mud: (.551) 10.6 x 55 x 11.8

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 10-13-81
(WC) Brinkerhoff #15 17,662/80//236. Status: Drilling.
18,875' Cretaceous Test Strap in hole. Repair power tongs. Wash 165'
\$ M/\$ to btm, no fill. Circ.
WI - 40% Dev. 17,524' 23⁰ N24E
GL 5774', KB 5796' Mud: (.551) 10.6 x 48 x 9.7
30" csg @ 52'
20" csg @ 527'
13-3/8" csg @ 5502'
9-5/8" csg @ 15,733'

10-14-81
17,720/58//237. Status: POOH for bit.
Dev. 17,678' 22⁰ N24E
Mud: (.551) 10.6 x 48 x 9.7

10-15-81
17,720/0//238. Status: TIH.
POOH. Test BOP's, rams, chokeline, choke manifold,
remote kill line, lower kelly cock, floor valve
& inside BOP. Test mud lines standpipe, kelley
valve upper kelly cock & rig kill line to 5000#.
Hydril to 2500#. Change out upper kelly cock.
Replace strip-o-matic.
Mud: (.556) 10.7 x 48 x 9.4

10-16-81
17,820/100//239. Status: Drilling.
Mud: (.551) 10.6 x 46 x 9.6

10-17-81
17,945/125//240. Status: Drilling.
Mud: (.546) 10.5 x 44 x 8.8

10-18-81
17,991/46//241. Status: Trip for bit.
Mud: (.546) 10.5 x 43 x 8.4

10-19-81
18,025/34//242. Status: Drilling.
Mud: (.546) 10.5 x 55 x 9.4

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 10-20-81
(WC) Brinkerhoff #15 18,087/62//243. Status: Drilling.
18,875' Cretaceous Test Mud: (.551) 10.6 x 43 x 5.8
\$7111 M/\$
WI - 40%
GL 5774', KB 5796' 10-21-81
30" csg @ 52' 18,176/89//245. Status: Drilling.
20" csg @ 527' Mud: (.562) 10.8 x 43 x 6.8
13-3/8" csg @ 5502' 10-22-81
9-5/8" csg @ 15,733' 18,186/20//246. Status: Reline brakes.
Mud: (.562) 10.8 x 43 x 8.6

10-23-81
18,218/22//247. Status: Drilling.
Mud: (.562) 10.8 x 43 x 8.6

10-24-81
18,326/108//248. Status: Drilling.
Mud: (.556) 10.7 x 44 x 7.4

10-25-81
18,485/159//249. Status; Drilling.
Dev. 18,326'. 27° N25E
Mud: (.562) 10.8 x 45 x 6.9

10-26-81
18,580/95//250. Status: Trip.
Dev 18,539', 27° N26E
Mud: (.562) 10.8 x 46 x 7.6

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 10-27-81
(WC) Brinkerhoff #15 18,617/37//251. Status: Drilling.
18,875' Cretaceous Test Mud: (.562) 10.8 x 50 x 9
\$ M/\$
WI - 40%
GL 5774', KB 5796' 10-28-81
30" csg @ 52' 18,743/126//252. Status: Drilling.
20" csg @ 527' Mud: (.572) 11 x 46 x 9
13-3/8" csg @ 5502' 10-29-81
9-5/8" csg @ 15,733' 18,825/82//253. Status: Short trip.
Mud: (.582) 11.2 x 43 x 9.4

10-30-81
18,825/0//254. Status: Short trip.
Lost returns, mix & pump pill. Lost 340
bbls. Circ & cond. mud.
Mud: (.572) 11 x 44 x 7.4

10-31-81
18,825/0//255. Status: Rig repair.
Mud: (.572) 11 x 43

11-1-81
18,854/29//256. Status: Drilling.
Mud: (.572) 11 x 44 x 8

11-2-81
18,933/79//257. Status: Drilling.
Mud: (.577) 11 x 43 x 7.5

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 11-3-81

(WC) Brinkerhoff #15 18,975/42//158. Status: Trip out

18,875' Cretaceous Test Mud: (.577) 11 x 41 x 9.8

\$ M/\$

WI - 40%

11-4-81

GL 5774', KB 5796' 19021/46//259. Status: Drilling.

30" csg @ 52' Mud: (.580) 11.1 x 45 x 10

20" csg @ 527'

11-5-81

13-3/8" csg @ 5502' 19,136/115//260. Status: Drilling.

Mud: (.572) 11 x 41 x 12

9-5/8" csg @ 15,733'

11-6-81

19,157/21//261. Status: Tripping.

Mud: (.572) 11 x 40 x 11.6

11-7-81

19,242/85//262. Status: Drilling.

Mud: (.572) 11 x 42 x 11.2

11-8-81

19,290/48//262. Status: Tripping for bit.

Mud: (.572) 11 x 42 x 11.2

11-9-81

19,323/33//263. Status: Drilling.

Mud: (.572) 11 x 42 x 11.2

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A 11-10-81

(WC) Brinkerhoff #15

19,350/27//264. Status: Logging.

18,875' Cretaceous Test

Mud: (.580) 11.1 x 45 x 11.1

\$ M/\$

WI - 40%

11-11-81

GL 5774', KB 5796'

19,350/0//265. Status: Logging.

30" csg @ 52'

Ran DIL, FDC/CNL, Dipmeter. Attempting 3rd sonic run.

20" csg @ 527'

Mud: (.580) 11.1 x 45 x 11.1

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

11-12-81

19,350/0//266. Status: Circ. & conditioning.

Mud: (.580) 11.1 x 44 x 11

11-13-81

19,375/0//267. Status: Shooting sidewall samples. SLM depth 19,375'. Second dipmeter failed. On first sidewall sample run, left 2 sidewall sample bullets and a centralizer clamp in hole.

Mud: (.577) 11.1 x 49 x 10.8

11-14-81

19,375/0//268. Status: Circ. & condition mud. Attempted to run Dialog casing Caliper - recorder failed. Work tight hole after getting stuck at 19,375'. Gradually freed up - acted like iron - not borehole problems.

Mud: (.577) 11.1 x 49 x 10.8

11-15-81

19,375/0//269. Status: Cutting drilling line. Ran Dialog casing Caliper.

Mud: (.577) 11.2 x 56 x 11.6

11-16-81

19,375/0//270. Status: Laying down DP.

Mud: (.582) 11.2 x 56 x 7.2

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

5" csg @ 19,360'

11-17-81

19,375/0//272. Status: Tripping in.

Trip in slowly w/liner.

Mud: (.582) 11.2 x 56 x 7.2

11-18-81

19,375/0//273. Status: Trip out.

Trip in hole and hang 5" liner. Shoe at 19,360',

landing collar at 19,236', top of liner at

14,399. Cmt w/660 sx Class "H", 50/50 Poz,

4% gel, 17% silica flour, 1% Halad 2.2A,

3#/sx HCL, .6% HR-12. Bump plug at 2:45 AM,

11-18-81.

Mud: (.582) 11.2 x 62 x 9.8

11-19-81

19,375/0//274. Status: Trip out.

Lay dn liner setting tools & PU cmt. retainer.

Trip in to 11,500 and W.O. cmt to get to location.

Go in to 13,920 & circ. Set packer at 13,920',

unsting from packer & test csg to 2000# for 15 min.

Mixed cmt & resting - cmt lap with 300 sx Class "H",

40% SSA-1, HR-12, Halad 22A. Final shut in pressure

200 psi.

Mud: (.582) 11.2 x 62 x 9.8

11-20-81

19,375/0//275. Status: Trip out w/packer.

Mud: (.582) 11.2 x 62 x 9.8

11-21-81

19,375/0//276. Status: Trip out.

11-22-81

19,375/0//277. Status: Trip out w/mill.

Mill on packer & cmt. to 14,348'.

11-23-81

19,375/0//278. Status: TIH w/RTTS tool.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

5" csg @ 19,360'

11-24-81

19,375/0//279. Status: Change out Hydril rubber.

Pressure test line to 3000# - OK.

Mud: (.587) 11.3 x 75 x 9.8

11-25-81

19,375/0//280. Status: Trip out.

Dress tie-back assembly - cmt. in all the 10' sections.

Mud: (.587) 11.3 x 75 x 9.8

11-26-81

19,375/0//281. Status: Lay down DP.

Mud: (.587) 11.3 x 75 x 9.8

11-27-81

19,375/0//282. Status: Running 7" csg.

Mud: (.587) 11.3 x 75 x 9.8

11-28-81

19,375/0//283. Status: Change rams in BOP.

Ran 380 jts of 7" csg. to 14,400. Cmt

w/850 sx Lite. Tail w/560 sx Class H, 40% SSA-1, .3% HR-12. Bumped plug at 10:05 PM, 11-27-81.

