

FILE NOTATIONS

Entered in NID File ..... ✓  
Location Map Pinned ..... ✓  
Card Indexed ..... ✓

Checked by Chief .....  
Approval Letter .....  
Disapproval Letter .....

*P.W.B.*  
*1-21-92*

COMPLETION DATA:

Date Well Completed ..... *9-2-92*

Location Inspected .....

OW..... WW..... TA.....

Bond released

GW..... OS..... PA.....

State or Fee Land .....

LOGS FILED

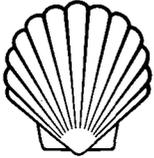
Driller's Log..... ✓

Electric Logs (No.) .....

E..... I..... Dual I Lat..... GR-N..... Micro.....

BHC Sonic GR..... Lat..... Mi-L..... Sonic.....

CBLog..... CCLog..... Others.....



# SHELL OIL COMPANY

1700 BROADWAY  
DENVER, COLORADO 80202

January 17, 1972

Subject: Shell-Tenneco-Chevron 1-21A4  
2940' FSL & 2462' FEL  
Section 21-T1S-R4W  
North Uinta Basin  
Duchesne County, Utah

State of Utah  
Department of Natural Resources  
Division of Oil & Gas Conservation  
1588 West North Temple  
Salt Lake City, Utah 84116

Attention Mr. Cleon B. Feight

Gentlemen:

The attached application for a drilling permit for Shell-Tenneco-Chevron Chatwin Unit 1-21A4, Section 21-T1S-R4W, Duchesne County, Utah, specifies a location which does not conform to the order issued in Cause No. 139-4. Location within 660 feet of the center, NE $\frac{1}{4}$  would cause extensive disruption of natural drainage features of the Lake Fork River. The proposed exception location requires the least surface excavation while maintaining relative conformity with the established spacing pattern.

Shell Oil Company respectfully requests approval of this exception location for topographic reasons under the provision of the above order.

Yours very truly,

G. G. Carnahan  
Division Engineering Manager  
Rocky Mountain Division

NWN:jrg

Attachments

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL & GAS

5. Lease Designation and Serial No.  
Patented

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name

9. Well No.

10. Field and Pool, or Wildcat

Altamont

11. Sec., T., R., M., or Blk. and Survey or Area

SW/4 NE/4 Section 21-  
T 1S-R 4W

12. County or Parrish 13. State

Duchesne Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

2. Name of Operator Shell Oil Company (Rocky Mtn Division Production)

Chevron Oil Company and Tenneco Oil Company

3. Address of Operator

1700 Broadway, Denver, Colorado 80202

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface

2940' FSL and 2462' FEL Sec 21

At proposed prod. zone

*SWSWNE*

14. Distance in miles and direction from nearest town or post office\*

Approx six miles south of Boneta

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

300'

16. No. of acres in lease

120

17. No. of acres assigned to this well

80

(640-acre unit)

18. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft.

No other wells on lease

19. Proposed depth

15,300'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

Proposed GL 6594

22. Approx. date work will start\*

2-10-72

23. PROPOSED CASING AND CEMENTING PROGRAM

| Size of Hole | Size of Casing | Weight per Foot | Setting Depth | Quantity of Cement |
|--------------|----------------|-----------------|---------------|--------------------|
|              |                |                 |               |                    |
|              |                |                 |               |                    |

As per attached drilling prognosis and certified survey plat.

*Verbal Approval 1/12/72 CB7*

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed *J.C. Howell* Title Division Operations Engineer Date January 18, 1972

(This space for Federal or State office use)

Permit No. 13-013-30101 Approval Date

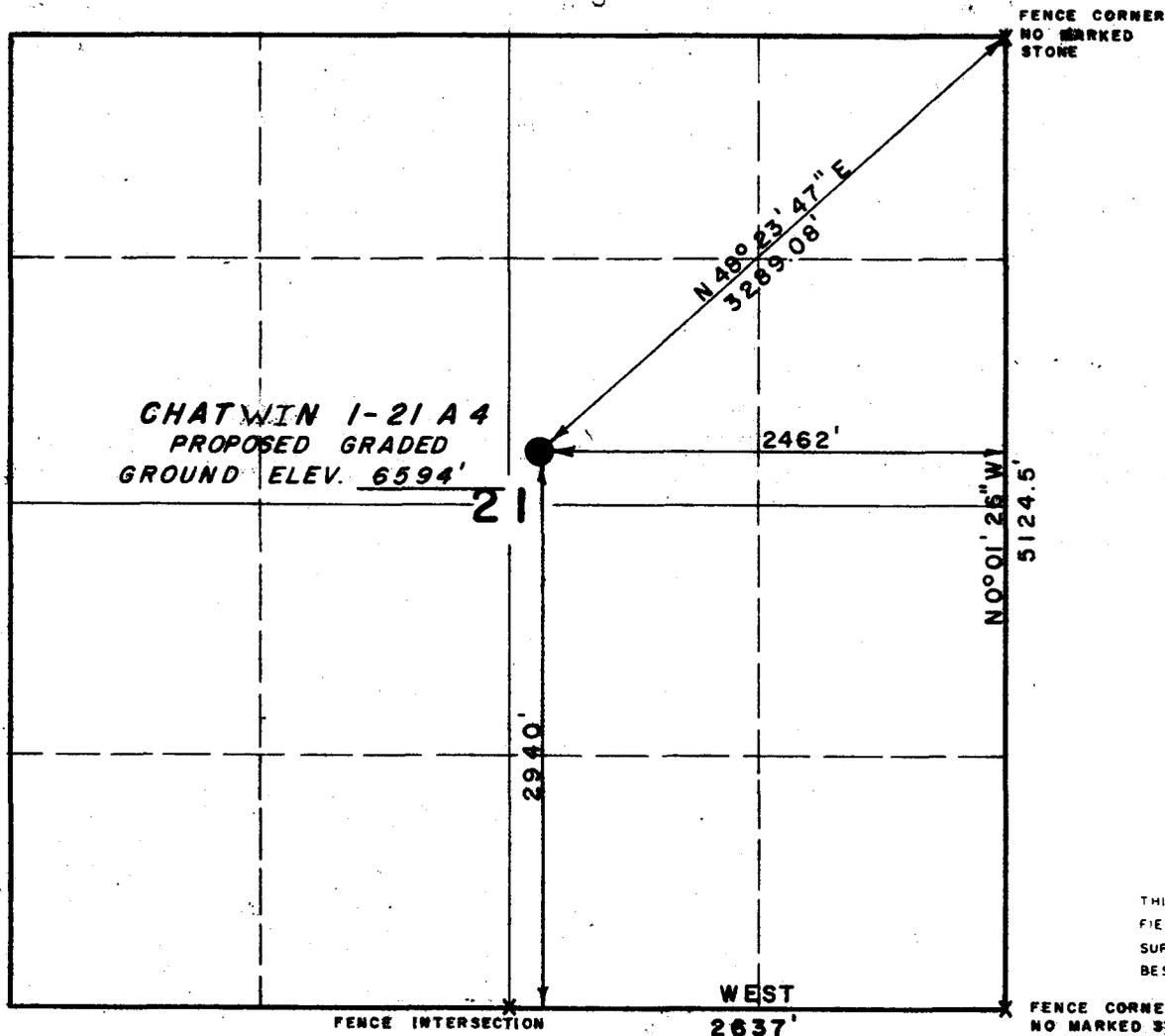
Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

TIS, R4W, U.S.M.

PROJECT

SHELL OIL COMPANY

Well location, CHATWIN 1-21A 4,  
located as shown in the SW 1/4  
NE 1/4, Section 21, TIS, R4W,  
U. S. B. & M., Duchesne County, Utah.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

*Jene Stewart*

REGISTERED LAND SURVEYOR  
REGISTRATION NO 3154  
STATE OF UTAH

X = Corners re-established.

UINTAH ENGINEERING & LAND SURVEYING  
P. O. BOX Q - 110 EAST - FIRST SOUTH  
VERNAL, UTAH - 84078

|                            |                           |
|----------------------------|---------------------------|
| SCALE<br>1" = 1000'        | DATE<br>10 Jan. 1972      |
| PARTY<br>G.S., D.P. & T.H. | REFERENCES<br>GLO Plat    |
| WEATHER<br>Cold            | FILE<br>Shell Oil Company |

January 21, 1972

Shell Oil Company  
1700 Broadway  
Denver, Colorado 80202

Re: Shell-Chevron-Tenneco-Chatwin  
#1-21A4  
Sec. 21, T. 1 S, R. 4 W,  
Duchesne County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the topographical exception under the order issued in Cause No. 139-3/139-4.

It is suggested that the following mud system monitoring equipment be installed (with derrick floor indicators) and used throughout the period of drilling after setting and cementing the surface casing:

- (1) Recording mud pit level indicator to determine mud pit volume gains and losses. This indicator shall include a visual or audio warning device.
- (2) Mud volume measuring device for accurately determining mud volumes required to fill the hole on trips.
- (3) Mud return indicator to determine that returns essentially equal the pump discharge rate.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL - Chief Petroleum Engineer  
HOME: 277-2890  
OFFICE: 328-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation with regard to the above will be greatly appreciated.

Shell Oil Company  
January 21, 1972  
Page Two

The API number assigned to this well is 43-013-30101.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT  
DIRECTOR

CBF:sd

4

878

August 21, 1972

MEMO FOR FILING

Re: Shell Oil Company  
Chatwin #1-21A4  
Sec. 21, T. 1 S, R. 4 W,  
Duchesne County, Utah

On August 16, 1972, the above referred to well site was visited.

The operator reported to the Division that the mud pit had broken sometime last Saturday night and was discovered Sunday afternoon, whereupon, all interested parties were notified. At the time of the visit, met with Mr. Bob Hunt, Shell's drilling foreman, who had diked off the narrow wash leading to the nearby Lake Fork River. The low topographical area had gathered mud and rig motor oil which were being burnt off. Apparently some mud did get into the River, however, exact pollution damage, if any, is unknown at this time. Overall work being performed to correct the mishap was considered satisfactory.

It should be noted that the Brinkerhoff Drilling Company's rig #43 was moving off the location and tank battery facilities were under construction.

PAUL W. BURCHELL  
CHIEF PETROLEUM ENGINEER

PWB:ck

cc: U.S. Geological Survey

STATE OF UTAH

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

OIL & GAS CONSERVATION COMMISSION

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

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

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

2. NAME OF OPERATOR Shell Oil Company (Rocky Mountain Div. Production)  
Chevron Oil Co. and Tenneco Oil Company

3. ADDRESS OF OPERATOR 1700 Broadway, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 2940' FSL and 2462' FEL Sec 21  
At top prod. interval reported below  
At total depth

14. PERMIT NO. 43-013-30101 DATE ISSUED 1-21-72

5. LEASE DESIGNATION AND SERIAL NO. Patented

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME Chatwin

9. WELL NO. 1-21A4

10. FIELD AND POOL, OR WILDCAT Altamont

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA SW/4 NE/4 Section 21-T 1S-R 4W

12. COUNTY OR PARISH Duchesne 13. STATE Utah

15. DATE SPUNDED 2-23-72 16. DATE T.D. REACHED 8-2-72 17. DATE COMPL. (Ready to prod.) 9-2-72 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 6594 GL, 6618 KB 19. ELEV. CASINGHEAD 25'

20. TOTAL DEPTH, MD & TVD 17,012 21. PLUG, BACK T.D., MD & TVD 16,892 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY → 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* Wasatch-No. Horn Transition perms 13,457-16,887 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN BHCS/GR w/cal, CNL-FDC, DIL-SP, Dialog Csg Cal, CBL, VDL & PDC 27. WAS WELL CORED No

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

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|-------------|-----------------|----------------|-----------|------------------|---------------|
| 10 3/4"     | 40.5#           | 1988'          | 12 1/4"   | 1400 SX          | 0             |
| 7 5/8"      | 39#             | 13,368'        | 8 3/4"    | 880 SX           | 0             |

29. LINER RECORD 30. TUBING RECORD

| SIZE   | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|--------|----------|-------------|---------------|-------------|------|----------------|-----------------|
| 5 1/2" | 13,093   | 17,010      | 930           |             |      |                |                 |

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| As per attachments  |                                  |

33.\* PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | WELL STATUS (Producing or shut-in) |                         |          |            |                         |               |
|-----------------------|--|------------------------------------|-------------------------|----------|------------|-------------------------|---------------|
| 9-2-72                | Flowing  | Producing                          |                         |          |            |                         |               |
| DATE OF TEST          | HOURS TESTED   | CHOKE SIZE                         | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF.   | WATER—BBL.              | GAS-OIL RATIO |
| 10-27-72              | 14   | 34/64"                             | →                       | 901      | 680        | 12                      | 755           |
| FLOW. TUBING PRESS.   | CASING PRESSURE  | CALCULATED 24-HOUR RATE            | OIL—BBL.                | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) |               |
| 350                   | 170  | →                                  | 901                     | 680      | 12         | 42.8° API               |               |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Used on rig, heaters, treaters and remainder flared TEST WITNESSED BY

35. LIST OF ATTACHMENTS Well Log and History, Csg & Cmtg Details.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED K R Jordan TITLE Division Operations Engr. DATE Dec. 13, 1972

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



SHELL OIL COMPANY-CHEVRON-  
TENNECOLEASE  
DIVISION  
COUNTYCHATWIN  
ROCKY MOUNTAIN  
DUCHESNEWELL NO. 1-21A4  
ELEV 6618 KB  
STATE UTAH

FROM: 2-23 - 10-30-72

NOV 06 1972

UTAHALTAMONTShell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test"FR" RURT. Drilled rat holes.  
Located 2940' FSL and 2462' FEL  
Section 21-T1S-R4W, Duchesne County, Utah.  
Elev: 6594 GL (ungraded)  
Shell Working Interest: 74.11% FEB 23 1972  
Drilling Contractor: Brinkerhoff  
This is a stepout delineation test to evaluate acreage  
northwest of the presently established productive area.Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test115/101/1/115. Drilling. Dev: 3/4° @ 60'.  
Spudded 6:00 AM 2/23/72.  
Mud: 9.5 x 60. FEB 24 1972Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test550/101/2/435. Drilling. Dev: 1-3/4° @ 310, 1-1/2° @  
500. Welded plate on mouse hole and lost circ through  
same. FEB 25 1972  
Mud: 9.2 x 47.Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test1718/101/5/1168. Tripping. Dev: 2° @ 957, 3° @ 1364,  
2-3/4° @ 1435, 1-1/4° @ 1575 and 2° @ 1685. CO bridges  
at 70-175', 260-350', 15' fill. FEB 28 1972  
Mud: 9.1 x 51 x 6.4.Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test1988/10/6/270. Circulating. Dev: 1-3/4° @ 1718.  
Repairing rig - shaft broken in #2 pump. FEB 29 1972  
Mud: 9.1 x 50 x 7.6.Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'1988/10/7/0. Testing Braden head. Dev: 2° @ 1988.  
Ran and cem 47 jts and 1 pc 10-3/4" 40.5# K-55 8rd  
sfc csg @ 1988 w/1200 sx 65:35 poz, 6% gel and 2%  
CaCl<sub>2</sub> (12.4 ppg) and 200 sx Class "G" w/2% CaCl<sub>2</sub>  
(15.8 ppg). Displaced w/185.5 BW. Full returns  
throughout. Shoe @ 1988 and float @ 1899. Plug down  
3:45 PM 2/29. MAR 1 1972Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

1988/10/8/0. Testing BOP's. MAR 2 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

2430/10/9/442. Drilling. Tested BOP's to 5000 psi  
and Hydril to 4000 psi. Drid float collar @ 1899.  
Shoe @ 1988. Tested csg to 1500 psi, OK.  
Mud: (gradient .431) 8.3 MAR 3 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

5000/10/12/2570.  
3-4: Drilling. Dev: 1-1/4° @ 2500, 2-3/4° @ 2980 and  
3519.  
Mud: wtr.  
3-5: Drilling.  
Mud: 8.3  
3-6: Drilling. Dev: 1-1/2° @ 4497. Changed BHA and  
kelly. Repaired mud line. MAR 6 1972  
Mud: 8.3

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

5700/10/13/700. Drilling.  
Mud: 8.3 MAR 7 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

6340/10/14/640. Drilling  
Mud: 8.3 x 27 MAR 8 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

6726/10/15/386. Drilling. Dev: 2° @ 6645. Changed  
kelly. MAR 9 1972  
Mud: 8.3 x 27

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

7126/10/16/400. Drilling.  
Mud: 8.3 x 27 MAR 10 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

7875/10/19/749.

3/11: Drilling. Dev: 2 $\frac{1}{2}$ ° @ 7370'. Repaired torque gauge.

Mud: 8.3 x 27

3/12: Tripping for new bit.

MAR 13 1972

Mud: 8.3 x 27

3/13: Drilling. Dev: 2 $\frac{1}{2}$ ° @ 7664'. Washed 70' to btm.

Mud: 8.3 x 27

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

8100/10/20/225. Drilling.

Mud: 8.3 x 27 MAR 14 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

8314/10/21/214. Tripping for new bit.

Mud: 8.3 x 27 MAR 15 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" sfc csg @ 1988'

8595/10/22/281. Drilling. Changed out shock sub, new bit reamer and Circle "C" stabilizer.

Mud: 8.3 x 27 MAR 16 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

8872/10/23/277. Drilling. Cut drill line and washed to btm.

MAR 17 1972

Mud: 8.3 x 27

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

9571/10/26/699.

3/18: Tripping. Washed to btm. Background gas - 8-10 units, trip gas - 80 units.

Mud: 8.3 x 27

MAR 20 1972

3/19: Drilling. Washed 200' to btm. Background gas - 15 units, trip gas - 200 units.

Mud: 8.3 x 27

3/20: Drilling. Dev: 2 $\frac{1}{2}$ ° @ 9410'. Washed 180' to btm. Background gas - 15-20 units, trip gas - 180 units.

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

9865/10/27/294. Tripping for new bit. Survey Correction  
@ 9410': 2° 50' SE4, TVD = 9407.01. Total displacement  
111.76S - 44.96E. (previously reported as dev of 2½°)  
Background gas - 10-20 units. MAR 2 1 1972  
Mud: 8.3 x 27

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

10,100/10/28/235. Drilling. Washed to btm. Background  
gas: 10-20 units, trip gas: 240 units.  
Mud: 8.3 x 27 MAR 2 2 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10 3/4" csg @ 1988'

10,114/10/29/14. Repairing rig.  
Rig repair consisting of broken power input shaft in  
transmission. MAR 2 3 1972  
Mud: 8.3 x 27

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

10,114/10/30/0. Repairing rig (transmission).  
Mud: 8.3 x 27 MAR 2 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

3/25: 10,166/10/31/52. Drilling. Dev: 3° S16W @  
10,114'. Washed 250' to btm.  
Mud: 8.3 x 27  
3/26: 10,514/10/32/348. Drilling. 10 units background  
gas.  
Mud: 8.3 x 27  
3/27: 10,718/10/33/204. Drilling. Cut drlg line.  
Washed 340' to btm. Background gas: 20 units, trip gas:  
90 units. MAR 2 7 1972  
Mud: 8.3 x 27

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

11,000/101/34/282. Drilling. Dev: 4° 15' S2E @ 10,965'.  
Background gas: 10-20 units, trip gas: 180 units.  
Mud: 8.3 x 27 MAR 2 8 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

11,392/101/35/392. Drilling. Background gas: 30 units,  
connection gas: 50-60 units. MAR 2 9 1972  
Mud: 8.5 x 29

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

11,568/10/36/176. Tripping in hole. Checked for flow, circ hole. Magnafluxed DC's (1 bad collar and stab).  
Lost approx 350 bbls since mudding up.  
Mud: 8.7 x 36 x 8 MAR 30 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

3/31: 11,581/10/37/13. Drilling. Tried to unplug bit. Worked out of tight hole, pulling wet string. Washed to btm, circ out gas and weighted up mud. Background gas: 90 units, trip gas: 2100 unit.  
Mud: (gradient .470) 9.0 x 38 x 8.2 (2% LCM) (9% Oil)  
4/1: 11,630/10/38/49. Washing to btm. Mixed LCM and added wt material. Cond mud, filled trip tank and mixed pill. Changed bits, checked stab. Background gas: 35-40 units.  
Mud: 10.0 x 43  
4/2: 11,734/10/39/104. Drilling. Washed to btm. Repaired pump and checked press. Background gas: 20 units.  
Mud: (gradient .520) 10.0 x 44 x 8.6 (2% LCM)  
4/3: 11,838/10/40/104. Drilling. Background gas: 8 units.  
Mud: (gradient .520) 10 x 38 x 8 APR 3 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

11,880/101/41/42. Drilling. Cut drlg line.  
Mud: (gradient .514) 9.9 x 39 x 8.2 APR 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

11,939/101/42/59. Tripping. Lost circ @ 11,894'. Mixed 2 lost circ slugs of 100 bbls each w/30-40% LCM. Lost total of 900 bbls mud, w/no mud loss since regaining circ. Background gas: 8 units. APR 5 1972  
Mud: (gradient .514) 9.9 x 39 x 8.4 (5% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

11,968/101/43/29. Drilling. Dev: 5° 10' @ 11,862 S2E. TVD = 11,851.87, displacement 295.01 S and 39E. Tripped to repair chain. Lost circ @ 11,966.w/10.3 ppg mud. Mixed 100 bbls w/30% LCM - regained circ. Lost total of 600 bbls mud. Background gas: 5-8 units. Trip gas: 27 units.  
Mud: (gradient .535) 10.3 x 40 x 8.0 (4% LCM) APR 6 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,025/101/44/57. Drilling. Background gas: 6 units,  
trip gas: 25 units.  
Mud: (gradient .540) 38 x 10.4 x 9.2 APR 7 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

4/8: 12,077/101/45/52. Drilling. Background gas: 5  
units.  
Mud: (gradient .540) 10.4 x 39 x 8.8  
4/9: 12,100/101/46/23. Drilling. Tripped for new bit.  
Tested BOP's to 5000 psi and hydril to 3000 psi. Lost  
75 bbls mud. Background gas: 2 units; trip gas: 10 units.  
Mud: (gradient .535) 10x3 x 39 x 8.0  
4/10: 12,172/101/47/72. Drilling. Lost 30 bbls mud.  
Background gas: 2 units.  
Mud: (gradient .540) 10.4 x 39 x 8.0 APR 10 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,240/101/48/48. Mixing LCM. Tripped for new  
bit and cut drlg line. Washed to btm. Lost circ,  
losing 250 bbls mud. Spotted LCM pill, regaining  
full circ. Trip gas: 8 units. APR 11 1972  
Mud: (gradient .540) 10.4 x 37 x 8.4 (20% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,287/101/49/47. Tripping out of hole w/survey.  
Mixed and spotted LCM slug, soaking @ 12,279'. Lost  
100 bbls mud. Background gas: 2 units. APR 12 1972  
Mud: (gradient .555) 10.7 x 38 x 8.0

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,295/101/50/8. Soaking LCM pill @ 12,295. Dev:  
4° 55' S8°E @ 12,287. Tripped to change shock sub,  
picked up stab. Trip gas: 15 units. Cut mud to  
9.9 ppg. Lost circ @ 12,295. Mixed and spotted 30%  
LCM on btm @ rate of 2 bbls/½ hr. Lost 605 bbls mud.  
Mud: (gradient .561) 10.8 x 40 x 11.4 (22% LCM) APR 13 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,333/101/51/38. Drilling. Lost circ. Built mud  
volume. Lost 300 bbls mud. Had 10 units gas on btms'  
after rec circ. Background gas: 2 units. APR 14 1972  
Mud: (gradient .561) 10.8 x 37 x 8.7 (10% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

4/15: 12,400/101/52/67. Drilling. Present mud system:  
1 lb/bbl X-Pel-G. Plan to increase to 2 lb/bbl. Back-  
ground gas: 2 units.  
Mud: (gradient .561) 10.8 x 39 x 8.2 (8% LCM)  
4/16: 12,434/101/53/34. Drilling. Washed 180' to btm.  
Trip Gas: 10 units; Background gas: 2 units.  
Mud: (gradient .561) 10.8 x 39 x 8 (10% LCM)  
4/17: 12,458/101/54/24. Tripping in hole w/new bit.  
Repaired torque gauge.  
Mud: (gradient .556) 10.7 x 36 x 8.4 (6% LCM) APR 17 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,503/101/55/45. Drilling. Lost 185 bbls mud.  
Background gas: 2 units. APR 18 1972  
Mud: (gradient .567) 10.9 x 39 x 8.2 (10% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,527/101/56/24. Drilling. Cut drlg line. Trip  
gas: 8 units. Background gas: 2 units. No mud  
loss. APR 19 1972  
Mud: (gradient .567) 10.9 x 37 x 8.5 (10% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,575/101/57/48. Drilling. Background gas: 4 units.  
No mud loss. APR 20 1972  
Mud: (gradient .567) 10.9 x 38 x 8.3 (10% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,587/101/58/12. Tripping in w/new bit. Dev:  
4° 20' S10° E @ 12,587'. Lost two nose cones on  
bit #26. Trip gas: 6 units. Background gas: 2  
units. No mud loss. APR 21 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

4/22: 12,614/101/59/27. Drilling. Lost 15 bbls mud.  
Trip gas: 8 units; background gas: 2 units.  
Mud: (gradient .561) 10.8 x 40 x 8.6 (11% LCM)  
4/23: 12,647/101/60/33. Tripping for new bit. No  
mud loss. Cut drilling line. Background gas: 4 units.  
Mud: (gradient .561) 10.8 x 38 x 8.8 (7% LCM)  
4/24: 12,678/101/61/31. Drilling. Lost 30 bbls mud.  
Washed to btm. Trip gas: 20 units; background gas:  
3 units. APR 24 1972  
Mud: (gradient .561) 10.8 x 36 x 8.5

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,707/101/62/29. Lost circ - building volume. Lost circ @ 12,707. Mixed two 30 and 35% LCM slugs. Trip gas: 10 units, background gas: 4 units. APR 2 5 1972  
Mud: (gradient .561) 10.8 x 40 x 8.4

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,707/101/63/0. Lost circ - mixing LCM. Mixed 250-bbl slug w/40% LCM. Did not regain circ. Mixed 275-bbl slug w/40% LCM and spotted on btm. Pulled to 10,700, cut mud wt to 10.3. Circ 145 bbls of 10.3 ppg mud w/90% returns. APR 2 6 1972  
Mud: 10.3

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,707/101/64/0. Circ 10.3 ppg mud @ 7804. Mixed 250 bbls 45% LCM and increased volume. Spotted LCM pill on btm and let soak. Filled annulus w/27 bbls wtr. Pulled to 8500'. Attempted to circ w/no success. Pulled to 7100' - could not circ. Pulled to 6864', circ 10.3 ppg mud w/slow pump. Ran to 7804' and circ 10.3 ppg mud. Background gas: 2 units. Lost 900 bbls mud last 24 hrs.  
Mud: (gradient .535) 10.3 x 37 x 10.8 (8% LCM) APR 2 7 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,709/101/65/2. Drilling. Spotted 250 bbl LCM pill @ 7060'; soaked 6 hrs. Hole took 31 bbls mud. Circ w/full returns after 30 min. Lost 4 bbls mud. Ran to 8188 and 9316, circ w/full pump at each depth. Ran to 10,444, circ btms up. Ran to 11,572, circ w/full pump. Ran to 12,707, circ and started drlg. Lost 250 bbls mud. Btms up had 80 units gas. Shaking out LCM slowly. APR 2 8 1972  
Mud: (gradient .535) 10.3 x 38 x 11.0 (22% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

4/29: 12,758/101/66/49. Drilling. Background gas: 4 units. No mud loss.

Mud: (gradient .535) 10.3 x 40 x 9.8 (10% LCM)

4/30: 12,815/101/67/57. Drilling. Background gas: 4 units. Lost 60 bbls mud.

Mud: (gradient .535) 10.3 x 40 x 9.8

5/1: 12,827/101/68/13. Tripping in hole w/9-5/8" ACC dia bit. Tested BOP's. Kelly cock did not test, changed out same.

Mud: (gradient .535) 10.3 x 40 x 9.4 (8% LCM) MAY 1 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,906/101/69/79. Drilling. Finished tripping in hole w/9-7/8" dia bit. Washed to btm. MAY 2 1972  
Correction to yesterday's wire: Bit size 9-7/8" instead of 9-5/8"  
Mud: (gradient .535) 10.3 x 47 x 4.5 (5% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,930/101/70/24. WO hole to heal. Lost returns while drlg @ 12,930. Mixed 40#/bbl LCM slurry and spotted 235-bbl pill on btm w/no returns. When returns first lost, annulus took 25 bbls wtr to fill. After spotting pill, annulus took 142 bbls wtr. Hole not standing full - taking approx 5 bbls/hr last hr w/hole improving. Lost approx 580 bbls mud to fm since losing returns. MAY 3 1972  
Mud: (gradient .535) 10.3 x 42 x 8.2

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,930/101/71/0. Tripping in hole open ended. WO hole to heal. RU OWP and ran temp survey from 1988-12,930. Pumped into fm. Re-ran survey w/hole taking 30 bbls fluid/hr. Survey indicated loss @ btm. Started in hole w/mule shoe jt to perform ben-gum sqz. MAY 4 1972  
Mud: (gradient .535) 10.3 x 50 x 8.0

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

12,930/101/72/0. Staging in hole w/ACC dia bit. Finished tripping in hole open ended w/mule shoe jt, setting pipe @ 12,880' for sqz. RU Howco. Pumped 22½ bbl slurry of ben-gum sqz w/500 psi on DP and 300 psi on csg after sqz in place. SI 1 hr. Press stabilized @ 100 psi on csg and 250 psi on DP. Bled press to zero - no flow. Inspected BH eqmt. Circ @ 4300'. MAY 5 1972  
Mud: (gradient .535) 10.3 x 40 x 7.5 (15% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

5/6: 12,950/101/73/10. Drilling. Finished staging in hole w/dia bit. Circ @ 6500, 7647, 8700, 9917, 11,062, 12,204, and 12,670. Washed and reamed 120' to btm, circ out before drlg. Made SLM: 12,930' = 12,940'.  
Mud: (gradient .535) 10.3 x 42 x 6.0 (10% LCM)

5/7: 12,974/101/74/24. Drilling. Laid down jars. Washed 80' to btm. Broke circ 11,000'. Trip gas: 15 units. Background gas: 2 units. No mud loss.  
Mud: (gradient .535) 10.3 x 41 x 6.0 (8% LCM)

5/8: 13,004/101/75/30. Tripping for new bit. Background gas: 4 units. No mud loss. MAY 8 1972  
Mud: (gradient .535) 10.3 x 43 x 5.8 (9% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

13,067/101/76/63. Drilling. Dressed reamers and washed to btm. Lost 8 bbls mud @ 13,048-13,050. No incr in background gas. Hole taking 2 bbls mud/hr. Trip gas: 14 units. Background gas: 5 units. Mud: (gradient .535) 10.3 x 41 x 5.8 (6% LCM) MAY 9 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

13,149/101/77/82. Drilling. Background gas: 5 units. No mud loss. Mud: (gradient .535) 10.3 x 40 x 5.8 (7% LCM) MAY 10 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

13,236/101/78/87. Drilling. No mud loss. Background gas: 5 units. Mud: (gradient .535) 10.3 x 39 x 5.6 (5% LCM) MAY 11 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

13,304/101/79/68. Drilling. Background gas: 5 units. Lost 10 bbls mud. Mud: (gradient .535) 10.3 x 41 x 5.5 (6% LCM) MAY 12 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

5/13: 13,360/101/80/56. Drilling. Background gas: 4 units. No mud loss.

Mud: (gradient .535) 10.3 x 41 x 5.6 (4% LCM)

5/14: 13,370/101/81/10. Logging. Dev: 4° 45' S8W @ 13,370'. Circ hole prior to taking survey and logging. RU Schl and ran logs as follows: BHCS/GR w/cal from 13,362-1987 and CNL-FDC w/tool failing @ 7000'. Now making run #2.

Mud: (gradient .535) 10.3 x 41 x 5.6 (4% LCM)

5/15: 13,370/101/82/0. Tripping. Ran logs as follows: CNL-FDC, Run #2, from 13,369-1988 and DIL from 13,369-1988. RD Schl.

Mud: (gradient .535) 10.3 x 41 x 5.6 (4% LCM) MAY 15 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
10-3/4" csg @ 1988'

13,370/101/83/0. Running 7-5/8" csg. Cond mud prior to running csg. Laid down DP. Ran multishots from 6500-1988. Pulled wear bushing, changed rams and RU to run csg.

Mud: (gradient .535) 10.3 x 40 x 5.6 MAY 16 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,370/101/84/0. Nippling up BOP's. Ran and cmtd 313  
jts 7-5/8" 39# S-95 LT&C and ST&C csg to 13,368 w/680 sx  
(12.4 ppg) 65-35 Pozmix w/6% gel and 0.3% D13 and 200 sx  
(15.9 ppg) Class "G" w/10% salt and 0.3% D8. Plug down @  
7:45 PM 5/16. Shoe @ 13,368, collar @ 13,269 and pup  
jt @ 12,851. MAY 17 1972  
Mud: 10.3 x 41

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,370/101/85/0. Picking up 4" slim hole DP. Nippled  
up BOP's and tested to 5000 psi. Changed kelly's.  
Strung back to 8 lines. MAY 18 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,390/101/86/20. Drilling. Picked up 4" DP. Tested  
csg to 2000 psi, held OK. Drld FC, cmt and shoe.  
Mud: (gradient .520) 10.0 x 38 x 6.8 (2% LCM) MAY 19 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

5/20: 13,420/101/87/30. Drilling. Tripped for new bit  
@ 13,396.