11-29-81

19,375/0//284. Status: PU 3-1/2" DP.

11-30-81

19,375/0//285. Status: PU 3-1/2" DP.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A

(WC) Brinkerhoff #15

18,875' Cretaceous Test

\$ M/\$

WI - 40%

GL 5774', KB 5796'

30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

7" csg @ 14,400'

5" csg @ 19,360'

12-1-81

19375/0//286. Status: Mill on cmt.

Tag top of cmt at 14,248; test csg to

3000# for 15 min - OK. Mill on cmt to 14,330.

Mud: (.556) 10.7 x 64

12-2-81

19,375/0//287. Status: Trip in w/polish mill.

12-3-81

19,375/0//288. Status: Mill on cmt.

Mud: 10.7 x 62

12-4-81

19,375/0//289. Status: Trip out w/polish mill.

Mill on cmt w/3-13/16 mill - fell thru cmt.
at 14,481.

12-5-81

19,375/0//290. Status: Clean out 5" csg.

12-6-81

19,375/0//291. Status: Lay down DP.

12-7-81

19,375/0//292. Status: Nipple down BOP.

Run CBL.

NEW MEXICO

ALBUQUERQUE BASIN

Shell-West Mesa Federal 1-24A

(WC) Brinkerhoff #15

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\$ M/\$

WI - 40%

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30" csg @ 52'

20" csg @ 527'

13-3/8" csg @ 5502'

9-5/8" csg @ 15,733'

7" csg @ 14,400'

5" csg @ 19,360'

12-8-81

19,375/0//293. Status: Clean mud tanks.

Nipple down BOP, install tubing head, clean mud tanks.

12-9-81

TD 19,375/0//294. Status: Prep. to release rig.

Cleaned mud tanks.

12-10-81

TD 19,375/0//295. Status: Release rig.

Released rig at 6 PM, 12-10-81

Cost \$9,433,921

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

First Report

- 2-22 - Rigging up rig and constructing test facilities.
2-26
- 2-27 Removed 20,000 psi tree. Installed 10 MS BOP and blind flange on
top of BOP. SI overnight.
- 2-28 Daily Cost: \$2,300
Cumulative Cost: \$35,433
- Continued installing and testing wellhead equipment.
- 3-1 Preparing to test BOP.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

First Report

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WEST MESA UNIT FEDERAL 1-24A

3-1 Daily Cost: \$101,635
 Cumulative Cost: \$137,068

Pressure tested BOP stack with 10,000 psi. Tested 7" casing in 1000 psi increments to 7000 psi. RU Schlumberger, ran CBL/CCL/GR log. Unable to run log with 5000 psi on casing due to leaking lubricator. Ran GO temperature survey from 13,000' to 19,204'. Temperature = 275°F - 390.5°F. POOH.

3-2 Preparing to run Dia-Log casing caliper log.

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3-2 Daily Cost: \$20,536
 Cumulative Cost: \$157,604

Waited on Schlumberger pack-off lubricator for 9 hours. Attempted to run CBL with 4000 psi on casing, tool malfunctioned due to high temperature. RIH with new CBL tool to wireline PBTD at 19,194'. Logged from 19,194' to 14,000' with 4000 psi on casing. RD Schlumberger.

3-3 Rigging up Dia-Log to run casing caliper log.

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3-3 Daily Cost: \$49,832
 Cumulative Cost: \$207,436

RU Dia-Log, ran 7", 64 finger casing caliper log from 14,417' to surface. Ran 5", 40 finger caliper log from 19,100' to 14,417'. RD Dia-Log.

3-4 Rigging up to run 2-7/8", P-105 Hydril "CS-CB" tubing.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-4 Daily Cost: \$28,311
 Cumulative Cost: \$235,747

Picked up and Hydro-tested, with 10,000 psi, 143 joints 2-7/8" Hydril tubing in hole. Ran 2-7/8" x 3-1/2" box for locator collar. Picked up and Hydro-tested 30 joints of 3-1/2" AB DSS tubing in hole.

3-5 Finish running and testing 3-1/2" tubing in hole.

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- 3-5 & Continued Hydro testing tubing in hole. 300 joints in hole, no
3-6 failures.
- 3-7 3-Day Cost: \$30,627
Cumulative Cost: \$266,374
- Finished picking up 3-1/2" AB JSS tubing and testing in hole. Tagged
packer bore receptacle at 14,390'. RU 60, ran 1-11/16" CCL/GR log.
- 3-8 Rigging up Halliburton to displace water in hole with mud.

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WEST MESA UNIT FEDERAL 1-24A

3-8 Daily Cost: \$29,580
 Cumulative Cost: \$295,954

Displaced fresh water in hole with 11.1 ppg CaCl brine. Made up
VANNGUN assembly on tubing and started running in hole.

3-9 GIH with VANNGUNS to perforate.

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PERSONAL

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3-9 Daily Cost: \$10,342
 Cumulative Cost: \$306,296

Finished running in hole with VANNGUN and TIW seal assembly.
Circulated to flush VANNGUN. Landed tubing in PBR with 10,000#.
Tested annulus to 2000 psi. Start nipping down BOP.

3-10 Preparing to displace fluid from tubing.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-10 Daily Cost: \$16,389
 Cumulative Cost: \$322,685

Installed Cameron tree. RU NOWSCO, ran 1" coiled tubing and displaced fluid from tubing to 6000'. RD NOWSCO. Tested tree to 15,000 psi.

3-11 Preparing to drop detonator bar and fire VANNGUNS.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-11 Daily Cost: \$61,914
 Cumulative Cost: \$384,599

Dropped detonator bar and fired VANNGUNS. Perforated 4 HPF 19,090'-19,132' with 23 gram charges phased 120°. Blow after perf'g too small to measure. No trace of H₂S. Shut in pressure built to 7 psi in 12 hours. RU NOWSCO, liquids at 5700' (bubble tube). Lifted fluid from 8200'. Found pin hole in coiled tubing. Raised coil tubing to 8000'. Shut in well.

3-12 Checking for inflow.

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WMU FEDERAL 1-24A

- 3-12 POOH w/coiled tubing due to hole and leaking injector head.
- 3-13 RU and ran replacement coiled tubing unit from Carlsbad, New Mexico. Ran coiled tubing to 11,900'. Displaced fluid from 3-1/2" tubing to 10,400' w/nitrogen. Monitored for inflow.

3-14 3 Day Cost: \$188,213
Cumulative Cost: \$572,812

POOH w/coiled tubing. RU Halliburton and broke formation down using 11.1 ppg CaCl brine w/5400 psi, pumped at 4 BPM. No decrease in pressure after break down. Dropped ball and released VANNGUNS. Acidized perforated interval 19,090-19,132' w/4000 gals MSA. Dropped 200 ball sealers during acid job. Maximum pressure = 7000 psi, ISIP = 5400 psi, 15 minute S.I. = 4600, 30 min S.I. = 4400, 1-1/2 hr S.I. = 4050 psi. Opened well to pit.

15 minutes	1500 psi	32/64" choke
30 minutes	300 psi	Incr. choke to 64/64"
1 hour	100 psi	
2 hours	25 psi	
3 hours	0 psi	Est. flowing 4 BFH, no H ₂ S
4 hours	0 psi	Est. flowing 4 BFH, no H ₂ S
8 hours	0 psi	Est. flowing 3.5 BFH, no H ₂ S

- 3-15 Continue to test well.

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WEST MESA UNIT FEDERAL 1-24A

3-15 Daily Cost: \$37,014
 Cumulative Cost: \$609,826

Continued flowing to pit for 2 hours. Producing 2.5 BPH fluid with zero psi. RU NOWSCO, RIH with coiled tubing to 11,900'. Stopping at intervals to displace fluid with nitrogen. Displaced 129 bbls of fluid into steel tank plus an estimated 80 bbls to pit. Flow turned to mist, producing approximately 2 BPH fluid. S.D. due to wind direction.

3-16 Resume operations when wind conditions change.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-16 Daily Cost: \$55,883
 Cumulative Cost: \$665,709

Jetted tubing with nitrogen for 9 hours recovering approximately 2 BPH in a fine mist. RD NOWSCO. RU Halliburton, pressured casing to 3000 psi. Pumped 93 bbls fresh water down tubing, hit fluid at 12,658'. Pumped additional 407 bbls at 1 BPM with 7500 psi. Ran G0 GR/CCL/Temperature Log across perforated interval 19,090'-19,132'. Log indicates top perf 4' low at 19,094'.