Mud: (gradient .520) 10.0 x 37 x 6.4 (1% LCM)

5/21: 13,455/101/88/35. Drilling. Tripped to pick up  
Eastman 2-stage Turbo drill. Circ through fill-up line  
2 hrs, shaking out LCM.

Mud: (gradient .520) 10.0 x 37 x 6.5

5/22: 13,510/101/89/55. Drilling. Unable to make hole  
w/Turbo drill press'd up. Tripped and ran conventional  
hookup w/dia bit. MAY 22 1972

Mud: (gradient .520) 10.0 x 37 x 6.3

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,628/101/90/118. Drilling. MAY 23 1972  
Mud: 10.0 x 36 x 6.6

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,700/101/91/72. Drilling. Checked for flow and circ.  
Had 17' drlg break from 13,637-13,654. Cut mud from  
10.0 ppg to 9.3 ppg for 10 min, then cut to 9.6 to 9.8  
for 1½ hrs. Gas from btm 850 units. Drld ahead w/350  
units background gas. Connection gas: 400 units.  
Raised mud wt to 10.3 ppg. Connection gas: 700 units.  
Raised mud wt to 10.5 ppg. No mud loss. MAY 24 1972  
Mud: (gradient .541) 10.4 x 38 x 6.6

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,753/101/92/53. Tripping for new bit. Background  
gas: 60 units. Connection gas: 160 units. No mud  
loss.  
Mud: (gradient .551) 10.6 x 40 x 6.8 MAY 25 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

13,827/101/93/74. Drilling. Washed to btm. Background  
gas: 5 units. Trip gas: 1400 units. Mud cut to 9.7 ppg  
for 10 min, then incr to 10.0 ppg for 45 min. Had no  
mud loss.  
Mud: (gradient .561) 10.8 x 39 x 7.0 MAY 26 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7 5/8" csg @ 13,368'

5/27 13,888/101/94/61. Drilling.  
No mud loss. Background gas - 5 units  
Connection gas - 18 units  
Mud: (.562) 10.8 x 39 x 7.

5/28 13,957/101/95/69. Drilling.  
No mud loss. Background gas - 2 units.  
Mud: (.562) 10.8 x 37 x 7

5/29 14,038/101/96/81. Drilling  
No mud loss. Background gas - 2 units.  
Mud: (.562) 10.8 x 38 x 7.4

5/30 14,112/101/97/74. Drilling.

Background gas - 40 units  
Connection gas - 160 units  
No mud loss  
Mud: (.562) 10.8 x 38 x 7.5

MAY 30 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7 5/8" csg @ 13,368'

14,177/101/98/65. Drilling.  
Background gas - 60 units  
Connection gas - 210 units  
Raised mud wt to 11.9#  
No mud loss  
Mud: (.619) 11.9 x 41 x 7.4

Presently carrying

2  
8

MAY 31 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7 5/8" csg @ 13,368'

14,232/101/99/55. Drilling.  
Cut drlg line  
Trip gas - 6 units  
Background gas - 4 units JUN 1 1972  
No mud loss  
Mud: (.624) 12 x 43 x 7.4

Shell-Chevron-Tenneco 14,336/101/100/104. Drilling. Background gas-2 units.  
Chatwin 1-21A4 No mud loss. Mud: (.624) 12 x 41 x 7.2. JUN 2 1972  
(D) Brinkerhoff  
15,300' Wasatch Test  
7 5/8" csg @ 13,368'

Shell-Chevron-Tenneco 6/3: 14,427/101/101/91. Drilling.  
Chatwin 1-21A4 Pulled into csg. Repacked swivel.  
(D) Brinkerhoff Mud: (.624) 12 x 40 x 7.0  
15,300' Wasatch Test 6/4: 14,511/101/102/84. Drilling JUN 5 1972  
7 5/8" csg @ 13,368' Mud: (.624) 12 x 41 x 6.2  
6/5: 14,560/101/103/49. Testing BOP's.  
Bit began "ringing out". Made trip for bit. Tested BOP's on  
trip out. Increasing mud wt to 13.0#.  
Mud: (.650) 12.5 x 40 x 6.2 (LCM trc).

Shell-Chevron-Tenneco 14,637/101/104/77. Drilling. Finished testing BOP's,  
Chatwin 1-21A4 testing Hydril to 3000 psi, all rams, valves and lines  
(D) Brinkerhoff to 5000 psi. Changed out kelly safety valve. Incr  
15,300' Wasatch Test mud wt to 13 ppg. Circ and washed to btm. Background  
7-5/8" csg @ 13,368' gas: 2 units. JUN 6 1972  
Mud: (gradient .676) 13 x 40 x 6.0

Shell-Chevron-Tenneco 14,728/101/105/91. Drilling. Background gas: 3 units.  
Chatwin 1-21A4 Mud: (gradient .676) 13.0 x 40 x 6.0 JUN 7 1972  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

Shell-Chevron-Tenneco 14,807/101/106/79. Background gas: 3 units. No mud  
Chatwin 1-21A4 loss.  
(D) Brinkerhoff Mud: (gradient .676) 13.0 x 40 x 6.2 JUN 8 1972  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

Shell-Chevron-Tenneco 14,861/101/107/54. Drilling. Tripped for new bit @  
Chatwin 1-21A4 14,831. Background gas: 4 units. Trip gas: 8 units.  
(D) Brinkerhoff Mud: (gradient .676) 13.0 x 42 x 6.5 JUN 9 1972  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

6/10: 14,940/101/108/79. Circ gas show. Circ drlg show - had 7 units background gas while drlg @ 14,936-14,940. Checked for flow (no flow). Zero press on DP and csg. Circ btms up. Cut mud from 12.9 to 11.5 ppg for 30 min. Had 1800 units gas. Raised mud wt to 13.3 ppg, then cut to 12.4-12.6 and raised to 13.5. Now carrying 760 units background gas.

6/11: 15,008/101/109/68. Drilling. No mud loss last 24 hrs. Background gas: 6 units. Connection gas: 35 units.

Mud: (gradient .702) 13.5 x 42 x 7.0

6/12: 15,067/101/110/59. Drilling. Circ out gas. Gained 5 bbls while drlg @ 15,025. Checked for flow (no flow). No press on DP or csg. Circ out gas show and cut mud to 11.1 for 5 min. Raised mud wt to 13.8 ppg. Mud cut from btm to 13.5, then raised to 14.1 ppg. Lost 45 bbls mud last 24 hrs. Mixed 5% LCM slug. Background gas: 60 units. Connection gas: 180 units.  
Mud: (gradient .733) 14.1 x 44 x 6.8 (2% LCM) JUN 12 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,300' Wasatch Test  
7-5/8" csg @ 13,368'

15,119/101/111/52. Drilling. Checked for flow. Circ gas up. Had drlg break @ 15,077-79. Cut mud to 11.5 ppg. Had 1100 units gas. Raised mud to 14.4 w/hole taking 20 bbls. Background gas: 16 units. Connection gas: 160 units.

Mud: (gradient .749) 14.4 x 44 x 6.4 JUN 13 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,400' Wasatch Test  
7-5/8" csg @ 13,368'

15,149/101/112/20. Drilling. Tripped for new bit @ 15,122. Broke circ @ 8000 and 13,000'. Trip gas: 560 units. Background gas: 24 units. Measured out of hole - corrected hole depth +10'. No mud loss last 24 hrs.  
Mud: (gradient .749) 14.4 x 44 x 6.4 JUN 14 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,400' Wasatch Test  
7-5/8" csg @ 13,368'

15,200/101/113/51. Tripping in hole w/fishing tools. Pin twisted off on DP. Backed off between saver sub and kelly safety valve. Top of fish @ 2793. Started tripping in hole w/6-3/8" OD overshot and bumper jar. Background gas: 12 units. Lost 45 bbls mud.  
Mud: (gradient .754) 14.5 x 42 x 6.5 (1% LCM) JUN 15 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,400' Wasatch Test  
7-5/8" csg @ 13,368'

15,209/101/114/9. Drilling. Fished 1½ hrs, rec fish. Changed out crooked DP. CO bridges @ 13,825-860 and washed 90' to btm. Trip gas: 248 units. Background gas: 8 units. No mud loss.  
Mud: (gradient .759) 14.5 x 42 x 6.2 JUN 16 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,400' Wasatch Test  
7-5/8" csg @ 13,368'

6/17: 15,276/101/115/67. Drilling. Background gas:  
60-90 units. No mud loss.

Mud: (gradient .754) 14.5 x 42 x 6.5

6/18: 15,352/101/116/76. Pulled twisted off pipe out  
of hole. Pipe twisted off while drlg @ 15,352. After  
pipe twisted off, string backed off on top of kelly  
saver sub. Screwed kelly into pipe and started out of  
hole. Chained and measured out. String weighed 10,000#  
after twist off. Background gas: 45 units. Connection  
gas: 85 units.

Mud: (gradient .754) 14.5 x 43 x 6.3

6/19: 15,354/101/117/2. Drilling. Circ 1/2 hr @ 13,300'.  
Washed through tight hole 14,330-14,590. Ran 6-3/8" Bowen  
overshot and bumper jars, rec complete string. Laid down  
11 jts bent pipe. (Pulled 42 stds - 3902'). Washed 120'  
to btm - 5' fill. Resumed drlg. Trip gas: 1200 units.  
Background gas: 60 units.

Mud: (gradient .754) 14.5 x 47 x 6.5

JUN 19 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,400' Wasatch Test  
7-5/8" csg @ 13,368'

15,428/101/118/74. Drilling. Background gas: 50 units.  
Connection gas: 90 units. Max gas in 24-hr period: 200  
units.

Mud: (gradient .754) 14.5 x 42 x 6.0

JUN 20 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,504/101/119/76. Drilling. Background gas: 52 units.  
Last connection gas: 100 units w/high of 210 units.

Mud: (gradient .754) 14.5 x 43 x 5.5

JUN 21 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,578/101/120/74. Drilling. Background gas: 60 units.  
Last connection gas: 88 units w/high of 130 units.

Mud: (gradient .754) 14.5 x 42 x 3.8

JUN 22 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,650/101/121/72. Drilling. No mud loss. Background  
gas: 48 units. Connection gas: 90 units.

Mud: (gradient .759) 14.6 x 42 x 4.0

JUN 23 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,700' Wasatch Test  
7-5/8" csg @ 13,368'

6/24: 15,728/101/122/78. Drilling. Background gas:  
60 units. Connection gas: 340 units. No mud loss

Mud: (gradient .764) 14.7 x 42 x 4.3

6/25: 15,742/101/123/14. Tripping in hole. RU Dia-log  
and ran csg caliper from 13,366-sfc. Log showed csg OK.  
Twisted off @ 13,278. Ran 6-1/8" OD overshot and jars,  
rec fish. Background gas: 55-100 units. Connection gas:  
300 units. No mud loss.

Mud: (gradient .764) 14.7 x 40 x 4.0

JUN 26 1972

6/26: 15,787/101/124/45. Drilling. Finished trip in  
hole w/new bit and broke circ. Washed and reamed to  
btm. Background gas: 60 units. Connection gas: 250  
units. Trip gas: 540 units.

Mud: (gradient .764) 14.7 x 43 x 4.6

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff  
15,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,861/101/125/74. Drilling. Background gas: 55 units.  
Connection gas: 160 units. No mud loss. JUN 27 1972  
Mud: (gradient .764) 14.7 x 45 x 5.0

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,893/101/126/32. Tripping in hole. Twisted off @  
12,273. Ran 6-1/8" overshot and bumper jar, rec fish.  
Tripped in hole to lay down Grade "E" DP. No mud loss.  
Background gas: 50 units. Connection gas: 105 units.  
Mud: (gradient .764) 14.7 x 40 x 5.2 JUN 28 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,896/101/127/3. Drilling. Finished trip in hole  
and circ. Tested BOP's to 5000 psi and Hydril to 3000  
psi. Washed 100' to btm. Lost 30 bbls mud. Trip gas:  
1200 units.  
Mud: (gradient .764) 14.7 x 46 x 6.2 JUN 29 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

15,920/101/128/24. Tripping in hole. Ran Eastman  
Turbo Drill, breaking circ @ 8500-13,000'. No mud  
loss. Background gas: 55 units.  
Mud: (gradient .764) 14.7 x 40 x 5.5 JUN 30 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

7/1: 15,985/101/129/65. Drilling w/turbo drill.  
Finished tripping in w/new bit. Washed to btm. Circ  
gas show. Had drlg break @ 15,969-15,981. Cut mud  
from 14.7 to 13.7 ppg for 15 min - back to 14.4 ppg  
in 1 hr. Background gas before show: 69-90 units.  
Background gas w/show: 1200 units. Presently carrying  
100 units.

Mud: (gradient .764) 14.7 x 43 x 8

7/2: 16,089/101/130/104. Drilling w/turbo drill. Lost  
35 bbls mud. Background gas: 40 units. Connection gas:  
100 units.

Mud: (gradient .770) 14.8 x 41 x 6

7/3: 16,129/101/131/40. Tripping in hole w/new bit.  
Eastman turbo drill failed @ 16,129. Started press up  
and pulled out of hole. Bearing pack OK. Tool plugged.  
Broke circ @ 8500'.

Mud: (gradient .770) 14.8 x 43 x 5.2 JUL 3 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

7/4: 16,127/101/132/0. Laying down 4" slim hole DP and RU to pick up 3½" DP. Finished staging in hole w/ Eastman Turbo drill. Washed 90' to btm. Approx 50' fill on btm. Turbo plugged - unable to free same. Laid down 4" DP and collars. Changed rams in BOP's to 3½" and tested.

Mud: (gradient .770) 14.8 x 45 x 6.0

7/5: 16,129/101/133/0. Picking up 3½" DP. Tested both sets rams to 5000 psi. Tested floor safety valves to 5000 psi. Ran BHA and 3½" DP and circ @ 8000, 11,125 and 13,780. Washed bridge @ 13,780. Presently picking up DP below 14,000'.

Mud: (gradient .770) 14.8 x 41 x 4.0 JUL 5 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,170/101/134/41. Drilling. Experiencing some hole problems. Bit torqued up. Dragged about 20,000# until bit was 10' off btm. Brought vis up to improve conditions. Washed to btm. Btms up gas: 510 units. Background gas: 90 units. Connection gas: 140 units.

Mud: (gradient .770) 14.8 x 41 x 6.2 JUL 6 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,171/101/135/1. Tripping for mill-tooth bit. Hole conditions unsatisfactory - hole tight and unable to rotate. Pulled up and pumped out looking for good hole - necessary to pull into csg. Btm 1,000' very bad. Loggers were finding 5% reds and 95% greys before trouble. Came out after getting in csg.

Gas units - 100

Mud: (.775) 14.9 x 50 x 6.5 JUL 7 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

7/8: 16,171/101/136/0. Reaming. Washed and reamed and cond mud and hole. Hole caved in @ 13,660. Reamed to 13,722. No mud loss.

Mud: (gradient .775) 14.9 x 55 x 2.5

7/9: 16,173/101/137/2. Circ and drlg. CO bridges from 13,611-614 and 13,626-630. Washed and reamed to btm.

Background gas: 50 units. Trip gas: 550 units.

Mud: (gradient .775) 14.9 x 53 x 2.2

7/10: 16,174/101/138/1. Tripping to log. Circ and cond hole 12 hrs. Made short trip. Washed bridges from 13,614-616 and 13,628-630. Washed 75' to btm. Background gas: 50 units. Trip gas: 200 units. Lost 135 bbls mud.

Mud: (gradient .780) 15.0 x 53 x 2.3 JUL 10 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,174/101/139/0. Circ. Ran BHCS-GR w/cal and DIL  
from 16,174-13,366. Tripped and broke circ @ 8500,  
13,000 and 14,800. Circ and cond hole 3 hrs - 2' fill  
on btm. Trip gas: 250 units. Background gas: 10 units.  
Lost 130 bbls mud.  
Mud: (gradient .775) 14.9 x 53 x 2.1 (3% LCM) JUL 11 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,174/101/140/0. Washing to btm. Circ and cond hole  
4½ hrs. Attempted to rerun BHCS-GR - unable to log due  
to tight hole. JUL 12 1972  
Mud: (gradient .775) 14.9 x 52 x 2.6 (2% LCM)

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,188/101/141/14. Drilling. Drld w/torque to 250'.  
Tripped out, laying down 3 stabs and 2 DC's. Picked  
up 2 DC's and broke circ @ 13,300'. Washed 90' to btm.  
Background gas: 40 units. Trip gas: 530 units. JUL 13 1972  
Mud: (gradient .775) 14.9 x 48 x 2.5

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,221/101/142/33. Drilling. Made connection - tight  
hole @ 16,221. Background gas: 30 units. Connection  
gas: 50 units.  
Mud: (gradient .770) 14.8 x 47 x 3.0 JUL 14 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

7/15: 16,271/101/143/50. Drilling. Background gas:  
20 units. Connection gas: 30 units.  
Mud: (gradient .770) 14.9 x 52 x 3.5  
7/16: 16,340/101/144/69. Drilling. Background gas:  
15 units. Connection gas: 30 units.  
Mud: (gradient .770) 14.9 x 49 x 4.0  
7/17: 16,416/101/145/76. Drilling. Background gas:  
4 units. Connection gas: 20 units.  
Mud: (gradient .774) 14.9 x 49 x 3.6 JUL 17 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,476/101/146/60. Drilling. Background gas: 6 units.  
Connection gas: 72 units. Max gas last 24 hrs: 72 units.  
Mud: (gradient .770) 14.8 x 49 x 3.6 JUL 18 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,546/101/147/70. Drilling. Hole torqued up at times.  
Washed pipe - still torquing. Background gas: 20 units.  
Connection gas: 50 units. Max gas last 24 hrs: 205 units.  
Mud: (gradient .770) 14.8 x 52 x 2.4 JUL 19 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,601/101/148/55. Drilling. Attempted to free hole  
of torque - torque same as previous day. Background  
gas: 30-40 units. Max gas last 24 hrs: 50 units.  
Mud: (gradient .770) 14.8 x 51 x 2.4 JUL 2 0 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,653/101/149/52. Drilling. Background gas: 25 units.  
Connection gas: 40 units.  
Mud: (gradient .770) 14.8 x 50 x 2.5 JUL 2 1 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

7/22: 16,668/101/150/15. Pulling for mill tooth bit.  
Circ and cond hole. Pulled into csg - had tight spot @  
16,572. Attempted to ream tight spot going back to btm -  
unsuccessful. Circ and cond hole. Hole became tight -  
pmpd out and jarred 34 singled. Hole tight up to shoe.  
Mud: (gradient .780) 15.0 x 5.3

7/23: 16,668/101/151/0. Circ and cond hole. Finished  
trip out of hole. Washed to btm and CO bridges from  
13,651-16,000. Circ and cond hole 5½ hrs. Sptd 180-bbl  
mica and gel slug in open hole. Trip gas: 250 units.  
Background gas: 10 units. No mud loss.  
Mud: (gradient .780) 15.0 x 45 x 2.6

7/24: 16,668/101/152/0. Tripping. Tripped in hole,  
breaking circ. Ran logs as follows: DIL and CNL-FDC  
from 16,668-13,368. Ran sonic - tool stuck @ 15,400.  
Pulled tool loose. RD Schl and started tripping in  
hole.

Mud: (gradient .780) 15.0 x 45 x 2.6 JUL 2 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,668/101/153/0. Tripping in hole. Circ and sptd  
180-bbl gel and mica slug in open hole. RU Schl.  
Ran Sonic w/o cal. Tool stopped @ 13,609. Ran Sonic  
w/cal. Tool stopped @ 13,732. Ran CNL-FDC from 13,739-  
13,367. Attempted to rerun caliper several times -  
unable to get below 13,732.

Mud: (gradient .780) 15.0 x 45 x 2.7 JUL 2 5 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,668/101/154/0. Tripping to log. Washed and drld  
bridges @ 13,724, 14,510, 15,660 and 16,330. Mixed  
and sptd 220-bbl gel slug w/15 lb/bbl Superdrill. Circ  
hole 5½ hrs. Background gas: 10 units. Trip gas: 160  
units. No mud loss.

Mud: (gradient .785) 15.1 x 55 x 3.0 JUL 2 6 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,672/101/155/0. Drilling. Circ hole prior to logging. Ran BHCS-GR w/o cal from 16,670-13,367. Tool stuck @ 16,350 for 35 min - worked loose. Ran FDC-CNL-GR w/cal from 15,950-13,367. Trip gas: 66 units. Background gas: 8 units. No mud loss. JUL 27 1972  
Mud: (gradient .780) 15.0 x 61 x 2.3

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,714/101/156/42. Drilling. No mud loss. Background gas: 6-8 units. Connection gas: 24 units. JUL 28 1972  
Mud: (gradient .770) 14.8 x 51 x 2.6

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

7/29: 16,777/101/157/63. Drilling. No mud loss. Background gas: 6 units. Connection gas: 20 units. Mud: (gradient .775) 14.9 x 50 x 2.4  
7/30: 16,837/101/158/60. Drilling. No mud loss. Background gas: 4 units. Connection gas: 20 units. Mud: (gradient .775) 14.9 x 56 x 2.4 JUL 31 1972  
7/31: 16,900/101/159/63. Drilling. No mud loss. Background gas: 5 units. Connection gas: 16 units. Mud: (gradient .775) 14.9 x 53 x 2.8

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

16,946/101/160/46. Drilling. No mud loss. Background gas: 8 units. Connection gas: 56 units. AUG 1 1972  
Mud: (gradient .770) 14.8 x 48 x 2.4

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
16,700' Wasatch Test  
7-5/8" csg @ 13,368'

17,000/101/161/54. Circ to log. Incr mud wt from 14.8 to 15.1 ppg - trying to improve hole conditions for logging. Max gas: 90 units. Background gas: 6 units. Mud: (gradient .788) 15.1 x 52 x 2.2 AUG 2 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
7-5/8" csg @ 13,368'

17,012/101/162/0. Circ and cond hole prior to running liner. RU Schl. Ran logs as follows: DIL/SP from 17,001 to 15,600, BHCS w/o stabilizer or cal from TD to 15,600, FDC/CNL from TD to 15,600. Made SLC - 17,000 = 17,012. Schl TD 17,007. Circ 2½ hrs. Tripped in hole, breaking circ @ 8000, 13,300, 14,800 and 16,220. Washed 60' to btm. Background gas: 20 units. Max gas last 24 hrs: 40 units. AUG 3 1972  
Mud: (gradient .788) 15.1 x 53 x 2.4

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
7-5/8" csg @ 13,368'

17,012/101/163/0. Going in hole w/5½" liner. Finished circ and cond hole. RU and ran 41 jts 5½" 23# S00-95 SFJ, 15 jts 5½" 20# P-110 and 43 jts S00-95 SFJ-20#. Went in hole slowly due to returns - est @ 75%. Have 35 stds to run.  
Mud: (gradient .788) 15.1 x 53 x 2.4  
AUG 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
5½" liner @ 17,010'

8/5: 17,012/101/164/0. WOC. Finished running 5½" liner to 17,012. Circ and cond w/full returns. Cmtd w/930 sx Class "G" mixed w/30% silica flour, 0.5% D-31 friction reducer and 0.4% R-5 retarder. Good returns throughout cmt job. CIP @ 4:45 PM w/200 psi over differential press. Top of liner @ 13,093. Liner hung 2' off btm. FC @ 16,890. Pulled running tool and ran re-run bit to top of cmt @ 12,860'. Washed to 12,998.  
Mud: (gradient .780) 15.5 x 48 x 2.6  
Note: Released mud logger 8/4/72.

8/6: 17,012/101/165/0. CO soft cmt @ 13,068. WOC total of 24 hrs. Cmt not firm enough. WOC add'1 8 hrs. CO to 12,998, soft cmt. WOC 8 hrs. CO to 13,061, soft cmt. WOC 8 hrs. CO to 13,068, soft cmt. WOC.

Mud: (gradient .780) 15.0 x 45 x 2.8

8/7: 17,012/101/166/0. CO firm cmt. WOC total of 43 hrs. Finished CO cmt to top of liner. Tagged liner @ 13,109 and measured out of hole. Picked up six 3½" DC's and 2-7/8" DP and drld thru liner hanger and FC @ 16,897, CO firm cmt.

Mud: (gradient .775) 14.9 x 46 x 2.8  
AUG 7 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
5½" liner @ 17,010'

17,012/101/167/0. Tripping. Drld FC @ 16,897 and CO firm cmt to 16,985. Circ hole 2½ hrs. Ran Baker sqz tool. Tested mud line and set pkr @ 13,080. Liner lap broke down @ 900 psi. Attempted to unseat pkr. Tripped out to change pkr.

Mud: (gradient .775) 14.9 x 43 x 3.2  
AUG 8 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
5½" liner @ 17,010'

17,012/101/168/0. PBTB 16,985. WOC. Set Baker sqz pkr @ 12,985. Broke down liner lap w/900 psi @ 2 B/M. Mixed 300 sx Class "G" (15.1 ppg) w/2% gel, 30% silica flour, 1% D-31 and 0.1% R-5. Slurry 88 bbls. Sqzd 84 bbls in fm, leaving 4 bbls in csg. Final sqz press 3000 psi. CIP @ 11:15 PM, 8/8.

Mud: (gradient .780) 15.0 x 51 x 3.0  
AUG 9 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
5½" liner @ 17,010'

17,012/101/169/0. PBTB 16,985. Drilling cmt. Circ 2  
hrs. WOC 10 hrs. Drld hd cmt from 12,986-13,109, top  
of liner, and from 13,109-13,119. AUG 1 0 1972  
Mud: (gradient .780) 15.0 x 51 x 3.2

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D) Brinkerhoff #43  
17,012' Wasatch Test  
5½" liner @ 17,010'

17,012/101/170/0. PBTB 16,985. Tripping in hole.  
Drld cmt from 13,109-119. Circ btms up @ 16,985.  
Ran Baker sqz pkr to 13,053. Tested liner lap @ 13,109  
to 1500 psi for 15 min, OK. Displaced DP w/96 BW w/  
4250 sfc press. Set pkr and bled off DP to zero for  
15 min, OK. Reversed out wtr and set pkr. Tested  
annulus to 400 psi, OK. Set pkr @ 7000' and tested  
annulus to 2000 psi. Set pkr @ 4000' and tested annulus  
to 3100 psi. Set pkr @ 1000' and tested annulus to 4200  
psi. All tests for 15 min. AUG 1 1 1972  
Mud: (gradient .780) 15.0 x 50 x 3.4

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

8/12: 17,012/101/171/0. PBTB 16,985. Nippling down  
BOP's. Removed wear ring and installed FBB hanger w/5½"  
BP valve.  
Mud: 15.0  
8/13: 17,012/101/172/0. PBTB 16,985. MORT. Finished  
nippling down BOP's. Nippled up tree. Released rig @  
9:00 PM, 8/12/72. (RDUFA.)  
Mud: 15.0 AUG 1 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. (RRD 8/14/72). Picking up tbg. MI&RU  
Western Oilwell Service 8/23. Removed Xmas tree,  
installed BOP's and removed BP valve. Tested BOP's  
to 5000 psi. Picked up 4" OD jk basket and started  
picking up 2-7/8" tbg. Picked up 3900' tail. Ran  
7-5/8" csg scraper. AUG 2 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. Pulling tbg. Picked up and ran tbg to  
13,000'. Circ out 15.1 ppg mud. Ran to 16,996 and  
circ 15.1 ppg mud. Circ until hole was clean. Started  
pulling tbg. AUG 2 5 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012.

8/26: Logging. Finished pulling tbg, laying down 4000'. RU Schl @ 1:30 PM to run CBL, VDL, CNL and PDC logs. Ran CNL and collar logs from 16,968 to 8000'. Addition to 8/25 report: Sptd 90 bbls 2% SW on btm. Press tested csg to 4000 psi.

8/27: Running tbg. Ran CBL and VDL logs w/3000 psi from 16,968 to 8500. Finished logging @ 12:30 PM. Ran Baker Model "D" pkr on WL, setting @ 12,965. RD Schl. Ran 139 jts 5½" 14# K-55 ST&C csg to 4521. Installed BP valve, removed BOP, installed 10" 5000 psi x 6" 5000 psi tbg spool. Installed BOP. Removed BP valve. Tested BOP to 3000 psi. Started running prod eqmt.

8/28: RD compl rig. Ran 10' prod tube w/knock-out plug, seal assembly, on-off tool, 3 jts 2-7/8" EUE 8rd tbg, Camco KBM mandrel w/dummy, 242 jts 2-7/8" tbg, KBM mandrel w/dummy, 177 jts tbg w/8' sub below top jt and spaced out. Displaced annulus w/inhib wtr. Displaced tbg w/2% SW. Landed tbg w/1000# set-down wt. Press'd tbg to 7500 psi for 1 hr, OK. Installed BP valve, removed BOP, installed 10,000 psi tree, removed BP valve and tested tree to 10,500 psi. Released rig @ 2:30 AM,  
8/28. AUG 28 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. RD&MO Western Oilwell Service. Tbg design: Baker on-off tool @ 12,990, Camco KBMG mandrel w/dummy @ 12,894, Camco mandrel w/dummy @ 5474. Both ends of all tbg collars doped w/Baker TBL seal. RU Camco and knocked out tbg plug. RD Camco. (RDUFA) AUG 29 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. (RRD 8/29/72) Perforating. TP 4875 psi. MI&RU McC on 8/30. Perf'd 1 hole each w/ 2" magnetic decentralizer steel tube carrier DP sidewinder gun using JRC charges: First run: 16,887, 16,817, 16,809, 16,785, 16,746, 16,709, 16,650, 16,650, 16,613, 16,595, 16,543, 16,516, 16,496, 16,490, 16,407. Press from zero to 530 psi. Second run: 16,342, 16,134, 16,021, 16,003, 15,945, 15,939. Press from 530 to 450 psi, to vac w/tools out of hole. Third run: 15,876, 15,742, 15,721. Press from 690 to 1060, to 3470 w/tools in lubricator. Fourth run mis-fired. Closed well in @ 6 PM. TP 4260 psi. AUG 31 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. Prep to AT. 7 AM TP 4830 psi. Perf'd following in five runs: First run: 15,700, 15,568, 15,453, 15,356, 15,328, 15,053, 14,993, 14,854, 14,839, 14,779, 14,748. Press from 4280 to 4310 psi. Second run: 14,703, 14,586, 14,575, 14,453, 14,436, 14,423, 14,249, 14,194, 14,136, 14,044, 14,030, 14,024. Press from 4300 to 4350 psi. Third run: 14,005, 13,941, 13,806, 13,794, 13,769, 13,752, 13,738. Press 4350 psi. Fourth run: 14,014, 13,950, 13,815, 13,803, 13,778. Press from 4420 to 4440 psi. Fifth run: 13,761, 13,747, 13,649, 13,630, 13,530, 13,457. Press from 4530 to 4650 psi. RD McC. SEP 1 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012.  
9/2: Prep to flow well. TP 4450 psi. RU B-J and AT gross perfs from 13,457-16,887 w/35,000 gal 15% HCl w/seventy-seven 1.4 gravity 7/8" ball sealers evenly distributed throughout acid. Each 1000 gal acid contained 20# G-5, 3 gal C-15, 3# G-7 and 3 gal J-22. Flushed w/7000 gal FW w/each 1000 gal containing 165# NaCl and 20# G-5. Press, rates and information listed below are estimates due to insignificant measuring eqmt and pumping eqmt on location: Max press 10,000 psi, avg 9000 psi, min 8100 psi. Max rate 11 B/M, avg 6 B/M, min 1/2 B/M. ISIP 6300 psi, decr to 6100 in 15 min, to 5850 psi in 30 min, to 5600 psi in 45 min. Good ball action w/approx 52 to 64 balls on fm and 600 to 700 bbls acid. With 70 bbls flush remaining, SD. Bled back 3 bbls. Changed recorders. Rate before 1/2 B/M, w/remainder of flush pumped @ approx 6 B/M. Job complete 2:30 PM. RD&MO B-J.

9/3: Flowing. Opened well @ 8 AM. TP 4525 psi. Opened to heater treater on 64/64" chk, w/well flowing wtr, oil and mud. Emulsion too tight to treat. Dumped to pit for 5 hrs on 64/64" chk w/TP from 1400 to 1100 psi. Turned to tank battery. On 17-hr test, flowed 2113 BO, 51 BW and 1190 MCF gas on 18/64" chk, w/TP varying from 3040 to 3100 psi.

9/4: On 24-hr test, flowed 2647 BO, 151 BW and 1687 MCF gas on 18/64" chk w/2450 psi FTP and 70 psi CP.

9/5: On 24-hr test, flowed 2572 BO, 150 BW and 1740 MCF gas on 18/64" chk w/2050 psi FTP and 75 psi CP. SEP 5 1972

GDR=CIT

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. Flowing. On 16-hr test, flowed 1668 BO, 60 BW and 1000 MCF gas on 20/64" chk w/1800 psi FTP and 70 psi CP. SEP 6 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. SI for BHP. On 10-hr test, flowed 776 BO,  
no wtr and 750 MCF gas on 20/64" chk w/2350-4000 psi  
FTP and 75 psi CP. SEP 7 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. SI for BHP. SEP 8 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012.  
9/9 and 10: SI for BHP. SEP 11 1972  
9/11: SI.