3-17 Preparing to plug Basal Dakota interval 19,094'-19,136'.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-17 Daily Cost: \$32,134
 Cumulative Cost: \$697,843

Halliburton pumped 160 bbls 11.1 ppg CaCl_2 brine down tubing at 1 BPM with 7000 psi. SIP = 5400 psi. Opened well to bleed pressure off, well back flowing. Flowed 112 bbls in 12 hours and started surging. Shut in well to observe pressure. One hour SIP = 425 psi, 1-1/2 hour = 600, 2 hours = 700, 2-1/2 hours = 760 and 3 hours = 820 psi. At 5:40 a.m. Sniffing Tester indicates 60% combustible.

3-18 Continue testing.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-18 Daily Cost: \$38,657
Cumulative Cost: \$736,500

Continued PBU. At 6:10 a.m. TP = 875, 7:10 a.m. = 925 psi. Opened well to pit with 960 psi TP on a 4/64" choke. Burned gas flare. Well unloading water. S.I. well at 8:05 a.m. and TP increased as follows:

<u>Time</u>	<u>TP</u>
8:05 a.m.	500 psi
8:45 a.m.	790 psi
9:15 a.m.	875 psi
9:35 a.m.	925 psi
10:00 a.m.	940 psi

Opened well to pit and pressure bled to zero immediately. Water sample tested 80,000 ppm chlorides. Flowed well to pit for 12 hours. Well surging at intervals with stable flow between surges. Gas flare remained burning with a small flame. No apparent decrease in fluid flow. S.I. well to observe PBU for 4 hours, with following results:

<u>Time</u>	<u>TP</u>
10:30 p.m.	90 psi
11:00 p.m.	180 psi
11:30 p.m.	235 psi
12:00 midnight	300 psi
12:30 a.m.	350 psi
1:00 a.m.	385 psi
1:30 a.m.	425 psi
2:00 a.m.	450 psi

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Water sample taken at 8:30 p.m. tested 36,000 ppm chlorides. Open well to pit and pressure bled to zero immediately but well still trying to unload by surging.

3-19 Continue to test.

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- 3-19 Flowed well to pit for 10 hrs, averaging approximately 50 BWPD and a small volume of gas. RU NOWSCO. Displaced fluid in tubing to 8000' w/nitrogen.
- 3-20 Ran coiled tubing to 12,000' and blew well down for 1 hr. Pulled C.T. to 11,000' and monitored for inflow for 1½ hrs, no fluid entry. Gas flow metered through a ¼" plate = 150 MCFD and decreasing. Injected nitrogen at 11,000', no fluid displaced. POOH w/C.T. for repairs. Left well flowing to pit at 30± MCFD, no water.
- 3-21 3 Day Cost: \$48,369
Cumulative Cost: \$784,869
- Continued to flow to pit w/a small flame. RIH w/C.T. to 4500', and started injecting nitrogen.
- 3-22 Continue to check for fluid entry.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-22 Daily Cost: \$14,713
Cumulative Cost: \$799,582

Finished running C.T. to 12,000' while injecting nitrogen. Hit FL at 9500'. Fluid level rise 1500'+ in approximately 36 hours since last nitrogen injection. Injected N_2 at 12,000' for 2 hours 45 minutes. S.D. NOWSCO. After flowing for 30 minutes gas would burn. Flowing 50 MCFD. Bubble tube FL showed 100-150' fluid rise in 2 hours after N_2 injection S.D. Continued flowing well for total of 7 hours 15 minutes, rate decreased to 10-15 MCFD. Pulled C.T. to 11,950' and injected N_2 for 2 hours. Flare would burn after unloading N_2 for 30 minutes. Flowing 50 MCFD, no H_2S . Flowed 4 hours, injected N_2 2 hours with a very fine mist to pit. Flare will burn a 4' flame.

3-23 Continue to test.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-23 Daily Cost: \$17,027
 Cumulative Cost: \$816,209

Bubble tube shows FL at 110' with C.T. at 11,950'. POOH with C.T. Well flowing to pit with a 3-4' flame.

3-24 Preparing to run BHP survey.

CONFIDENTIAL

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-24 Daily Cost: \$42,041
 Cumulative Cost: \$858,250

Opened to pit 4 hours, flowing 12 MCFD through 1/4" plate. RU wireline and ran 1-1/2" sinker bars to 18,975'. POOH. RIH with Amerada BHP instrument to 18,950'. Unable to set. Reran and set at 18,820' (wireline measurement). Unable to set plug in "F" nipple.

3-25 Running plug with weight bars to set in "F" nipple.

CONFIDENTIAL

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-25 Daily Cost: \$10,575
 Cumulative Cost: \$868,825

RIH with "FSG" plug and set in "F" nipple. Plug leaked. Pulled plug. Reran plug with shear disc. Plug leaked. Reran plug with 2.25" packing. Plug leaked. RIH, found plug on top of BHP instrument. Reran plug with 2.31" packing, unable to latch into "F" nipple.

3-26 Attempting to obtain BHP survey.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

- 3-26 RIH with FSG plug and set in "F" nipple. Plug leaked at a steady rate for 2 hours and then pressure dropped to zero within 15 minutes. Filled tubing with 86 bbls 2% KCl water. Fluid slowly leaking away.
- 3-27 Re-filled tubing with 19-1/2 bbls and pumped away at 1/8 BPM with 1000 psi. RIH, recovered equalizer prong, plug and BHP instrument. Set BPV, removed tree and installed BOP.
- 3-28 3-Day Cost: \$29,860
Cumulative Cost: \$898,685
- Pulled BPV, no pressure. Tested rams in BOP. Worked tubing and pulled seals free of PBR. Started POOH with tubing.
- 3-29 Finish POOH and prepare to plug back.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-29 Daily Cost: \$12,159
 Cumulative Cost: \$910,844

Finished POOH with tubing after S.D. of 8 hours due to high wind. RU GO, ran 3.75" gauge ring to 19,090'. Ran Baker CIBP and set at 19,040'.

3-30 Preparing to cap CIBP with cement.

CONFIDENTIAL

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-30 Daily Cost: \$185,823
 Cumulative Cost: \$1,096,667

RIH with dump bailer and capped CIBP at 19,040' with cement.
RIH with Baker CIBP and set at 18,990'. Tested BP with 2000
psi. Made up VANNGUN assembly on tubing and started RIH.

3-31 RIH with VANNGUN assembly to perforate.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

3-31 Daily Cost: \$17,533
 Cumulative Cost: \$1,114,190

Finished RIH with VANNGUN assembly. RU Halliburton and circulated 150 bbls 11.1 ppg CaCl water to clean guns. Landed tubing in PBR. Removed BOP, installed x-mas tree and tested. RU NOWSCO coil tubing unit, RIH to 8000' and started displacing fluid from tubing with nitrogen.

4-1 Preparing to perforate.

CONFIDENTIAL

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-1 Daily Cost: \$18,450
 Cumulative Cost: \$1,132,640

Finished displacing fluid from 8000' with C.T. POOH. Dropped detonator bar to fire VANNGUNS. No indication of guns firing. Waited on wireline unit. RIH with 1-3/4" overshoot, tagged FL at 6130'. In 17-3/4 hours had 1870' of fluid rise. Spudded on VANNGUN firing head, still no indication of detonation of guns.

4-2 POOH to check if detonator bar is in overshoot.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

- 4-2 Finished pulling overshot. Retrieved detonator bar. RU Halliburton, established injection rate of 1 BPM with 7200 psi. ISIP = 7000 psi, 3 minutes = 5450 psi, 19 minutes = 3700 psi, 30 minutes = 2500 psi, 1-1/2 hours = 300 psi. Installed BPV, removed x-mas tree and installed BOP. Pulled tubing from PBR and started POOH.
- 4-3 POOH with tubing and VANNGUN assembly. Found charge cap missing at 18,623' and 2 missing at 18,627'. Gun swelled at 18,627'. Started making up VANNGUN assembly.
- 4-4 3-Day Cost: \$54,704
Cumulative Cost: \$1,187,344
- RIH with VANNGUN assembly, tagged top of PBR and circulated 150 bbls CaCl₂ to clean firing head. Installed BPV, removed BOP, installed x-mas tree and tested. Removed BPV and RU NOWSCO.
- 4-5 Preparing to run C.T. and displace fluid from tubing to 8000'.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-5 Daily Cost: \$115,271
Cumulative Cost: \$1,302,615

Ran C.T. and displaced fluid from tubing to 8000'. POOH with C.T. Dropped detonating bar and fired VANNGUNS loaded with 23 gram charges, phased 90°, 4 holes/ft in the interval 18,600'-18,746'. Ran C.T. to 8000' and displaced 4 bbls fluid from tubing. Ran C.T. to 12,000' and displaced 30 bbls fluid. Gas to surface in 1 hour. No H₂S. Well open to pit flowing 1'-2' flare.