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. Flowing. On 18-hr test, flowed 1747 BO,  
43 BW and 1433 MCF gas on 18/64" chk w/3000 psi FTP and  
90 psi CP. SEP 12 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 22-hr test, flowed  
2288 BO, 78 BW and 1563 MCF gas on 22/64" chk w/1900  
psi FTP and zero CP. Correction to 8/29/72 report SEP 13 1972  
Baker on-off tool set @ 12,964 instead of 12,990 and  
Camco KBMG mandrel w/dummy @ 12,874 instead of 12,894.

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 10-hr test, well  
flowed 1378 BO, 33 BW and 850 MCF gas on 22/64" chk w/  
2600 psi FTP and 1200 psi CP. Checked wax. SEP 14 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. SI - no production. SEP 15 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On various tests,  
flowed as follows: SEP 18 1972

| Date | Hrs | BO   | BW | MCF Gas | Chk       | FTP  | CP   |
|------|-----|------|----|---------|-----------|------|------|
| 9/16 | 14  | 1634 | 37 | 966     | 20/64"    | 2150 | 1750 |
| 9/17 | 17  | 1657 | 10 | 1327    | 20-14/64" | 2350 | 90   |
| 9/18 | 24  | 2014 | 82 | 1540    | 22/64"    | 1400 | 90   |

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
2157 BO, 96 BW and 970 MCF gas on 30/64" chk w/800 psi  
FTP and 90 psi CP. SEP 19 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
963 BO, 21 BW and 372 MCF gas on 10/64" chk w/2250 psi  
FTP and 90 psi CP. SEP 20 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
633 BO, 2 BW and 188 MCF gas on 10/64" chk w/2400 psi  
FTP and zero CP. SEP 21 1972  
GOR = 297

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner at 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test,  
1710 BO, 2 BW, 1071 MCF gas on 26/64" chk w/1000  
FTP, 100 CP. SEP 22 1972  
GOR = 324

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr tests, flowed  
as follows: SEP 25 1972

| Date | BO   | BW | MCF Gas | Chk    | FTP | CP |
|------|------|----|---------|--------|-----|----|
| 9/23 | 2042 | 83 | 1044    | 34/64" | 500 | 90 |
| 9/24 | 1644 | 67 | 1006    | 26/64" | 550 | 90 |
| 9/25 | 1398 | 54 | 1781    | 30/64" | 500 | 90 |

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 1436 BO, 47 BW and 1781 MCF gas on 30/64" chk  
w/500 psi FTP and 100 psi CP. SEP 26 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr tests, well  
flowed as follows:

| Date | BO   | BW | MCF Gas | Chk    | FTP | CP  |       |      |
|------|------|----|---------|--------|-----|-----|-------|------|
| 10/7 | 1132 | 28 | 437     | 32/64" | 250 | 110 |       |      |
| 10/8 | 1035 | 34 | 571     | 32/64" | 300 | 120 | OCT 9 | 1972 |
| 10/9 | 1165 | 30 | 614     | 32/64" | 300 | 120 |       |      |

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 944 BO, 27 BW and 530 MCF gas on 32/64" chk w/  
300 psi FTP and 120 psi CP. OCT 10 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 819 BO, 40 BW and 471 MCF gas on 32/64" chk w/  
300 psi FTP and 120 psi CP. OCT 11 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
690 BO, 30 BW and 504 MCF gas on 32/64" chk w/300 psi  
FTP and 110 psi CP. OCT 12 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 938 BO, 22 BW and 369 MCF gas on 34/64" chk w/100  
psi FTP and 110 psi CP. OCT 13 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On various tests,  
well flowed as follows: OCT 16 1972

| Date  | Hrs | BO  | BW | MCF Gas | Chk    | FTP | CP  |
|-------|-----|-----|----|---------|--------|-----|-----|
| 10/14 | 21  | 650 | 17 | 443     | 34/64" | 300 | 125 |
| 10/15 | 24  | 594 | 15 | 420     | 34/64" | 540 | 120 |
| 10/16 | 24  | 875 | 7  | 342     | 34/64" | 565 | 45  |

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
1071 BO, 39 BW, 635 MCF gas on 32/64" chk w/300 psi FTP  
and 150 psi CP. OCT 17 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)  
17,012' wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 20-hr test, flowed  
874 BO, 24 BW and 499 MCF gas on 32/64" chk w/250 psi  
FTP and 130 psi CP. OCT 18 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
1850 BO, 31 BW and 901 MCF gas on 30/64" chk w/500 psi  
FTP and 100 psi CP. SEP 27 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
1624 BO, 55 BW and 896 MCF gas on 30/64" chk w/550 psi  
FTP and 100 psi CP. SEP 28 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 1721 BO, 34 BW and 922 MCF gas on 30/64" chk  
w/550 psi FTP and 100 psi CP. SEP 29 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On various tests, well  
flowed as follows: OCT 2 1972

| Date | Hrs | BO   | BW | MCF Gas | Chk    | FTP | CP  |
|------|-----|------|----|---------|--------|-----|-----|
| 9/30 | 21  | 1385 | 8  | 885     | 30/64" | 550 | 100 |
| 10/1 | 24  | 1387 | 34 | 881     | 30/64" | 475 | 100 |
| 10/2 | 24  | 1329 | 38 | 683     | 30/64" | 400 | 110 |

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 1325 BO, 31 BW and 717 MCF gas on 32/64" chk w/  
400 psi FTP and 110 psi CP. OCT 3 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 1542 BO, 12 BW and 785 MCF gas on 32/64" chk  
w/400 psi FTP and 112 psi CP. OCT 4 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 23-hr test, well  
flowed 1413 BO, 38 BW and 751 MCF gas on 32/64" chk w/  
450 psi FTP and 110 psi CP. OCT 5 1972

Shell-Chevron-Tenneco  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, well  
flowed 1330 BO, 34 BW and 753 MCF gas on 32/64" chk w/  
300 psi FTP and 110 psi CP. OCT 6 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
1089 BO, 21 BW and 599 MCF gas on 32/64" chk w/275 psi  
FTP and 130 psi CP. OCT 1 9 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,996. Flowing. On 24-hr test, flowed  
943 BO, 22 BW and 599 MCF gas on 32/64" chk w/300 psi  
FTP and 140 psi CP. OCT 2 0 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,892.

10/21: Flowing. On 12-hr test, flowed 526 BO, 8 BW  
and 298 MCF gas on 17/64" chk w/750 psi FTP and 140  
psi CP. RU and ran WL full gauge ring to PBTD @ 16,892.  
RD WL. MI&RU Schl for prod log. Had three misruns.  
Tool working OK for 4th run - made correlation runs.

Opened well to stabilize. Pumper closed master valve,  
cutting line, leaving tools and 13,418' of line in hole.

10/22: SI. On 2-hr test, flowed 43 BO and no wtr.

10/23: SI. OCT 2 3 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,892. SI. MI&RU Western Oilwell  
Service rig #6 on 10/23. MI&RU OWP and ran in hole w/  
2-21/64" OD gauge ring. Located top of Schl line @  
4135'. Ran 7/8" spear w/sixteen 1/4" barbs, using  
mech and hyd jars, 8' sinker bars and collar locator.  
Latched into fish @ 4136 and pulled out of hole, rec  
13,489' of Schl WL and 30' of tools including full  
bore spinner. RD and released OWP. Released Western  
@ 8 PM, 10/23. OCT 2 4 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,892. SI OCT 2 5 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

(D)

17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,892. SI OCT 2 6 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,892. Flowing. On 12-hr test, flowed  
1037 BO, 26 BW and 529 MCF gas on 34/64" chk w/420 psi  
FTP and 180 psi CP. OCT 27 1972

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(D)  
17,012' Wasatch Test  
5½" liner @ 17,010'

TD 17,012. PB 16,892. SI for BHP. OIL WELL COMPLETE.  
On 14-hr test ending 10/28/72, flowed 901 BO, 12 BW and  
680 MCF gas on 34/64" chk w/350 psi FTP and 170 psi CP  
from the following Wasatch-No. Horn Transition perfs:  
13,457, 13,530, 13,630, 13,649, 13,738, 13,747, 13,752,  
13,761, 13,769, 13,778, 13,794, 13,803, 13,806, 13,815,  
13,941, 14,950, 14,005, 14,014, 14,024, 14,030, 14,044,  
14,136, 14,194, 14,249, 14,423, 14,436, 14,453, 14,575,  
14,586, 14,703, 14,748, 14,779, 14,839, 14,854, 14,993,  
15,053, 15,328, 15,356, 15,453, 15,568, 15,700, 15,721,  
15,742, 15,876, 15,939, 15,945, 16,003, 16,021, 16,134,  
16,342, 16,407, 16,490, 16,496, 16,516, 16,543, 16,595,  
16,613, 16,650, 16,709, 16,746, 16,785, 16,809, 16,817,  
16,887.

Elev: 6594 GL, 6618 KB

Oil Gravity: 42.8° API @ 60°F.

Test date: 10/27/72. Initial prod date: 9/2/72

|           |                          |                  |
|-----------|--------------------------|------------------|
| Log tops: | TGR-3                    | 10,850 (-4232)   |
|           | UPPER WASATCH TRANSITION | 12,310 (-5692)   |
|           | LOWER WASATCH TRANSITION | 14,930 (-8312)   |
|           | FLAGSTAFF                | 15,675 (-9057)   |
|           | NORTH HORN TRANSITION    | 16,700 (-10,082) |

This well was an exploratory stepout which extends  
prod approx two miles north from present limits.

FINAL REPORT. OCT 30 1972

CASING AND CEMENTING

FIELD ALTAMONT WELL CHATWIN 1-21A4 KB TO CHF 25'

Shoe jt started in hole 5-16-72

Ran 313 jts 39# S-95 LT&C & ST&C 7 5/8" csg to 13,368'

| <u>JTS</u> | <u>WT</u>               | <u>GRADE</u> | <u>ST&amp;C<br/>LT&amp;C</u> | <u>NEW</u> | <u>FEET</u> | <u>FROM</u> | <u>TO</u> |
|------------|-------------------------|--------------|------------------------------|------------|-------------|-------------|-----------|
|            | KB to cut Jt            |              |                              |            |             |             | 25.00     |
| 1 pc       | 39#                     | S-95         | LT&C                         | X          | 6.96        | 25.00       | 31.96     |
| 159        | 39#                     | S-95         | LT&C                         | X          | 7098.85     | 31.96       | 7130.81   |
| 140        | 39#                     | S-95         | ST&C                         | X          | 5720.83     | 7,130.81    | 12,851.64 |
| 1          | 39#                     | S-95         |                              | X          | 18.82       | 12,851.64   | 12,870.46 |
| 10         | 39#                     | S-95         |                              | X          | 398.78      | 12,870.46   | 13,269.24 |
|            | Halliburton fill collar |              |                              |            | 2.40        | 13,269.24   | 13,271.64 |
| 2          | 39#                     | S-95         |                              | X          | 96.92       | 13,271.64   | 13,368.56 |
|            | Halliburton fill shoe   |              |                              |            | 2.04        | 13,368.56   | 13,370.60 |

313 jts (Total)

Collar at 13,269

Shoe at 13,368

No. Make and Type:

6 B & W centralizers

Cementing:

Reciprocated and circ 1½ hrs. With 30 bbls water ahead, cemented through shoe at 13,368' w/680 sx (12.4 ppg) 65-35 poz, 6% gel, and 0.3% D-13 and 200 sx (15.9 ppg) Class "G", 10% salt, and .3% D-8. Plug down 7:45 PM 5-16-72. Press to 2000 psi.

**CASING AND CEMENTING**

FIELD ALTAMONT WELL CHATWIN 1-21A4 KB TO CHF 25'

Shoe jt started in hole 2-29-72

Ran 47 +1 pc 40.5# K-55 8rd ST&C 10 3/4" csg to 1988'

| <u>JTS</u> | <u>WT</u> | <u>GRADE</u>                 | <u>ST&amp;C</u> | <u>NEW</u> | <u>FEET</u> | <u>FROM</u> | <u>TO</u> |
|------------|-----------|------------------------------|-----------------|------------|-------------|-------------|-----------|
|            |           | Halliburton guide shoe       |                 |            | 1.05        | 1988.00     | 1986.95   |
| 2          | 40.5#     | K-55                         | X               | X          | 86.96       | 1986.95     | 1899.99   |
|            |           | Halliburton Diff fill collar |                 |            | 2.05        | 1899.99     | 1897.94   |
| 45         | 40.5#     | K-55                         | X               | X          | 1865.48     | 1897.94     | 32.46     |
| 1 pc       | 40.5#     | K-55                         | X               | X          | 7.46        | 32.46       | 25.00     |

47 +1 pc Total

Float collar at 1899'

Shoe at 1988'

No. Make and Type:

6 centralizers

Cementing:

Reciprocated and circ 1 hr. With 20 bbls water ahead, cemented through shoe at 1988' w/1200 sx 65:35 poz, 6% gel, and 2% CaCl<sub>2</sub> (12.4 ppg) and 200 sx Class "G", 2% CaCl<sub>2</sub> (15.8 ppg). Displaced w/185.5 EW. Full returns throughout. Plug down 3:45 PM 2/29.



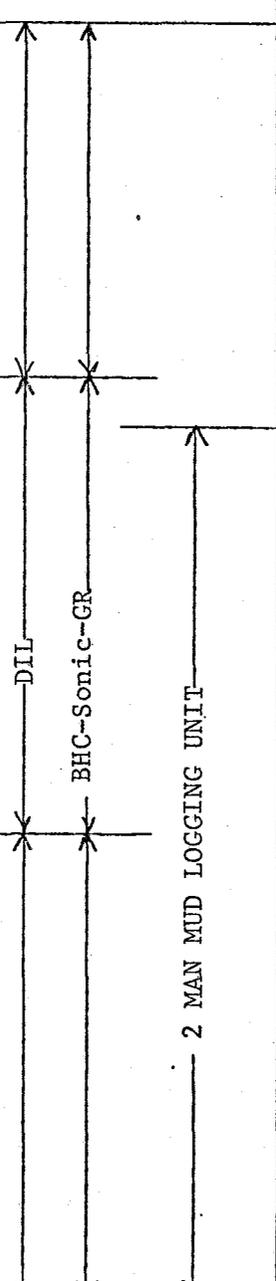
DRILLING WELL PROGNOSIS

WELL NAME Chatwin 1-21A4  
 TYPE WELL Development  
 FIELD/AREA Altamont

APPROX. LOCATION (SUBJECT TO SURVEY) NE<sup>1</sup>/<sub>4</sub> Section 21-T1S-R4W, Duchesne County, Utah

EST. G. L. ELEVATION 6480' PROJECTED TD 15,300' OBJECTIVE Wasatch

| HOLE SIZE                        | CASING PROGRAM                        | LOGGING PROGRAMS | MAX DEV.      | DEPTHS AND FORMATION TOPS | SPECIAL INSTRUCTIONS   |  |  |
|----------------------------------|---------------------------------------|------------------|---------------|---------------------------|--|--|--|
| 26"                              | 20"                                   |                  | ↑             | 30'                       | SAMPLES:<br>30' from surface to 7000'<br>10' from 7000' to TD                                |  |  |
| 17 <sup>1</sup> / <sub>2</sub> " | 13 3/8"                               |                  |               | 300'                      |  |  |  |
| 12 <sup>1</sup> / <sub>4</sub> " | 9 5/8"                                |                  | 1° per 1,000' |                           | CORES:<br>none<br><br>DST'S:<br>1 : between 7800' and 9100'<br>1 : between 9100' and 12,100' |  |  |
|                                  | 6,900'                                |                  |               | TGR <sub>1</sub> 6400'    |  | DEVIATION CONTROL<br>1° per 1000'<br>dogleg severity not to exceed 1 <sup>1</sup> / <sub>2</sub> °<br>in any 100' interval |  |
|                                  |                                       |                  |               | TGR <sub>2</sub> 9100'    |  |  |  |
| 8 5/8"                           | 7 5/8" liner                          |                  |               | TGR <sub>3</sub> 10,600'  |  |  | CEMENT<br>See casing and cementing prognoses |
|                                  | 12,600                                |                  |               | Wasatch Top 12,100'       |  |  |  |
|                                  |                                       |                  | 12,300'       |                           |  |  |  |
|                                  |                                       |                  | red beds      |                           |  |  |  |
|                                  |                                       |                  |               | 13,700'                   |  |  |  |
| 5 <sup>1</sup> / <sub>2</sub> "  | 5 <sup>1</sup> / <sub>2</sub> " liner |                  |               | Wasatch Bottom            |  |  |  |
|                                  |                                       |                  |               | 15,100'                   |  |  |  |
|                                  |                                       |                  |               | TD 15,300'                |  |  |  |



ORIGINATOR: Reiner DATE 11/11/71

ENGINEERING APPROVAL:  
 PETROLEUM: [Signature]  
 OPERATIONS: [Signature]

OPERATIONS APPROVAL:  
[Signature]  
 DIV. DRILLING SUPT.