4-6 Flow test well.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-6 Daily Cost: \$28,121
 Cumulative Cost: \$1,330,736

Injected nitrogen at 12,000' with C.T. for 1 hour. Had mist returns. No gas flow. POOH with C.T. RU Halliburton and established injection rate of 1 BPM with 4200 psi, 2 BPM with 5000 psi, 3 BPM with 6000 psi. Dropped ball and released VANNGUNS.

4-7 Preparing to stimulate with acid.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-7 Daily Cost: \$62,638
 Cumulative Cost: \$1,393,374

Acidized formation with 12,000 gallons 10% acetic acid.
Pumped treatment with varying rates and pressure as
follows:

1.5 BPM with 7810 psi.
2.1 BPM with 7980 psi.
2.9 BPM with 8100 psi.
3.9 BPM with 8270 psi.
4.4 BPM with 8600 psi.

Maximum and final pressure = 8600 psi, ISIP = 7600 psi,
5 minutes = 7520, 15 minutes = 7420, 30 minutes = 7350,
1 hour = 7260 and 2 hours = 7150 psi. Opened well to
pit and bled pressure to 0. RU NOWSCO, ran C.T. and
displaced fluid from tubing to 12,000'. S.D. nitrogen
injection. Gas to surface in 1-1/2 hours. Well produced
4' flare for 5 hours. Total fluid recovered = 160 bbls.

4-8 Flow test well.

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WEST MESA UNIT FEDERAL 1-24A

- 4-8 With C. T. at 12,000', displaced 16 bbls fluid from tubing with nitrogen. Gas to surface in 1½ hrs, 3'- 4' flare. Well dead in 2 hrs. Displaced 7 bbls from tubing with nitrogen. Gas to surface in 45 minutes. Well flowing with varying rates as follows:
- 11:00 a.m. - 2:00 p.m. 15 MCFD min. 20 MCFD max.
2:00 p.m. - 6:00 p.m. 30 MCFD min. 70 MCFD max.
6:00 p.m. - 5:00 a.m. 70 MCFD min. 195 MCFD max.
- Total fluid recovered = 183 bbls.
- 4-9 Tested 10 hrs. with rates varying from 70 MCFD to 150 MCFD. Displaced 14 bbls fluid from tubing with C. T. at 12,000'. Gas to surface in 45 minutes. Well flowed 43 MCFD rate for 4 hrs. Well trying to unload. Flow increased to an estimated 500 MCFD for 1½ hrs. POOH with C. T. Fluid inflow decreased gas rate to 45 - 60 MCFD, well continued to surge. H₂S check = 0 - 6 ppm.
- 4-10 Ran C. T. to 11,960' and displaced 17 bbls fluid from tubing. POOH with C. T. Ignited flare and burned overnight at an estimated rate of 70 - 190 MCFD. H₂S check = 0 - 5 ppm.
- 4-11 Four Day Cost: \$ 79,539
Cumulative Cost: \$1,472,913
- Flowed well at an average rate of 70 MCFD, with well surging and trying to unload. H₂S check = 0 - 5 ppm. Total fluid recovered = 224 bbls.
- 4-12 Flow test well.

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WEST MESA UNIT FEDERAL 1-24A

4/12 Daily Cost: \$18,382
 Cumulative Cost: \$1,491,295

RIH w/C.T. to 10,000'. FL at 8,000'. Injected nitrogen for 1/2 hr. Ran C.T. to 11,900', displaced approximately 25 bbls fluid. Total fluid recovered = 249 bbls. Gas flow decreased over night to approximately 47 MCFD rate. Well continues to surge.

4/13 Flow test well.

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WEST MESA UNIT FEDERAL 1-24A

4-13 Daily Cost: \$18,507
 Cumulative Cost: \$1,509,802

Well flowed in surges entire day. Filled tubing with 135
bbls. 11.1 ppg CaCl water, installed BPV, removed x-mas tree,
installed BOP and tested. Started POOH with tubing.

4-14 Finish pulling tubing and run CIBP.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-14 Daily Cost: \$19,478
 Cumulative Cost: \$1,529,280

Finished POOH with tubing. RU GO and ran gauge ring to 18,600'. RIH with Baker CIBP and set at 18,555'. Running dump bailer loaded with 5 sx cement to place on top of CIBP.

4-15 Finish placing cement plug and run 2nd CIBP.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-15 Daily Cost: \$73,384
 Cumulative Cost: \$1,602,664

Placed 5 sx cement plug on top of CIBP at 18,555'. RIH with CIBP and set at 18,490'. RIH with VANNGUN assembly on tubing. Circulated 200 bbls CaCl water to clean firing head and landed tubing in PBR. Ran BPV, removed BOP, installed x-mas tree and tested. RU NOWSCO, running C.T. to displace fluid from tubing.

4-16 Finish displacing fluid from tubing and perforate.

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WEST MESA UNIT FEDERAL 1-24A

- 4-16 RIH with C.T. to 11,000' and displaced fluid from tubing. POOH with C.T. RD NOWSCO. Dropped detonator bar to fire VANNGUNS. No indication that VANNGUNS fired. RU wireline unit. RIH with overshot, spudded on firing head. No response. POOH with overshot and detonator bar. RU Halliburton, pressured casing to 5000 psi and pressured tubing to 9500 psi. Pressure dropped to 4500 psi, pumped fluid at 2 BPM with 5400 psi.
- 4-17 RD Halliburton. Set BPV, removed x-mas tree, installed BOP and tested. Reversed out 164 bbls fluid. POOH with tubing and TIW seal assembly. Seals missing in top section of seal assembly.
- 4-18 3-Day Cost: \$75,257
Cumulative Cost: \$1,677,921
- Finished POOH, removed VANNGUNS. No guns fired. Confirmed fluid loss by pumping 1-1/2 BPM at 5500 psi, with pump in pressure decreasing to 3800 psi after pumping for 2 hours. RU wireline unit.
- 4-19 Trying to locate leak.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-19 Daily Cost: \$13,094
 Cumulative Cost: \$1,691,015

RIH with temperature logging tool. Gradient change at 18,550'-18,650'. Tagged CIBP at 18,673', 183' lower than original setting depth. RIH with dump bailer, dumped 30 gallons of sand on CIBP.

4-20 Continue to place 180' sand plug on CIBP.

CONFIDENTIAL

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-20 Daily Cost: \$9,503
 Cumulative Cost: \$1,700,518

Changed dump bailer from disc to plunger type. Plugged back to 18,580' with sand. Dumped 15' Class H cement plug 18,580'-18,565'. RIH with gauge ring and junk basket to 18,564'. RIH with Halliburton bridge plug, unable to set at 18,564'. Started POOH with plug, started dragging at 17,800' and stopped at 16,365'. Worked plug down to 16,370', attempted to POOH and pulled wireline out of rope socket.

4-21 Preparing to RIH with overshot on tubing.

CONFIDENTIAL

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-21 Daily Cost: \$11,106
 Cumulative Cost: \$1,711,624

RIH with Bowen overshot and jars on tubing. Tagged BP at 16,389' (pipe measurement). Latched onto fish and set down 18,000 lbs., no movement. Sheared pins in BP with 25,000 lbs. pull. Started POOH.

4-22 POOH with tubing and fishing tools.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

4-22 Daily Cost: \$7,275
 Cumulative Cost: \$1,718,899

Finished P00H. Recovered rope socket, collar locator, setting tool and adapter, no bridge plug. RIH with rotary shoe, tagged BP at 15,801' (588' up hole). RU rotary equipment and started circulating hole.

4-23 Attempt to recover BP.

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WEST MESA UNIT FEDERAL 1-24A

- 4-23 Cut over top slips and rubber of BP with rotary shoe. BP moved down hole, pushed to 18,571'. POOH with fishing tools. RIH with gauge ring and junk basket on wireline to 18,511'.
- 4-24 RIH with Halliburton BP, questionable depth control. POOH. Center packer rubber expanded 1/2 inch. Repaired plug and ran in hole, unable to set. POOH, rubber on plug expanded. Repaired plug, RIH and set at 18,447'. Ran in hole with bailer and dumped frac sand 18,447' to 18,357'. Dumped Class H cement from 18,357' to 18,342'. Ran gauge ring.
- 4-25 3-Day Cost: \$134,544
Cumulative Cost: \$1,853,443
- Ran Halliburton E-Z drill with BP, set at 18,295' and tested with 2000 psi. RIH with VANNGUN assembly. Circulated 150 bbls CaCl water down tubing to clean firing head and landed tubing in PBR. Pressured casing to 2000 psi. Installed BPV. Started removing BOP.
- 4-26 Install x-mas tree and displace fluid from tubing.