PI

STATE OF UTAH

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

**OIL & GAS CONSERVATION COMMISSION**

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

|   |  |
|---|--|
| <p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR<br/>Shell Oil Company</p> <p>3. ADDRESS OF OPERATOR<br/>1700 Broadway, Denver, Colorado 80202</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)<br/>At surface<br/>2940' FSL and 2462' FEL Section 21</p> <p>14. PERMIT NO.<br/>43-013-30101</p> | <p>5. LEASE DESIGNATION AND SERIAL NO.<br/>Patented</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME<br/>Chatwin</p> <p>9. WELL NO.<br/>1-21A4</p> <p>10. FIELD AND POOL, OR WILDCAT<br/>Altamont</p> <p>11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA<br/>SW/4 NE/4 Section 21-T1S-R4W</p> <p>12. COUNTY OR PARISH<br/>Duchesne</p> <p>13. STATE<br/>Utah</p> <p>15. ELEVATIONS (Show whether DF, RT, OR, etc.)<br/>6594 GL, 6618 KB</p> |
|---|--|

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO:                      |   | SUBSEQUENT REPORT OF:   |  |
|--|---|---|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/>                           | REPAIRING WELL <input type="checkbox"/>  |
| FRACTURE TREAT <input type="checkbox"/>      | MULTIPLE COMPLETE <input type="checkbox"/>    | FRACTURE TREATMENT <input type="checkbox"/>                       | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/>    | ABANDON* <input type="checkbox"/>             | SHOOTING OR ACIDIZING <input type="checkbox"/>                    | ABANDONMENT* <input type="checkbox"/>    |
| REPAIR WELL <input type="checkbox"/>         | CHANGE PLANS <input type="checkbox"/>         | (Other) <u>Production Log</u> <input checked="" type="checkbox"/> |  |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

To document files, a production log has been run on above-named well. Copy available in Operator's files. Attached is a copy of the report indicating log being run.

cc: USGS - Salt Lake City, w/attachment

18. I hereby certify that the foregoing is true and correct

SIGNED T.S. Mize TITLE Division Operations Engr. DATE 11/15/74

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPPLICATE\*  
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

|  |   |  |
|--|---|--|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>   |   | 5. LEASE DESIGNATION AND SERIAL NO.<br>Patented                                  |
| 2. NAME OF OPERATOR<br>Shell Oil Company   |   | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME   |
| 3. ADDRESS OF OPERATOR<br>1700 Broadway, Denver, Colorado 80202  |   | 7. UNIT AGREEMENT NAME   |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)<br>At surface<br>2940' FSL & 2462' FEL Section 21 |   | 8. FARM OR LEASE NAME<br>Chatwin   |
| 14. PERMIT NO.   | 15. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>6618 KB | 9. WELL NO.<br>1-21A4  |
|  |   | 10. FIELD AND POOL, OR WILDCAT<br>Altamont                                       |
|  |   | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>SW/4 NE/4 Section 21-T1S-R4W |
|  |   | 12. COUNTY OR PARISH<br>Duchesne   |
|  |   | 13. STATE<br>Utah  |

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| TEST WATER SHUT-OFF <input type="checkbox"/>         | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/>                   | REPAIRING WELL <input type="checkbox"/>  |
| FRACTURE TREAT <input type="checkbox"/>              | MULTIPLE COMPLETE <input type="checkbox"/>    | FRACTURE TREATMENT <input type="checkbox"/>               | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input checked="" type="checkbox"/> | ABANDON* <input type="checkbox"/>             | SHOOTING OR ACIDIZING <input checked="" type="checkbox"/> | ABANDONMENT* <input type="checkbox"/>    |
| REPAIR WELL <input type="checkbox"/>                 | CHANGE PLANS <input type="checkbox"/>         | (Other) <input type="checkbox"/>                          | (Other) <input type="checkbox"/>         |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

See attachment

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING

DATE: Sept. 30, 1976

BY: P. L. Ansell

18. I hereby certify that the foregoing is true and correct

SIGNED J. W. Linnell TITLE Div. Oper. Engr. DATE 9/24/76

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

cc: USGS w/attachment

ACED TREAT

SHELL-CHEVRON-TENNECO

LEASE CHATWIN  
DIVISION WESTERN  
COUNTY DUCHESNE

ALTAMONT  
WELL NO. 1-21A4  
ELEV 6618 KB  
STATE UTAH

FROM: 9/3 - 9/24/76

UTAH

ALTAMONT

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

"FR" TD 17,012. PB 16,892. AFE #524477 provides funds to AT. Ran paraffin tools to 10,000; well not flw'g. Hot oiler pmp'd 3 bbls diesel down tbg; tbg plug'd. Max press 4500 psi. BJ pmp'd 60 bbls diesel @ 3000 psi @ 2 B/M. ISIP 1500 psi. Ran base temp log from 12,900-16,951. Installed 10,000# tree. SD for night. **SEP 03 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. AT perf'd interval 13,457-16,887 (64 holes) as per prog. Max TP 9700 psi, min 5500, avg 8800. Max rate 15 B/M, min 7, avg 11. ISIP 6500 psi, 5 mins 5800, 10 mins 5700, 15 mins 5600, Final 4700. OWP ran temp log from 12,900-16,951; zone took trtmt. Ran GR tracer; indicated zone took most of trtmt @ btm. Install'd 10,000# tree. Turned over to prod. **SEP 07 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. Backflwd well to pit; did not prod any oil. Backed down w/100 bbls prod wtr foll'd by 40 bbls diesel. Ran BHPS. **SEP 08 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. Run'g BHPS.

**SEP 09 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. SI.

**SEP 10 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. 9/10 Pulled BHPB. SITP 1200. Opened well to bty; well died in 15 mins. 9/11 MI&RU 1" Nowsco CTU & jetted on well. Well flw'g; turned over to prod. **SEP 13 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 223 BO, 251 BW, 79 MCF gas w/50 psi. **SEP 14 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 147 BO, 111 BW, 54 MCF gas w/50 psi. **SEP 15 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 133 BO, 94 BW, 57 MCF gas w/100 psi.

**SEP 16 1976**

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 97 BO, 95 BW,  
65 MCF gas w/100 psi.

SEP 17 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On various tests, prod:  

| <u>Rept Date</u> | <u>Hrs</u> | <u>BO</u> | <u>BW</u> | <u>MCF Gas</u> | <u>Press</u> |
|------------------|------------|-----------|-----------|----------------|--------------|
| <u>9/18:</u>     | 24         | 120       | 114       | 69             | 50           |
| <u>9/19:</u>     | 24         | 134       | 111       | 69             | 100          |
| <u>9/20:</u>     | 24         | 81        | 74        | 72             | 100          |

SEP 20 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 91 BO, 72 BW,  
57 MCF gas w/100 psi.

SEP 21 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 114 BO, 100 BW,  
58 MCF gas w/100 psi.

SEP 22 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. On 24-hr test, prod 87 BO, 64 BW,  
69 MCF gas w/50 psi.

SEP 23 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(AT)

TD 17,012. PB 16,892. AT COMPLETE. On 24-hr test prior  
to work, prod 65 BO, 10 BW, 107 MCF gas w/500 psi. On  
24-hr test dated 9/24/76 after work, prod 98 BO, 59 BW,  
58 MCF gas w/50 psi.  
FINAL REPORT

SEP 24 1976

PRODUCTION LOG WELL

ALTAMONT

SHELL OIL COMPANY

LEASE CHATWIN

WELL NO. 1-21A4

DIVISION WESTERN

ELEV 6618 KB

COUNTY DUCHESNE

STATE UTAH

11/7/74 - 11/11/74

LOCATION SW/4 NE/4 SECTION 21-T1S-R4W

UTAH

ALTAMONT

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Run prod log)

"FR" TD 17,012. PB 16,892. Prep to log. AFE #411487 provides funds to production log well. On 11/6/74, cut wax, flwd well cln and backed well down w/diesel. Made dummy run w/no drag. Ran spinner to btm - tool failed. Pulled spinner tool and ran new spinner, working OK. Well SI total of 13 hrs. Opened well at 10 PM to stabilize. NOV 7 1974

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Run prod log)

TD 17,012. PB 16,892. No report. NOV 8 1974

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Run prod log)

TD 17,012. PB 16,892.  
11/8: Flowing. Ran gradiometer log, temp log and full bore spinner survey. Completed logging at 6 PM, 11/7. Returned well to production. NOV 11 1974  
FINAL REPORT.

K

PI

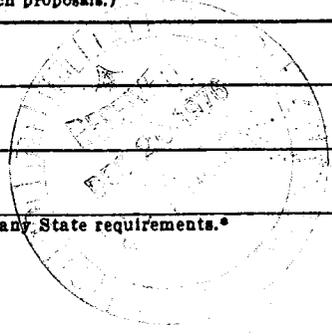
STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPPLICATE\*  
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

|   |  |  |
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| 3. ADDRESS OF OPERATOR<br>1700 Broadway, Denver, Colorado 80290   |  | 7. UNIT AGREEMENT NAME   |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*<br>See also space 17 below.)<br>At surface<br>2940' FSL & 2462' FEL Section 21 |  | 8. FARM OR LEASE NAME<br>Chatwin   |
| 14. PERMIT NO.  |  | 9. WELL NO.<br>1-21A4  |
| 15. ELEVATIONS (Show whether DF, RT, OR, etc.)<br>6618 KB   |  | 10. FIELD AND POOL, OR WILDCAT<br>Altamont                                       |
|   |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>SW/4 NE/4 Section 21-T1S-R4W |
|   |  | 12. COUNTY OR PARISH<br>Duchesne   |
|   |  | 13. STATE<br>Utah  |



16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

|  |   |  |  |
|--|---|--|--|
| NOTICE OF INTENTION TO:                            |   | SUBSEQUENT REPORT OF:                                  |  |
| TEST WATER SHUT-OFF <input type="checkbox"/>       | FULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/>                | REPAIRING WELL <input type="checkbox"/>  |
| FRACTURE TREAT <input checked="" type="checkbox"/> | MULTIPLE COMPLETE <input type="checkbox"/>    | FRACTURE TREATMENT <input checked="" type="checkbox"/> | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/>          | ABANDON* <input type="checkbox"/>             | SHOOTING OR ACIDIZING <input type="checkbox"/>         | ABANDONMENT* <input type="checkbox"/>    |
| REPAIR WELL <input type="checkbox"/>               | CHANGE PLANS <input type="checkbox"/>         | (Other) <input type="checkbox"/>                       |  |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE Dec 27, 1976

BY: P. W. Amcull

See attachment

18. I hereby certify that the foregoing is true and correct  
SIGNED J. W. Dannel TITLE Div. Oper. Engr. DATE 12/16/76

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

cc: USGS w/attachment

## FRAC

SHELL-CHEVRON-TENNECO

LEASE CHATWIN

WELL NO. 1-21A4

DIVISION WESTERN

ELEV 6618 KB

COUNTY DUCHESNE

STATE UTAH

FROM: 10/22 - 12/15/76

## ALTAMONT

UTAHALTAMONT

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac)

"FR" TD 17,012. PB 16,892. AFE #524467 provides funds to frac. 10/20 MI&RU Sun & cut wax to 10,000'. Opened well to bty 2 hrs to clean up. Installed 10,000# tree & removed BPV. SI overnight. 10/21 MI&RU BJ & frac'd gross perf'd interval 13,457-16,887 (64 holes) as follows: (1) Pmp'd 100 bbls frh wtr w/2% KC1 & J22, (2) Pmp'd 20 bbls Amber Frac II prepad, (3) Pmp'd 20 bbls Amber Frac II containing 1.5#/gal 20-40 mesh Ucar props & 7 ball sealers evenly spaced & (4) Pmp'd 75 bbls frh wtr w/2% KC1 & J22. Repeated stages 2-4 seven times for a total of 150 bbls Amber Frac II prepad, 160 bbls Amber Frac II containing 10,840# 20-40 Ucar props & 56 ball sealers & 525 bbls 2% KCL spacer. Flushed w/147 bbls 2% KC1 wtr for a total load of 1092 bbls. Max rate 11 B/M, min 2-3, avg 6. Max press 9800 psi, min 7200, avg 9100. ISIP 6400 psi, 5 mins 6000, 10 mins 5950, 15 mins 5880. SI overnight. OCT 22 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac)

TD 17,012. PB 16,892. 10/22 23-hr SITP 3250 psi. MI&RU OWP. Ran temp survey from pkr @ 12,965-14,980. Hit bridge @ 14,980 & could not get thru. Temp @ bridge 20 deg F cooler than base log. RD&MO OWP. Opened well to pit & flwd est 25 bbls load wtr w/FTP to 1300 psi in 1.5 hrs. 10/23 14-hr SITP 1400. Flwd est 15 bbls load wtr/hr for 4.5 hrs on 12/64 chk w/FTP of 200 psi. Tree plug'd. CO top part of tree. SITP 300#. Opened well & FTP to 0 immediately. Cleaned top of tree; plug'g w/material that looked like drlg mud. Pmp'd 5 bbls down tbq. Opened well; died immediately. Est total load rec'd 92 bbls load wtr. 10/24 18-hr SITP 800 psi. Opened well; tree plug'd. CO top half of tree; flwd thick gelled wtr w/tr of oil & gas. Flwd est 50 bbls in 7 hrs. Total rec'd 142 bbls. OCT 25 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac)

TD 17,012. PB 16,892. 17-hr SITP 600. Opened well to pit; FTP to 0 immediately w/some gas on top, then 2 bbls gel & oil w/wax. Flwd est 15 BW (99%+) in 3 hrs on 1" chk. SI well. OCT 26 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac)

TD 17,012. PB 15,398. 18-hr SITP 400 psi. Installed 5000# tree. RU Sun & RIH w/sinker bars & jars on slickline. Hit sml bridge @ 14,800. Spudded thru & got to PBTD @ 15,398. RD&MO Sun & SI well overnight. OCT 27 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac)

TD 17,012. PB 15,398. SI; WO Newsco.

OCT 28 1976

|   |  |             |
|---|--|-------------|
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SITP 500 psi; bled to 0. MI&RU Newsco CTU & N2 trk. Inj'd 350 cu ft/min N2. Ran CT to 11,000'. Got some oil, but blew well almost dry. POOH. SD overnight.   | OCT 29 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 01 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 02 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 03 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 04 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 05 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI   | NOV 08 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 09 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac)                          | TD 17,012. PB 15,398. SI.  | NOV 10 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac & Install gas lift equip) | TD 17,012. PB 16,892. AFE #421474 provides funds to equip w/gas lift equip. Pmp'd 30 bbls diesel & hot wtr behind wax cutter to get down tbg. Pmp'd 30 bbls diesel & approx 100 BW down tbg; unable to kill well. SD pmp trk & turned well to pit to bleed off press. Press vary'g from 200-700#. Flwd to pit 2 hrs. SD for night. | NOV 11 1976 |
| Shell-Chevron-Tenneco-Chatwin 1-21A4<br>(Frac & Install gas lift equip) | TD 17,012. PB 16,892. TP 700#; CP 0. Bled press off tbg. Installed 5000# 6" BOP's. Disconnected from pkr & circ'd 200 bbls prod wtr to clean tbg. Pulled 253 jts 2-7/8 tbg. SD for night.  | NOV 12 1976 |

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip) NOV 15 1976

TD 17,012. PB 16,892. 11/12: Bled press. Pulled 84  
jts tbg. Well started flowing. Cir 400 bbls prod wtr &  
killed well. Pulled 85 jts tbg & 10' prod tbg. Installed  
10,000# tree. Circ 200 bbls prod. wtr through csg.  
11/13: Well SI report time w/400# press. Pulled 139 jts  
heat string w/dummy valves. Ran back in hole w/prod tbg  
seal assembly. Knock out plug above 4' sub, mandrel w/valve  
@ 12,850', tbg mandrel w/valve @ 12,200', tbg mandrel  
w/valve @ 11,550', mandrel w/valve @ 10,900' & mandrel  
w/Valve @ 10,250.

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

TD 17,012. PB 16,892. (Correction to 11/13/76 report-  
Should have read Schl knock out plug.) NOV 16 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

TD 17,012. PB 16,892. 11/15: Well had 250# SIP. Ran  
tbg 1 mandrel w/DV @ 9600', 1 mandrel w/DV @ 8950',  
1 mandrel w/DV @ 8200', 1 mandrel w/DV @ 7000', 1 mandrel  
w/DV @ 5300', 1 mandrel w/DV @ 5300'. Released from pkr.  
11/16: Well SJ w/O press. Landed tbg w/14,000# tension.  
Hooked wellhead up to pit, dropped 10' long 1" bar. Well  
blowing gas, no fluids, found fluid level @ 500'.  
Connected well to flowline. NOV 17 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4

TD 17,012. PB 16,892. No report NOV 18 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 23-hr test, prod 0 BO, 48 BW,  
34 MCF gas w/100 psi. NOV 19 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On various tests, prod:  

| Rept Date      | Hrs | BO | BW | MCF Gas | Press |
|----------------|-----|----|----|---------|-------|
| <u>11/19</u> : | SI  |    |    |         |       |
| <u>11/20</u> : | 4   | 0  | 0  | 34      | 100   |
| <u>11/21</u> : | 6   | 0  | 0  | 22      | 0     |

 NOV 22 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, prod 88 BO, 12 BW,  
61 MCF gas w/25 psi. NOV 23 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, prod 0 BO, 0 BW,  
0 MCF gas w/25 psi. NOV 24 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. AFE #421474 provides funds to equip  
w/gas lift equip. 11/24 SITP 600# & 25# on csg; bled press  
off csg. RIH w/WL & set collar stop @ 12,870. Pulled 8  
dummy valves from mandrels & SD. 11/26 Pulled remain'g 3  
dummy valves & ran 11 line valves in mandrels. Pulled  
collar stop.

NOV 29 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. No report; computers down.

NOV 30 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. 11/29 SI. On 22-hr test 11/30,  
gas lifted 33 BO, 0 BW, 19 MCF gas w/1400 psi inj press.

DEC 01 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 76 BO,  
189 BW, 200 MCF gas w/1400 psi inj press.

DEC 02 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 43 BO,  
62 BW, 155 MCF gas w/1370 psi inj press.

DEC 03 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On various tests, gas lifted:

| <u>Rept Date</u> | <u>Hrs</u> | <u>BO</u> | <u>BW</u> | <u>MCF Gas</u> | <u>Inj Press</u> |
|------------------|------------|-----------|-----------|----------------|------------------|
| 12/3:            | 24         | 589       | 243       | 390            | 1400             |
| 12/4:            | 12         | 280       | 114       | 309            | 1370             |
| 12/5:            | 24         | 516       | 204       | 433            | 1340             |

DEC 06 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 641 BO,  
330 BW, 418 MCF gas w/1340 psi inj press.

DEC 07 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 364 BO,  
270 BW, 275 MCF gas w/1340 psi inj press.

DEC 08 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 662 BO,  
267 BW, 400 MCF gas w/1400 psi inj press.

DEC 09 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 440 BO,  
258 BW, 560 MCF gas w/1370 psi inj press.

DEC 10 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On various tests, gas lifted:  

| <u>Rept Date</u> | <u>Hrs</u> | <u>BO</u> | <u>BW</u> | <u>MCF Gas</u> | <u>Inj Press</u> |
|------------------|------------|-----------|-----------|----------------|------------------|
| <u>12/10:</u>    | 24         | 447       | 320       | 600            | 1370             |
| <u>12/11:</u>    | 24         | 421       | 197       | 410            | 1370             |
| <u>12/12:</u>    | 24         | 363       | 333       | 310            | 1370             |

DEC 13 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

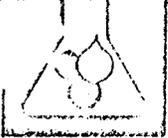
TD 17,012. PB 16,892. On 24-hr test, gas lifted 479 BO,  
328 BW, 683 MCF gas w/1370 psi inj press.

DEC 14 1976

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Frac & Install gas lift  
equip)

TD 17,012. PB 16,892. On 24-hr test 10/19/76 prior to work,  
well flwd 45 BO, 25 BW & 27 MCF gas on 40/64" chk. On 24-hr  
test after work, well prod 479 BO, 328 BW, 662 MCF gas w/5  
MCF inj.  
FINAL REPORT

DEC 15 1976



# LITE RESEARCH LABORATORIES

P O Box 119

Fort Duchesne, Utah 84026

(801) 722-2254

LABORATORY NUMBER W-1346  
 SAMPLE TAKEN \_\_\_\_\_  
 SAMPLE RECEIVED \_\_\_\_\_  
 RESULTS REPORTED \_\_\_\_\_

SAMPLE DESCRIPTION \_\_\_\_\_ FIELD NO. \_\_\_\_\_  
 COMPANY SHELL OIL CO. LEASE \_\_\_\_\_ WELL NO. 1-2134  
 FIELD Chatwin COUNTY \_\_\_\_\_ STATE \_\_\_\_\_ Sec. 21-18-4W  
 SAMPLE TAKEN FROM \_\_\_\_\_  
 PRODUCING FORMATION Wasatch TOP \_\_\_\_\_  
 REMARKS \_\_\_\_\_

SAMPLE TAKEN BY \_\_\_\_\_

### CHEMICAL AND PHYSICAL PROPERTIES

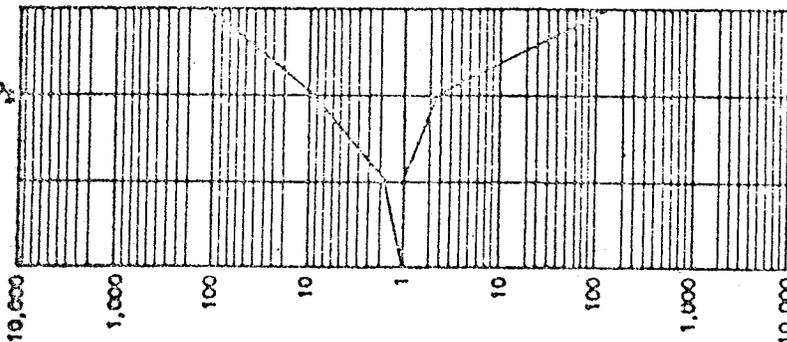
SPECIFIC GRAVITY @60/60° F. 0.9961 pH 8.13 RES. .80 OHM METERS @ 77°F

TOTAL HARDNESS Mg/L as CaCO<sub>3</sub> 153.2 TOTAL ALKALINITY Mg/L as CaCO<sub>3</sub> 588

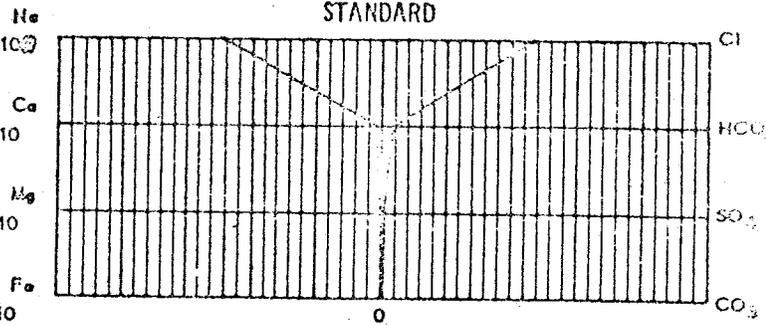
| CONSTITUENT                                 | MILLIGRAMS PER LITER<br>Mg/L. | MILLEQUIVALENTS PER LITER<br>MEQ/L. |       | REMARKS |
|---|-------------------------------|-------------------------------------|-------|---------|
| CALCIUM - Ca ++                             | 48.7                          | 2.44                                |       |         |
| MAGNESIUM - Mg ++                           | 7.3                           | 0.6                                 |       |         |
| SODIUM - Na +                               | 2878.0                        | 125.1                               |       |         |
| BARIUM (INCL. STRONTIUM) - Ba ++            | 7.03                          | 0.1                                 |       |         |
| TOTAL IRON - Fe ++ AND Fe +++               | .66                           | 0.02                                | 128.3 |         |
| BICARBONATE - HCO <sub>3</sub> <sup>-</sup> | 588                           | 9.64                                |       |         |
| CARBONATE - CO <sub>3</sub> <sup>--</sup>   | 0                             | 0                                   |       |         |
| SULFATE - SO <sub>4</sub> <sup>--</sup>     | 84                            | 1.75                                |       |         |
| CHLORIDE - CL <sup>-</sup>                  | 4148.3                        | 116.9                               | 128.3 |         |
| TOTAL DISSOLVED SOLIDS                      | 6880                          |                                     |       |         |

MILLEQUIVALENTS PER LITER

LOGARITHMIC



STANDARD



ANALYST \_\_\_\_\_

CHECKED \_\_\_\_\_

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

|  |  |  |
|--|--|--|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>   |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>Patented                                  |
| 2. NAME OF OPERATOR<br>Shell Oil Company   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME   |
| 3. ADDRESS OF OPERATOR<br>1700 Broadway, Denver, Colorado 80290  |  | 7. UNIT AGREEMENT NAME   |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)<br>At surface<br>2940' FSL & 2462' FEL Section 21 |  | 8. FARM OR LEASE NAME<br>Chatwin   |
| 14. PERMIT NO.   |  | 9. WELL NO.<br>1-21A4  |
| 15. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>6618 KB  |  | 10. FIELD AND POOL, OR WILDCAT<br>Altamont                                       |
|  |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>SW/4 NE/4 Section 21-T1S-R4W |
|  |  | 12. COUNTY OR PARISH<br>Duchesne   |
|  |  | 13. STATE<br>Utah  |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

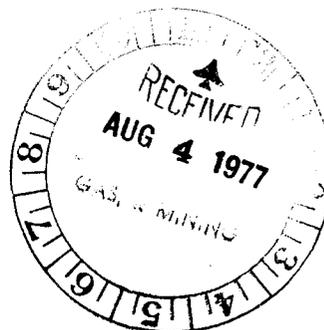
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

See attachment

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING

DATE: August 8, 1977

BY: P. H. Arnold



18. I hereby certify that the foregoing is true and correct

SIGNED

P. Plautz

TITLE

Div. Opers. Engr.

DATE

8/3/77

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

cc: USGS w/attachment

PERF, ACID TREAT & RUN GAS MANDRELS

SHELL-CHEVRON-TENNECO

FROM: 7/5 - 8/2/77

|          |          |          |          |
|----------|----------|----------|----------|
| LEASE    | CHATWIN  | WELL NO. | ALTAMONT |
| DIVISION | WESTERN  | ELEV     | 1-21A4   |
| COUNTY   | DUCHESNE | STATE    | 6618 KB  |
|          |          |          | UTAH     |

UTAH  
ALTAMONT

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT & run gas  
mndrls)

"FR" TD 17,012. PB 16,892. AFE #526777 provides funds to MO pkr @ 12,965, perf 109 new holes, AT, run full bore pkr & gas mandrels & return to prod. 7/2 MI&RU WOW #17. 7/5 Prep to kill well & install BOP.

JUL 05 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT & run gas  
mndrls)

TD 17,012. PB 16,892. Pmp'd 60 bbls prod wtr down tbg & tbg on vac. Removed tree & installed & tested BOP's. Pmp'd 200 bbls prod wtr down annulus. PU tbg off donut & unlatched from Mdl D pkr. POOH & LD Camco mndrls. SI well overnight.

JUL 06 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT & run gas  
mndrls)

TD 17,012. PB 16,892. Installed 10" BOP. Ran Bkr 7" mill & pkr picker & milled out pkr @ 12,965. Started POOH. Pulled 3 jts tbg & pkr; hung up @ 12,875. SI well overnight.

JUL 07 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT & run gas  
mndrls)

TD 17,012. PB 16,892. Milled on pkr 1/2 hrs & started out; pkr drug @ every 7-5/8 collar. Fin'd POOH & LD pkr & pkr picker. RIH w/4-1/2" mill. PU 30 jts 2-7/8 tbg & SI well overnight.

JUL 08 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. 7/8 Fin'd PU tbg. Ran 4-1/2" mill on tbg to 15,570. RU power swivel & milled & washed down 130' in 4 hrs. Returns included frac balls & scale. 7/9 Spt'd 10 bbls 15% HCl dbl-inh'd on btm of tbg. Bull-headed down csg & waited on acid 1 hr. Ran mill to 16,660 & hit 3 bridges, but fell thru. Hit hard bridge @ 16,660. Milled & reverse circ'd 1 hr & made almost nothing. Tbg plug'd; could not pmp out plug. Started POOH; pull'g wet string. Pulled 30 stds 2-7/8 & SI well.

JUL 11 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. Tried to swb; could not get swb below 800'. Pulled tbg (3000') wet. Swb'd down; POOH. LD 3600' 2-7/8 & SI well overnight. Note: tbg plug'd w/glass beads & Schl shear bar.

JUL 12 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. Perf'd as per prog 16,116-14,229 w/3-1/8" OD csg gun. Had no sfc press after perf'g. Ran 7-5/8 OD Bkr Mdl D pkr & set @ 13,000'. SD for night.

JUL 13 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. 12-hr ITP 1100#. Installed 6" BOP. Ran Bkr latch seal assy & latched into pkr w/7000# tension. Pmp'd hot wtr down tbg to remove paraffin. Std valve went to btm (16,650). Press'd 7" annulus to 3000#, ok. Removed 6" BOP & installed 10,000# xmas tree. Press'd tree to 10,000#, ok. Acdz'd perms 14,136-16,900 (64 old & 104 new perms) as per prog w/780 bbls 7-1/2% HCl. Max TP 8900 psi, avg 8500, min 7400. Max rate 12 B/M, avg 10, min 4. ISIP 5500 psi, 5 mins 5400, 10 mins 5250, 15 mins 5100. Flushed w/130 bbls prod wtr. Total load 910 bbls. Used 211 ball sealers. SI well overnight.

JUL 14 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. OWP ran GR tracer log from 16,620-13,000. Log indicated most perms took trtmt. Opened well to pit 1 hr; no flw - tbg on vac. Removed xmas tree, installed BOP & unstung from pkr. Pulled 150 stds tbg. SD for night.

JUL 15 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. 7/15 Pulled tbg & seal assy. Reran Bkr seal assy, 422 jts 2-7/8 tbg & gas mndrls. Stung into Bkr Mdl D pkr @ 13,000' w/5000# tension. Removed BOP & installed 5000# tree. Released rig 5 p.m. Prep to start gas lifting.

JUL 18 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. On 22-hr test, gas lifted 79 BO, 146 BW, 360 MCF gas w/1300 psi inj press.

JUL 19 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 83 BO, 447 BW, 810 MCF gas w/1300 psi inj press.

JUL 20 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 53 BO, 201 BW, 560 MCF gas w/1340 psi inj press.

JUL 21 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. On 17-hr test, gas lifted 63 BO, 236 BW, 520 MCF gas w/1300 psi inj press.

JUL 22 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 118 BO, 583 BW, 1438 MCF gas w/1300 psi inj press.

JUL 25 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mndrls)

TD 17,012. PB 16,892. On various tests, gas lifted:

| Rept Date | Hrs | BO | BW  | MCF Gas | Inj Press |
|-----------|-----|----|-----|---------|-----------|
| 7/22      | 24  | 65 | 318 | 657     | 1300      |
| 7/23      | 24  | 94 | 321 | 1009    | 1300      |
| 7/24      | 24  | 81 | 254 | 870     | 1300      |

JUL 26 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mdrils)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 132 BO,  
483 BW, 1482 MCF gas w/1300 psi inj press.

JUL 27 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mdrils)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 133 BO,  
324 BW, 1110 MCF gas w/1300 psi inj press.

JUL 28 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mdrils)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 106 BO,  
274 BW, 900 MCF gas w/1300 psi inj press.

JUL 29 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mdrils)

TD 17,012. PB 16,892. On 24-hr test, gas lifted 89 BO,  
221 BW, 760 MCF gas w/1300 psi inj press.