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WEST MESA UNIT FEDERAL 1-24A

4-26 Daiy Cost: \$144,538
 Cumulative Cost: \$1,997,981

Removed BOP, installed x-mas tree and tested. RU NOWSCO, ran C.T. to 11,000' and displaced fluid from tubing. Pulled C.T. Dropped detonating bar to fire VANNGUNS. No indication that guns fired. RIH with overshot on wireline, spudded on firing head. No detonation. Pulled overshot, retrieved detonating bar. Pumped 79 bbls CaCl water in tubing. Removed x-mas tree. Started installing BOP.

4-27 Preparing to pull VANNGUN assembly.

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WEST MESA UNIT FEDERAL 1-24A

4-27 Daily Cost: \$28,980
 Cumulative Cost: \$2,026,961

 Finished installing BOP and tested rams. POOH and retrieved
 VANNGUN assembly. No shots fired. S.D.

4-28 Waiting on inspection of more VANNGUNS.

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WEST MESA UNIT FEDERAL 1-24A

4-28

Daily Cost: \$19,303

Cumulative Cost: \$2,046,261

SD 24 hours waiting on inspection of VANNGUNS in Artesia, NM. Broke down firing head and guns. Firing head fired normal but primer cord had "low order" detonation through top perforating guns. No jet charges fired. Prep to run VANNGUNS with redesigned primer cord support system.

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WEST MESA UNIT FEDERAL 1-24A

4-29 Daily Cost: \$24,655
 Cumulative Cost: \$2,070,916

RIH with VANNGUN assembly, tagged PBR, circulated 20 bbls
CaCl water to clear firing head. Landed tubing and seal
assembly in PBR, tested annulus. Installed BPV, removed BOP,
installed x-mas tree and tested. RU NOWSCO. RIH with C.T.
to displace fluid from tubing.

4-30 Preparing to displace fluid to 7000'.

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WEST MESA UNIT FEDERAL 1-24A

- 4-30 RIH with c.t. to 7000' and displaced fluid from tubing. POOH with c.t. Dropped detonating bar to fire VANNGUNS. Perforated intervals 17,097'-17,134' and 17,146'-17,175' with 2 JSPF 23 gram charges. Monitored well for 2 hours, no appreciable amount of flow. RU NOWSCO. RIH with c.t. to 7000', no evidence of fluid inflow. S.D. N₂ injection. Bled N₂ off well for 4 hours 15 minutes. No gas. Injected N₂ for 1-1/2 hours. S.D. N₂ injection. Well flowing nitrogen with no trace of gas.
- 5-1 Continued alternating injecting N₂ and bleed off with no appreciable amount of gas flow. POOH with c.t. R.D NOWSCO. RU Halliburton. Loaded tubing with 3490 gallons 2% KCl, perfs took fluid at 2.6 BPM with 5300 psi. Established injection rate of 8.7 BPM with 8100 psi using KCl water. ISIP = 4500 psi, 5 min. = 3960, 10 min. = 3410, 30 min. = 2300 psi. Bled pressure off. Dropped ball and pumped VANNGUNS loose from assembly. Waiting on chemicals and acid.
- 5-2 3-Day Cost: \$146,642
Cumulative Cost: \$2,217,558
- Mixed and heated acid to 100°F. Pumped 7000 gallons MSA acid with 200 ball sealers as divertors at 9.5 BPM with 7200 psi. Pressure increased to 7600 psi when sealers hit perfs. Displaced with KCl water. Average rate = 9 BPM, average pressure = 7600 psi. ISIP = 6000 psi, 5 min. = 4250, 10 min. = 3950, 15 min. = 3720, 20 min. = 3580, 30 min. = 3470 psi. RD Halliburton. Opened well to pit with 3090 psi on tubing, bled to zero immediately. Flowed 90 bbls fluid in 2-1/2 hours and started surging. Gas will burn between surges. H₂S decreased from 1600 ppm to 400 ppm as of 6:00 a.m. S.I. well for PBU and change of wind direction. Recovered approximately 130 bbls of a 440 bbl load.
- 5-3 Preparing to run C.T.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

5-3 Daily Cost: \$26,211
Cumulative Cost: \$2,243,769

S.I. well for 3 hrs, pressure built to 310 psi. Bled well to pit, 50 ppm H₂S. RU NOWSCO, run C.T. to 10,000' and displaced fluid from tubing. S.D. N₂ injection. Flare ignited after 1 hr flowing approximately 50 MCFD, no H₂S. Continued alternating injecting N₂, at 11,000', and bleed off overnight. Well flowing 85 MCFD through meter to stack, zero to 5 ppm H₂S, no pressure. Estimated 240 bbls fluid recovered of a 440 bbl load.

5-4 Continue to test well.

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WEST MESA UNIT FEDERAL 1-24A

5-4 Daily Cost: \$9,308
 Cumulative Cost: \$2,253,077

Flowed 4 hours at 112 MCFD decreasing to 60 MCFD. With C.T. at 11,000', displaced estimated 7 bbls fluid. Light black liquid recovered with 1st head. Delivered samples to core lab. Bled well down. Gas to surface in 50 minutes. Flowed well with following rates:

12:00 noon to 2:00 p.m. @ 80 MCFD
2:00 p.m. to 4:00 p.m. @ 137 MCFD
4:00 p.m. to 6:00 p.m. @ 95 MCFD
6:00 p.m. to 8:00 p.m. @ 100 MCFD

Displaced estimated 1/2 bbl condensate and 8 bbls water from 11,000' with nitrogen. Bled well down, could not ignite flare. Measured flow at 140 MCFD. Flowed 4 hours. Displaced estimated 8 bbls liquid with 1/4 bbl condensate. Total liquid recovery to date = 256 bbls. Average H_2S = 10-20 ppm.

5-5 Continue to test well.

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WEST MESA UNIT FEDERAL 1-24A

5-5 Daily Cost: \$25,663
 Cumulative Cost: \$2,278,740

Flowed 3 hours at an estimated 130 MCFD. Displaced estimated 8 bbls fluid with 10% condensate with C.T. at 11,000'. Flowed 4 hours at 130 MCFD. Displaced estimated 5 bbls fluid with 5% condensate. Flowed 4 hours at 141 MCFD. Displaced 1 bbl fluid. Flowed 4 hours at 143 MCFD. Displaced 1 bbl fluid with 5% condensate.

Flowing to stack at 140 MCFD, 3 psi FTP, 3-12 ppm H₂S.
Estimated liquid recovery = 271 bbls.

5-6 Continue to flow test.

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WEST MESA UNIT FEDERAL 1-24A

5-6 Daily Cost: \$26,874
 Cumulative Cost: \$2,305,614

Flowed well 11 hours at 110 MCFD with rate decreasing to 86 MCFD last 4 hours. Injected nitrogen with C.T. at 11,000', recovered less than 1 bbl liquid in a fine mist. Flowed well again for 11 hours, first 4 hours at 117 MCFD, last 7 hours rate decreased to 83 MCFD.

Flowing to stack at 80 MCFD, 2 psi FTP, 6-15 ppm H₂S.
Estimated liquid recovery = 272 bbls.

5-7 Continue to flow test.

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WEST MESA UNIT FEDERAL 1-24A

- 5-7 Flowed well for 24 hours at 81 MCFD. POOH with C.T.
- 5-8 RIH to 17,000' with sinker bar. Ran dual 180-hour BHP recorders, hung up in setting tool in "F" nipple. POOH with running tools, fished BHP instruments. 24-hour flow rate = 61 MCFD, 3-10 ppm H₂S.
- 5-9 3-Day Cost: \$42,758
Cumulative Cost: \$2,348,372
- Ran BHP instruments with 180-hour clock to 15,982'. RIH with plug for "F" nipple. Plug in place at 9:40 a.m. 5-9-82. Filled tubing to 9000' with 2% KCl water. Shut in well for PBU. 4-hour flow rate before setting plug = 49 MCFD, 3-8 ppm H₂S.
- 5-10 Well shut in for 96-hour PBU survey.

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WEST MESA UNIT FEDERAL 1-24A

5-10 Daily Cost: \$11,055
 Cumulative Cost: \$2,359,427

S.I. for BHP survey.

5-11 Conducting BHP survey.

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WEST MESA UNIT FEDERAL 1-24A

5-11 Daily Cost: \$5,403
 Cumulative Cost: \$2,364,830

BHP instruments on bottom 68-1/2 hours of a 96-hour survey.

5-12 Conducting BHP survey.

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WEST MESA UNIT FEDERAL 1-24A

5-12 Daily Cost: \$7,602
 Cumulative Cost: \$2,372,432

 BHP instruments on bottom for 92-1/2 hours.

5-13 Preparing to pull BHP instruments.

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WEST MESA UNIT FEDERAL 1-24A

5-13 Daily Cost: \$27,499
 Cumulative Cost: \$2,399,931

RU wireline to pull plug from "F" nipple at 14,334'. Tubing pressure = 325 psi. Pulled prong and tubing pressure dropped to 200 psi. FL 1000' from surface. Attempted to pull "F" plug 9 times. FL holding at 2400' from surface. RU NOWSCO, ran C.T. to 11,000' and displaced fluid from tubing. POOH with C.T. RU wireline to pull blanking plug.

5-14 Attempt to pull plug from "F" nipple.

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WEST MESA UNIT FEDERAL 1-24A

- 5-14 Attempted 5 times to pull blanking plug. RD Kuykendall W.L. Service at 11:00 a.m. At 5:30 a.m., 5-15-82, well started flowing to pit at 75± MCFD and decreased to approximately 25-30 MCFD 1/2 hour later.
- 5-15 RU OWP. RIH and jarred blanking plug loose and recovered. Retrieved bombs. Questionable reading on one bomb, one clock stopped after 23 hours and third failed letting fluid enter recording chamber. RD OWP. RU NOWSCO, ran C.T. to 11,000' and displaced fluid from tubing. POOH with C.T. RU OWP and running temperature survey. Well flowing approximately 150 MCFD rate.
- 5-16 3-Day Cost: \$79,932
Cumulative Cost: \$2,479,863
- Ran temperature log across perf'd intervals 17,097'-17,134' and 17,146'-17,175'. RIH with C.T. to 11,000'. Injected N₂ and let well flow alternately. Gas rates vary from 170 MCFD to 73 MCFD, with small trace of H₂S.
- 5-17 Continue to test well.

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WEST MESA UNIT FEDERAL 1-24A

5/17 Daily Cost: \$20,896
Cumulative Cost: \$2,500,759

Flowed well for 3 hrs at an estimated rate of 30 MCFD. Displaced 1 bbl. fluid w/nitrogen. After N₂ bled off well flowed initially at 240 MCFD decreasing to 34 MCFD² in 1-1/4 hrs. Flowed well throughout day with rates varying - high of 101 MCFD, low of 48 MCFD. Displaced 1 bbl. fluid from 11,000' and had gas to surface in 1 hr. Flowed well overnight with following rates:

<u>Time</u>	<u>MCFD</u> <u>Gas</u>	<u>Time</u>	<u>MCFD</u> <u>Gas</u>
8:00 p.m.	155	1:00 a.m.	43
9:00 p.m.	68	2:00 a.m.	38
10:00 p.m.	24	3:00 a.m.	45
11:00 p.m.	24	4:00 a.m.	48
12:00 midnight	125	5:00 a.m.	43

5/18 Continue to flow test.

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WEST MESA UNIT FEDERAL 1-24A

5/18 Daily Cost: \$24,237
Cumulative Cost: \$2,524,996

Flowed well at 43 MCFD rate for 1 hr. Displaced estimated
1/2 bbl fluid w/N₂. Bled N₂ down and flowed at following
rates:

<u>Time</u>	<u>MCFD Gas</u>	<u>Time</u>	<u>MCFD Gas</u>
8:00 a.m.	175	12:00 midnight	34
9:00 a.m.	38	1:00 a.m.	48
10:00 a.m.	68	2:00 a.m.	45
11:00 a.m.	34	5:00 a.m.	45
12:00 noon	77		
1:00 p.m.	48	H ₂ S = 2-5 ppm	
2:00 p.m.	38		
3:00 p.m.	48		
4:00 p.m.	48		
5:00 p.m.	48		

5/19 Flow test well.

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WEST MESA UNIT FEDERAL 1-24A

5-19 Daily Cost: \$14,919
 Cumulative Cost: \$2,539,915

Flowed through meter for 10 hours at an average rate of 43 MCFD. Then flowed additional 9 hours at an average rate of 34 MCFD. H_2S = 2-3 ppm.

5-20 Flow testing well.

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WEST MESA UNIT FEDERAL 1-24A

5-20 Daily Cost: \$14,836
 Cumulative Cost: \$2,554,751

Flowed 5 hours at 33 MCFD with BT pressure = 550#. Unloaded 1 bbl liquids from 10,950' then POOH with 1" coiled tubing. RD NOWSCO. RU Kuykendall Wireline Services. Ran guage bar to 17,000' - no obstructions. Ran tandem Amerada bombs with 180-hour clocks and set at 16,003 (W.L.). Set "FSG" blanking plug in top profile nipple at 14,308' - flow declined to 10 MCF immediately but increased to 34 MCF in 7 hours. Plug not holding. RIH to pull plug.

5-21 Attempting to SWI downhole for 96-hour build-up.

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WEST MESA UNIT FEDERAL 1-24A

- 5-21 Pulled equalizer prong. Pulled 2.31" "FSG" plug, ran 2.25" plug and set in "F" nipple at 14,377'. Plug in place at 8:44 a.m. Shut well in at 12:05 p.m. for 96 hour BHPBU.
- 5-22 & 3-Day Cost: \$20,746
5-23 Cumulative Cost: \$2,575,497
- 5-24 Conducting BHP survey.

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WEST MESA UNIT FEDERAL 1-24A

5-24 Daily Cost: \$37,924
 Cumulative Cost: \$2,613,421

 Conducting BHP survey.

5-25 Finish survey.

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WEST MESA UNIT FEDERAL 1-24A

5-25 Daily Cost: \$106,423
 Cumulative Cost: \$2,719,844

POOH with blanking plug and bottom-hole pressure bombs. Detected pressure on wellhead when plug pulled. One BHP clock failed at 23 hours and the other at 58+ hours. Max recorded pressure 4013 psi. RIH with 12-hour clock to make gradient stops @ 2,500'; 5,000'; 10,000'; 11,000'; 12,000'; 13,000'; 14,000'; 15,000'; 16,000'; 16,800'. Max recorded pressure 3845 psi with FL @ 10,000'±. POOH with bombs. 820# in wellhead.

5-26 Evaluating BHP survey and preparing to frac.

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5-26

Flowing Hosta zone. Opened well to flow at 10:45 a.m. Bled tubing pressure from 1000 psi to zero psi. Flowed an average of 30 MCFGPD from 10:45 a.m. to 5/26/82 to 6:00 a.m. 5/27/82. Trace of H_2S .

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WEST MESA UNIT FEDERAL 1-24A

- 5-27 Daily Cost: \$15,860
 Cumulative Cost: \$2,750,276
- Flowed well at average rate of 26 MCFD. Began rigging up
 Halliburton for frac operations.
- 5-28 Rigging up Halliburton and flowing well.

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FEDERAL 1-24A

5-28 Daily Cost: \$16,697
Cumulative Cost: \$2,766,973

Finished R.U. Halliburton for "Mini Frac". Flushed and P.T. lines to 10,000 psi. Installed wellhead isolation tool. Well ave 22 MCFPD throughout day and night.

5-29 Daily Cost: \$23,699
Cumulative Cost: \$2,790,672

SI well at 6:00 a.m. started gelling fluid for "Mini Frac". Pumped "Mini Frac" as follows:

#	Fluid	Volume	Ave. Rate	Ave. PSI	ISIP
Stage 1	Slick water	60bbl	9	8300	5300
Stage 2	Slick water	60bbl	18.2	9500	5150
Stage 3	Gelled Fluid (No FLA)	119bbl	15.6	7360	5350
Stage 4	Gelled Fluid (5 gal/m FLA)	119bbl	10.0	7780	5250
Stage 5	Gelled Fluid (10 gal/m FLA)	119bbl	15.2	8560	5100
Stage 6	Gelled Fluid (10 gal/m FLA plus RA tracer)	238bbl	18.9	8700	5100

Overdisplaced fluid with 20bbl 2% KCl water 735 bbl load.

SI well to run logs at 3:45 p.m. R.U. GO international, run temperature and gamma ray logs over perfed interval 17097'-17134', 17149'-17175'. At 7:45 p.m. 3800 psi on tubing, at 4:30 a.m. 3200 psi on tubing. Left well SI.

5-30 Daily Cost: \$109,639
Cumulative Cost: \$2,900,311

Opened well to steel pit at 9:30 a.m., 3050 psi on tubing, and flowed 165 bbl. Switched to flare pit at 1:20 p.m., well surging, 10 ppm H₂S. Well Flared to pit until 6:00 a.m. 5/31/82. Recovered approximately 100 bbls, 265 total. Surging and heading enough to ignite a small flame. H₂S count 300 to 450 ppm during the afternoon. Early morning count 100 to 150 ppm.

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5-31 Daily Cost: \$11,407
 Cumulative Cost: \$2,911,718

Flowing well to pit. Recovered and estimated 10 bbls,
with a small gas flare.

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WEST MESA UNIT FEDERAL 1-24A

6-1 Daily Cost: \$10,052
 Cumulative Cost: \$2,921,770

Flowed well to pit for 11 hours. Recovered estimated 3 bbls fluid and small amount of gas in 2-3 minute surges. H_2S = 50-150 ppm. S.I. and installed isolation tool. Tested lines. Mixing and conditioning frac fluids.

6-2 Preparing to frac treat well.

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WEST MESA UNIT FEDERAL 1-24A

6-2 Daily Cost: \$9,261
Cumulative Cost: \$2,931,031

Held safety meeting. Frac treated Hosta-Upper Gibson interval with 138,000 gals (including pre-pad and pad) plus 58,900 lbs Bauxite (w/RA material) in concentration of 0 and increasing to 3 lbs/gal. Flushed w/112 bbls. Pumped treatment at an average rate of 20 BPM w/average pressure of 8900 psi. Attempted to pump additional frac proppant after flush and had 8 bbls in tubing when well sanded out and pressure increased to 14,500 psi. ISIP= 6100 psi. RU Go, ran sinker bar and tagged fill at 17,042'. Tubing at 17,060' and top perf at 17,097'. 6 hour S.I. = 4000 psi. RIH w/temperature logging tools, tagged fill at 16,912' (130' fill increase in 3 hour 45 minutes). POOH w/tools. RD Go.

6-3 Preparing for clean out.

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WEST MESA UNIT FEDERAL 1-24A

6-3 Daily Cost: \$339,668
 Cumulative Cost: \$3,270,699

SITP=2400 psi. Open well on 8/64" choke, flowed 2 hours w/1050 psi. Increased choke to 22/64". Very light blow of gas to surface after flowing 120 bbls. First 100 bbls was gelled fluid, then low viscosity dark fluid. Well produced 5 bbls Bauxite, major portion in first 200 bbls fluid.

Total liquids recovered = 670 bbls in 19 hours
 Bauxite recovered = 5 bbls in 19 hours
Tubing pressure = 40 psi
 Gas = 1' - 2' flare at 2 minute intervals
H₂S = initial 1100 ppm
 Average 10 ppm

6-4 Continue to clean up well.

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- 6-4 Flowed well to tank for 5 hours at an average rate of 12 BPH. RU NOWSCO, ran coiled tubing to 8000'. Displaced fluid with nitrogen with stops at 1000' intervals. H_2S = trace. Gas = trace.
- 6-5 Displaced fluid with nitrogen for 24 hours with tubing at 11,700'. Recovered 311 bbls frac fluid, trace of gas, trace of H_2S . Total fluid recovered = 1587 bbls.
- 6-6 3-Day Cost: \$58,697
Cumulative Cost: \$3,329,396
- Continued to displace fluid with nitrogen from 11,700'.
Turned flow to meter run and recorded rate of 40 MCFD decreasing to 14 MCFD.
- 10 hour average gas rate = 36 MCFD
Est. liquid recovery = 64 bbls
Total liquid to date = 1728 bbls
Load unrecovered = 1523 bbls
 H_2S = 20 ppm
- 6-7 Continue to flow test well.

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WEST MESA UNIT FEDERAL 1-24A

6-7 Daily Cost: \$23,649
 Cumulative Cost: \$3,353,045

Continued to displace fluid with nitrogen and flow well.
Recovered 45 bbls fluid with average 18-20 MCFD gas rate.
H₂S = 5-10 ppm. Total fluid recovered = 1773 bbls.

6-8 Continue to flow test.

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WEST MESA UNIT FEDERAL 1-24A

6-8

Daily Cost: \$22,227
Cumulative Cost: \$3,375,272

POOH with C.T. RD NOWSCO. Flowed well at an average rate of 18-20 MCFD for 7-1/2 hours. S.I. well for surface pressure build up and observed the following pressures:

<u>Time</u>	<u>S.I. Pressure</u>	<u>Time</u>	<u>S.I. Pressure</u>
2:00 p.m.	30	11:00 p.m.	410
3:00 p.m.	92	12:00 midn't	450
4:00 p.m.	128	1:00 a.m.	490
5:00 p.m.	180	2:00 a.m.	535
6:00 p.m.	220	3:00 a.m.	610
7:00 p.m.	260	4:00 a.m.	625
8:00 p.m.	310	5:00 a.m.	635
9:00 p.m.	340	6:00 a.m.	640
10:00 p.m.	375		

6-9

Continue pressure build up.

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6-9

Daily Cost: \$14,413

Cumulative Cost: \$3,389,685

Well shut-in for pressure build up with the following SITP readings:

<u>Time</u>	<u>S.I. Pressure</u>	<u>Time</u>	<u>S.I. Pressure</u>
7:00 a.m.	650	7:00 p.m.	900
8:00 a.m.	675	8:00 p.m.	920
9:00 a.m.	700	9:00 p.m.	940
10:00 a.m.	720	10:00 p.m.	960
11:00 a.m.	740	11:00 p.m.	980
12:00 noon	760	12:00 midn't	1000
1:00 p.m.	780	1:00 a.m.	1020
2:00 p.m.	800	2:00 a.m.	1035
3:00 p.m.	822	3:00 a.m.	1050
4:00 p.m.	841	4:00 a.m.	1070
5:00 p.m.	860	5:00 a.m.	1085
6:00 p.m.	880		

6-10

Preparing to run Gamma Ray log.

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WEST MESA UNIT FEDERAL 1-24A

6-10 Daily Cost: \$29,344
 Cumulative Cost: \$3,419,029

Ran Gamma Ray Log 16,500'-17,325'. Tagged bottom at 17,325'. GR log indicated high RA from 17,088' to 17,182' (perfs 17,097'-17,134' and 17,146'-17,175'). RD GO. Opened well to pit with 1255 psi SITP, bled to zero in 40 minutes. No fluid to surface. RIH with coiled tubing, FL at 6700'. Ran C.T. to 8500', injected N₂, ran to 11,900' displaced fluid from tubing. Recovered approximately 30 bbls. Waited 1 hour and well started flowing approximately 150 MCFD rate and no fluid flow. Rate decreased to estimated 100 MCFD after 1 hour. Started injecting N₂. Total estimated fluid recovery today = 60 bbls.

6-11 Continue to flow test well.

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6-11 Ran C.T. to 7500', displaced approximately 5 bbls fluid with nitrogen. Ran C.T. to 9000', displaced approximately 5 bbls fluid. Flare ignited 30 minutes after S.D. of N₂. Estimated flow rate of 200 MCFD, decreasing to 20-30 MCFD in 45 minutes. Ran C.T. to 10,000', displaced 2-3 bbls fluid. Estimated initial flow rate of 150 MCFD decreasing to 40-50 MCFD in 1 hour and 15 minutes. Ran C.T. to 11,800', displaced 3-4 bbls fluid. S.D. N₂. Flare ignited in 30 minutes with estimated 200 MCFD decreasing to 50-60 MCFD in 3 hours 45 minutes. Injected N₂ for 1 hour and recovered 3-4 bbls fluid. Well will flow 50-60 MCFD after rate stabilizes. Total fluid recovered after frac = 1861 bbls.

6-12 Injected N₂ for 1 hour and S.D. injection. Flare ignited in 20 minutes. Turned flow through meter and measured 240 MCFD, decreased rapidly. POOH with C.T. and S.I. well for PBU.

<u>Time</u>	<u>S.I. Pressure</u>	<u>Time</u>	<u>S.I. Pressure</u>
12:00 noon	120	10:00 p.m.	580
1:00 p.m.	170	11:00 p.m.	600
2:00 p.m.	230	12:00 midn't	620
3:00 p.m.	280	1:00 a.m.	640
4:00 p.m.	330	2:00 a.m.	655
5:00 p.m.	375	3:00 a.m.	670
6:00 p.m.	400	4:00 a.m.	680
7:00 p.m.	470	5:00 a.m.	700
8:00 p.m.	530	6:00 a.m.	730
9:00 p.m.	550		

6-13 3-Day Cost: \$53,993
Cumulative Cost: \$3,473,022

S.I. for PBU.

<u>Time</u>	<u>S.I. Pressure</u>	<u>Time</u>	<u>S.I. Pressure</u>
6:00 a.m.	730	8:00 p.m.	1020
8:00 a.m.	770	10:00 p.m.	1060
10:00 a.m.	815	12:00 midn't	1090
12:00 noon	865	2:00 a.m.	1130
2:00 p.m.	910	4:00 a.m.	1170
4:00 p.m.	950	5:00 a.m.	1190
6:00 p.m.	990		

PERSONAL

WEST MESA UNIT FEDERAL 1-24A

6-14

Daily Cost: \$5,403

Cumulative Cost: \$3,478,425

Opened well at 11:00 a.m. with 1290 psi on tubing. RIH with C.T., FL 7000'. Displaced 8 bbls fluid from tubing. Ran C.T. to 11,700', displaced 10 bbls fluid. Flare ignited 30 minutes after S.D. of N₂ injection. Displaced another 3-4 bbls fluid in 1/2 hour from 11,700'. Flare ignited in 45 minutes and initial rate of 750 MCFD decreased to 70 MCFD in 1 hour. Rate measured as follows:

Time	MCFD Gas
10:15 p.m.	60
10:30 p.m.	60
11:00 p.m.	150
11:30 p.m.	110
12:30 a.m.	78
1:00 a.m.	70

Injected N₂ for 1 hour and recovered approximately 1 bbl fluid. Flare ignited 45 minutes after S.D. of N₂. Resumed metering rate:

Time	MCFD Gas
3:00 a.m.	185
3:30 a.m.	60
4:00 a.m.	34
5:30 a.m.	42

Started injecting N₂ to displace fluid.

6-15

Continue to flow test well.

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WEST MESA UNIT FEDERAL 1-24A

6-15 Daily Cost: \$21,878
 Cumulative Cost: \$3,500,303

Injected N₂ for 1 hour 15 minutes and recovered 4 bbls fluid.
 Well flowed at following rates:

<u>Time</u>	<u>MCFD Gas</u>	<u>Time</u>	<u>MCFD Gas</u>
9:45 a.m.	165	8:00 p.m.	42
11:00 a.m.	130	10:00 p.m.	34
12:00 noon	65	11:00 p.m.	34
1:00 p.m.	74	12:00 midn't	42
2:00 p.m.	55	1:00 a.m.	34
3:00 p.m.	42	2:00 a.m.	34
4:00 p.m.	49	3:00 a.m.	34
5:00 p.m.	60	4:00 a.m.	34
6:00 p.m.	70	6:00 a.m.	38
7:00 p.m.	POOH w/C.T.		

6-16 Continue to flow test and await orders.

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WEST MESA UNIT FEDERAL 1-24A

6-16 Daily Cost: \$23,230
 Cumulative Cost: \$3,523,533

Continued to flow well until 10:00 p.m. at an average rate of 34 MCFD. RU Halliburton and killed well with 110 bbls water. Installed BPV, removed x-mas tree, installed BOP and tested.

6-17 POOH with tubing, preparing to abandon zone.

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WEST MESA UNIT FEDERAL 1-24A

6-17 Daily Cost: \$13,940
 Cumulative Cost: \$3,537,473

Circulated hole with 2% KCl water. Pulled tubing. RU GO and ran gauge ring to 17,090'. RIH with Halliburton "EZ" CIBP on wireline, casing collar locator not working. POOH. Reran plug and set at 17,065'.

6-18 Preparing to place sand and cement on plug.

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WEST MESA UNIT FEDERAL 1-24A

- 6-18 Dumped 15' of cement on top of CIBP, pressured casing for 30 minutes. Made up VANNGUN assembly on tubing and started RIH.
- 6-19 Finished running tubing to top of PBR. RU NOWSCO. Displaced 119 bbls 2% KCl fluid and lower tubing into PBR and landed in hanger. Removed BOP, installed x-mas tree and tested. Pressured tubing to 2100 psi with nitrogen and dropped detonator bar. Fired VANNGUNS and perforated 2 holes per foot 16,818' to 16,878'. No pressure change after perforating. Opened well to pit with 2150 psi tubing pressure. 1 hour 1725 psi, 2 hours 1200 psi, 3 hours 1000 psi, unloading nitrogen only.
- 6-20 3-Day Cost: \$79,468
Cumulative Cost: \$3,616,941
- Well started producing gas 5 hours 40 minutes after opening to pit. Flowing 170 MCFD, 75 psi FTP on 20/64" choke. After 45 minutes, flow had decreased to 92 MCFD, 35 psi FTP, 20/64" choke. Shut in well at 11:30 a.m. for PBU.
- 6-21 17-1/2 hours S.I. pressure = 300 psi. Waiting on PBU prognosis.

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WEST MESA UNIT FEDERAL 1-24A

6-21 Daily Cost: \$96,242
 Cumulative Cost: \$3,713,183

Well shut in for PBU. RU Delsco ran 1-1/2" tool 16,816' in tubing. Ran 3 Amerada clocks on wireline. FL at 11,000'. Set bombs at 16,800'. Set "FSG" blanking plug in "F" nipple. Bled tubing pressure to zero.

6-22 Conducting 72-hour BHP BU.

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WEST MESA UNIT FEDERAL 1-24A

6-22 Daily Cost: \$10,096
 Cumulative Cost: \$3,723,324

 Well S.I. for 72-hour BHP survey.

6-23 Continue SIP for PBU.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

6-23 Daily Cost: \$5,403
 Cumulative Cost: \$3,728,932

Well S.I. for 72-hour BHP survey.

6-24 Prepare to obtain downhole fluid sample, then pull BHP survey
 equipment.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

6-24 Daily Cost: \$120,853
 Cumulative Cost: \$3,849,585

RIH and recovered fluid samples from 9700' and 9675', FL between 9600' and 9800'. RIH and pulled equalizing prong. Had small blow at surface. RIH and pulled "FSG" blanking plug. Made run with overshot to retrieve BHP equipment, unable to latch onto bombs. FL at 6600' with 125 psi on tubing.

6-25 Running overshot to retrieve BHP equipment.

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PERSONAL

WEST MESA UNIT FEDERAL 1-24A

- 6-25 RIH with overshot and retrieved BHP instruments. Two of the 3 clocks operated for the entire 72 hours. RIH with sampler and recovered fluid from 16,700'. Opened well and flowed for 5 hours with rate varying 4-18 MCFD. RU NOWSCO, RIH with C.T., FL 8200'. Displaced 15 bbls fluid from 11,800'. Flare ignited 1 hour 45 minutes after S.D. of N₂. Rate approximately 10 MCFD. Had 8 bbl fluid inflow in 2 hours. Displace with N₂ and started pulling C.T.
- 6-26 POOH with C.T. Recovered fluid sample from 16,700'. RIH with C.T. to 11,800', displaced less than 1/2 bbl fluid. POOH with C.T.
- 6-27 3-Day Cost: \$102,514
Cumulative Cost: \$3,952,099
- RIH and recovered fluid sample from 16,700'. FL appeared to be at 9050'. RIH with C.T. to 11,825', displaced 1/2± bbls fluid with N₂. POOH with C.T. RD NOWSCO. Flaring well to pit at 10-20² MCFD rate.
- 6-28 Continue to flow test well.

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WEST MESA UNIT FEDERAL 1-24A

6-28 Daily Cost: \$23,958
 Cumulative Cost: \$3,976,057

Well flowed at rate of 10-20 MCFD throughout day. RIH with wireline and retrieved detonating bar. Returned well to flare pit at 10-20 MCFD rate.

6-29 Preparing to P&A well.

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WEST MESA UNIT FEDERAL 1-24A

6-29 Daily Cost: \$10,415
 Cumulative Cost: \$3,986,472

RU Halliburton, killed well with 88 bbls KCl water. Installed BPV, removed wellhead, installed BOPS and tested. Pumped and jarred on tubing 2 hours before pulling free of PBR. POOH with tubing and VANNGUN assembly. All seals on bottom of stinger missing. No misfire of VANNGUN charges. RIH with gauge ring on wireline to 16,800', tight spots at 14,450' and 14,878'. POOH.

6-30 Preparing to run and set CIBP.

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WEST MESA UNIT FEDERAL 1-24A

6-30 Daily Cost: \$37,558
 Cumulative Cost: \$4,024,030

RIH with "EZ" CIBP and set at 16,750'. Placed 15' of sand on top of CIBP. Placed 35' of cement 16,735' to 16,700', pressured casing with 2000 psi and held for 15 minutes. RIH with 3-1/2" tubing to 14,300' and spotted 100' cement plug above PBR. Pulled tubing to 11,300' and spotted 100' cement plug. Pulled tubing to 8300' and spotted 100' cement plug. Pulled tubing to 5300' and spotted 100' cement plug.

7-1 Placed 100' cement plug at 2300', 50' cement plug at surface and install abandonment marker.

FINAL REPORT.

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