AUG 01 1977

Shell-Chevron-Tenneco-  
Chatwin 1-21A4  
(Perf, AT, run gas  
mdrils)

TD 17,012. PB 16,892. Prior to work, well prod 316 BO,  
341 BW & 1100 MCF gas per day. After work, well prod an  
avg of 115 BO, 278 BW & 914 MCF gas per day.  
FINAL REPORT

AUG 02 1977

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPPLICATE\*  
(Other instructions on reverse side)

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

|  |   |  |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
|--|---|--|--|-----------------------|--|--|---|---|---|---|--|---|--|--|-----------------------------------|--|---------------------------------------|--------------------------------------|---------------------------------------|----------------------------------|--|--|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>   |   | 5. LEASE DESIGNATION AND SERIAL NO.<br><b>PATENTED</b> |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| 2. NAME OF OPERATOR<br><b>Shell Oil Company</b>  |   | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                   |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| 3. ADDRESS OF OPERATOR<br><b>P.O. Box 831 Houston, Tx 77001 ATTN: P.G. GELWING RM #6459 WCK</b>  |   | 7. UNIT AGREEMENT NAME                                 |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)<br>At surface<br><b>2940' FSL + 2462' FEL Sec. 21</b>   |   | 8. FARM OR LEASE NAME<br><b>CHATWIN</b>                |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| 14. PERMIT NO.   | 15. ELEVATIONS (Show whether DF, RT, OR, etc.)<br><b>6618' RG</b> | 9. WELL NO.<br><b>1-21A4</b>                           |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data  |   | 10. FIELD AND POOL, OR WILDCAT<br><b>ALTAMONT</b>      |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
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| NOTICE OF INTENTION TO:  |   | SUBSEQUENT REPORT OF:                                  |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| TEST WATER SHUT-OFF <input type="checkbox"/>   | PULL OR ALTER CASING <input type="checkbox"/>                     | WATER SHUT-OFF <input type="checkbox"/>                | REPAIRING WELL <input type="checkbox"/>  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| FRACTURE TREAT <input type="checkbox"/>  | MULTIPLE COMPLETE <input type="checkbox"/>                        | FRACTURE TREATMENT <input type="checkbox"/>            | ALTERING CASING <input type="checkbox"/> |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| SHOOT OR ACIDIZE <input checked="" type="checkbox"/>   | ABANDON* <input type="checkbox"/>                                 | SHOOTING OR ACIDIZING <input type="checkbox"/>         | ABANDONMENT* <input type="checkbox"/>    |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
| REPAIR WELL <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>                             | (Other) <input type="checkbox"/>                       |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
|  |   | 12. COUNTY OR PARISH<br><b>Duchesne</b>                |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |
|  |   | 13. STATE<br><b>Utah</b>                               |  |                       |  |  |   |   |   |   |  |   |  |  |                                   |  |                                       |                                      |                                       |                                  |  |  |

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

**RECEIVED**  
APR 26 1982

DIVISION OF  
OIL, GAS & MINING

SEE ATTACHED

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**

DATE: 4/27/82

BY: [Signature]

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE DIVISION PRDD. ENGINEER DATE 4-19-82  
**W. F. N. KELLDORF**

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

REMEDIAL PROGNOSIS  
CHATWIN 1-21A4  
SECTION 21, T15, R4W  
ALTAMONT FIELD, UT

Pertinent Data:

Shell's Share: 71.63%

Elevation (KB): 6,618'

Elevation (GL): 6,594'

TD: 17,012'

PBTD: 16,650'

Casing: 10-3/4", 40.5#, K-55 to 1,988'

7-5/8", 39#, S-95 to 13,366'

Liner: 5-1/2", 20# and 23#; S00-95; 13,093'-17,010'

Tubing: 2-7/8", EUE, N-80 to 13,000'

Packer: 7-5/8" Baker Model "D" at 13,000'

Perforations: 13,457'-16,887' (173 holes at 1 JSPF)

Artificial Lift: Gas lift with mandrels at 3,118', 5,561', 7,434', 8,725',  
9,588', 10,145', 10,702', 11,259', 11,786', 12,343', 12,930'

Current Status: 50 BOPD + 175 BWPD + 170 MCFPD gas with 770 MCFPD injection  
gas.

Objective: CO<sub>2</sub> perforate and stimulate the Wasatch.

Procedure:

1. MIRU. Load hole with clean produced water. Remove tree. Install and test BOPE. See Attachment III for Production Engineering recommendation.
2. Pull tubing and lay down GL equipment.
3. RIH and mill out 7-5/8" Baker Model "D" packer at 13,000'.
4. CO 5-1/2" liner to 16,350'±. Take two samples of scale from interval 13,457'/16,200' and send to I. Yung, WCK 6406.
5. Set CIBP at 16,300'± and cap with two± sacks of cement.
6. Rig up perforators with lubricator tested to 3000 psi and perforate as follows (depth reference is CNL dated 8-25-72):
  - a. Perforate from bottom up at 3 JSPF. Use a 3-1/8" O.D. casing gun with DML Densi-Jet XIV (14.0 gram) charges at 120° phasing for depths listed on Attachment I.
  - b. Record and report wellhead pressure before and after each run.
7. a. If well can be controlled with water after perforating, run a 5-1/2" full bore packer on tubing and set at 14,075'±. Test tubing to 6,500 psi.

- b. If well cannot be controlled with water after perforating, lubricate in a 5-1/2" Model "FA-1" packer with Model "B" expendable plug in place and set at 14,075'±. Run in with latch-in seal assembly and latch into packer. Pressure test tubing to 6500 psi. Run in with sinker bars and jars on wireline and knock out expendable plug in packer. Consider flowing well prior to acidizing.
8. Acid treat perms 14,116'-16,203' (137 old and 339 new) with 35,000 gallons of 7½% HCL as follows:
    - a. Pump 1,000 gallons 7½% HCL.
    - b. Pump 4,000 gallons acid, dropping one ball sealer (7/8" RCN with 1.2 S.G.) every 70 gallons.
    - c. Pump 1,000 gallons acid containing 1000# benzoic acid flakes.
    - d. Repeat step (b) six more times and step (c) five more times for a total of seven stages acid and six of diverting material (total 35,000 gallons acid and 400 ball sealers).
    - e. Flush with 110 bbls of clean produced water.
- Notes:
- (1) All acid and flush to contain five gallons G-10/1000 gallons HCL or equivalent for ±70% friction reduction and 1.0# 20-40 mesh RA sand per 1,000 gallons (no RA sand in flush).
  - (2) All acid to contain three gallons C-15/1,000 gallons HCL for four hours exposure at 210°F and the necessary surfactant (tested for compatibility with formation fluids).
  - (3) Maintain 2500 psi surface casing pressure during treatment if possible.
  - (4) Pumping rates: pump at maximum possible without exceeding 6500 psi differential pressure between tubing and annulus.
  - (5) Increase amount of diverting material if necessary to obtain a gradual increase in treating pressure and/or decrease in rate.
  - (6) Record ISIP and shut-in pressure decline for at least 20 minutes.
9. Run RA log from PBTD to 14,000'±.
  10.
    - a. If well flows, release rig and put on production. When well can be controlled with water, move in rig and proceed to step 11.
    - b. If well does not flow, continue with step 11.

11. a. If a 5-1/2" fullbore packer was used in step 7, POOH with tubing and packer. Run and set 5-1/2" CIBP at 14,250'. Pressure test plug to 3000 psi.
- b. If a 5-1/2" Model "FA-1" packer was used in step 7, POOH with tubing and seals. RIH with Model "DR" latching type packer plug and set in packer. Pressure test plug to 3000 psi. Spot one sack of sand on top of packer (at fields discretion).
12. Rig up perforators with lubricator tested to 3000 psi and perforate as follows (depth reference is CNL dated 8-25-72):
  - a. Perforate from bottom up at 3 JSPF. Use a 3-1/8" O.D. casing gun with DML Densi-Jet XIV (14.0 gram) charges at 120° phasing for depths 13,117'-14,201' listed on Attachment II. Use a 4" O.D. casing gun with DML Densi-Jet XIX (19.0 gram) charges at 120° phasing for depths 11,886'-13,072' listed on Attachment II.
  - b. Record and report wellhead pressure before and after each run.
13. a. If well can be controlled with water after perforating, run a 7-5/8" fullbore packer on tubing and set at 11,700'±. Test tubing to 6500 psi.
- b. If well cannot be controlled with water after perforating, lubricate in a 7-5/8" Model "D" packer (with flapper) and set at 11,700'±. Run tubing and latch into packer. Consider flowing well prior to acidizing.
14. Acid treat perms 11,886'-14,201' (21 old and 363 new) with 30,000 gallons of 7½% HCl as follows:
  - a. Pump 1,000 gallons 7½% HCl.
  - b. Pump 4,000 gallons acid, dropping one ball sealer (7/8" RCN with 1.2 S.G.) every 80 gallons.
  - c. Pump 1,000 gallons acid containing 1000# benzoic acid flakes.
  - d. Repeat step (b) five more times and step (c) four more times for a total of six stages acid and five of diverting material (total 30,000 gallons acid and 300 ball sealers).
  - e. Flush with 110 bbls of clean produced water containing 5 gallons Tretolite Xcide 102.

- Notes:
- (1) All acid and flush to contain five gallons G-10/1000 gallons HCl or equivalent for ±70% friction reduction and 1.0# 20-40 mesh RA sand per 1,000 gallons (no RA sand in flush).
  - (2) All acid to contain three gallons C-15/1,000 gallons HCl for four hours exposure at 210°F and the necessary surfactant (tested for compatibility with formation fluids).

- (3) Maintain 2500 psi surface casing pressure during treatment if possible.
- (4) Pumping rates: pump at maximum possible without exceeding 6500 psi differential pressure between tubing and annulus.
- (5) Increase amount of diverting material if necessary to obtain a gradual increase in treating pressure and/or decrease in rate.
- (6) Record ISIP and shut-in pressure decline for at least 20 minutes.

Run RA log from CIBP to 11,600'±.

15. a. If well flows, release rig and put on production. When well can be controlled with water, move in rig and proceed to step 16.
- b. If well does not flow, continue with step 16.
16. a. If a 7-5/8" fullbore packer was used in step 13, POOH with tubing and packer.
- b. If a 7-5/8" Model "D" packer was used in step 13, POOH with tubing and seals. RIH and mill out 7-5/8" Model "D".
17. RIH and mill out CIBP at 14,250'.
18. RIH with tubing, GL equipment, and 7-5/8" packer. Set packer at 11,700'±. Install GL equipment as shown on Attachment IV.
19. Return well to production.
20. Report well tests on morning report until production stabilizes.

WPK  
- 1/22/82  
Requested: P. K. [Signature]  
1/21/82

Approved: [Signature]

Date: 2/12/82

LLL/PKD: SJK

12/18/82

## ATTACHMENT I

Perforation depths for first stage (depth reference is CNL log dated 8/25/72).

|        |        |        |        |
|--------|--------|--------|--------|
| 16,203 | 15,426 | 14,945 | 14,532 |
| 194    | 412    | 924    | 518    |
| 183    | 400    | 917    | 494    |
| 174    | 377    | 901    | 481    |
| 158    | 365    | 889    | 466    |
| 133    | 356    | 874    | 453    |
| 117    | 336    | 863    | 436    |
| 095    | 327    | 852    | 423    |
| 080    | 310    | 839    | 405    |
| 073    | 298    | 821    | 395    |
| 053    | 281    | 799    | 389    |
| 16,034 | 273    | 778    | 382    |
| 15,974 | 261    | 765    | 376    |
| 947    | 250    | 747    | 352    |
| 898    | 241    | 720    | 343    |
| 855    | 187    | 702    | 332    |
| 804    | 164    | 689    | 321    |
| 771    | 159    | 667    | 299    |
| 762    | 154    | 660    | 290    |
| 752    | 103    | 644    | 283    |
| 740    | 079    | 630    | 266    |
| 710    | 068    | 619    | 194    |
| 690    | 053    | 611    | 177    |
| 682    | 044    | 599    | 156    |
| 657    | 020    | 585    | 144    |
| 645    | 15,014 | 574    | 136    |
| 566    | 14,993 | 555    | 129    |
| 469    | 14,966 | 14,547 | 14,116 |
| 15,453 |        |        |        |

Total 339 perforations (113 depths at 3 JSPF).

## ATTACHMENT II

Perforation depths for second stage (depth reference is CNL log dated 8/25/72).

|        |        |        |        |
|--------|--------|--------|--------|
| 14,044 | 13,614 | 13,117 | 12,638 |
| 030    | 602    | 072    | 630    |
| 024    | 568    | 065    | 613    |
| 014    | 534    | 042    | 605    |
| 14,005 | 525    | 033    | 583    |
| 13,983 | 516    | 13,014 | 569    |
| 971    | 496    | 12,989 | 536    |
| 961    | 480    | 974    | 520    |
| 950    | 466    | 957    | 492    |
| 941    | 439    | 942    | 484    |
| 932    | 422    | 930    | 475    |
| 926    | 410    | 914    | 468    |
| 913    | 402    | 899    | 456    |
| 894    | 392    | 882    | 442    |
| 883    | 379    | 863    | 435    |
| 870    | 318    | 855    | 429    |
| 842    | 309    | 850    | 409    |
| 834    | 301    | 825    | 385    |
| 803    | 282    | 808    | 376    |
| 794    | 260    | 788    | 366    |
| 761    | 249    | 776    | 355    |
| 747    | 237    | 760    | 343    |
| 709    | 226    | 740    | 337    |
| 698    | 210    | 713    | 321    |
| 686    | 198    | 702    | 311    |
| 670    | 186    | 694    | 298    |
| 660    | 175    | 678    | 282    |
| 649    | 160    | 670    | 273    |
| 640    | 142    | 662    | 266    |
| 13,631 | 13,137 | 12,654 | 255    |
|        |        |        | 12,220 |

Total 363 perforations (121 depths at 3 JSPF).

7/0  
8-4

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>   |   | 5. LEASE DESIGNATION AND SERIAL NO.<br><u>PATENTED</u>    |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
|--|---|---|--|-----------------------|--|--|---|---|---|---|--|---|--|---|-----------------------------------|---|---------------------------------------|--------------------------------------|---------------------------------------|----------------------------------|--|--|
| 2. NAME OF OPERATOR<br><u>SHELL OIL COMPANY</u>  |   | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                      |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| 3. ADDRESS OF OPERATOR<br><u>P.O. Box 831 Houston, TX 77001 ATTN: P.G. GELING RM. # 6459 WCK</u>   |   | 7. UNIT AGREEMENT NAME                                    |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*<br>See also space 17 below.)<br>At surface<br><u>2940' FSL + 2462' FEL Sec. 21</u>  |   | 8. FARM OR LEASE NAME<br><u>CHATWIN</u>                   |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| 14. PERMIT NO.   | 15. ELEVATIONS (Show whether DF, RT, GR, etc.)<br><u>6618' KB</u> | 9. WELL NO.<br><u>1-21A4</u>                              |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data  |   | 10. FIELD AND POOL, OR WILDCAT<br><u>ALTAMONT</u>         |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
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| NOTICE OF INTENTION TO:  |   | SUBSEQUENT REPORT OF:                                     |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| TEST WATER SHUT-OFF <input type="checkbox"/>   | PULL OR ALTER CASING <input type="checkbox"/>                     | WATER SHUT-OFF <input type="checkbox"/>                   | REPAIRING WELL <input type="checkbox"/>  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| FRACTURE TREAT <input type="checkbox"/>  | MULTIPLE COMPLETE <input type="checkbox"/>                        | FRACTURE TREATMENT <input type="checkbox"/>               | ALTERING CASING <input type="checkbox"/> |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| SHOOT OR ACIDIZE <input type="checkbox"/>  | ABANDON* <input type="checkbox"/>                                 | SHOOTING OR ACIDIZING <input checked="" type="checkbox"/> | ABANDONMENT* <input type="checkbox"/>    |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
| REPAIR WELL <input type="checkbox"/>   | CHANGE PLANS <input type="checkbox"/>                             | (Other) <input type="checkbox"/>                          |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
|  |   | 12. COUNTY OR PARISH<br><u>DUCHESSNE</u>                  |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |
|  |   | 13. STATE<br><u>UTAH</u>                                  |  |                       |  |  |   |   |   |   |  |   |  |   |                                   |   |                                       |                                      |                                       |                                  |  |  |

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

SEE ATTACHED

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE DIVISION PROD. ENGINEER DATE 7-23-82  
W. E. N. KELLDORF

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

ALTIAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

WELL: CHAIWIN 1-21A4  
 LABEL: FIRST REPORT  
 AFE: 528237  
 FOREMAN: R.G. THOMPSON  
 RIG: WDW 19  
 OBJECTIVE: CO PERF. AND STIM.  
 AUTH. AMNT: 200000  
 DAILY COST: 3100  
 CUM COST: 3100  
 DATE: 5-10 AND 5-11-82  
 ACTIVITY: FIRST REPORT ON THIS WELL. AFE 528237 PROVIDES  
 \*02\* FUNDS IN THE AMOUNT OF 200000 TO CO PERF. AND STIM.  
 \*03\* THE WASATCH.  
 \*04\* 5-10-82 ACTIVITY: MIRD WDW 19. REMOVE TREE AND  
 \*05\* INSTALL BOPS. RELEASE OUT OF MODEL D PKR. POOH  
 \*06\* TO 6500 FT. S.D.O.N.  
 \*07\* 5-11-82 STATUS: POOH W/SEAL ASSEMBLY. RIM W/PKR  
 \*08\* PLUCKER.

LABEL: -----  
 DAILY COST: 3800  
 CUM COST: 6900  
 DATE: 5-11 AND 5-12-82  
 ACTIVITY: 5-11-82 ACTIVITY: POOH W/TRG AND MANDRELLS AND SEAL  
 \*02\* ASSEMBLY. PICK UP PKR. PLUCKER AND RIM.  
 \*03\* TAG PKR. S.D.O.N.  
 \*04\* 5-12-82 STATUS: MILL OUT MODEL D PKR.

LABEL: -----  
 DAILY COST: 4600  
 CUM COST: 11500  
 DATE: 5-12-82  
 ACTIVITY: STING INTO PACKER WITH PACKER PLUCKER. MILL ON  
 \*02\* PACKER FOR 10 HRS. PACKER STILL NOT LOOSE.  
 \*03\* SHUT DOWN OVER NIGHT.  
 \*04\* DATE 5-13-82  
 \*05\* STATUS MILL ON PACKER.

LABEL: -----  
 DAILY COST: 3900  
 CUM COST: 15400

ALTAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

DATE: 5-13-82  
ACTIVITY: MILL ON PACKER FOR 5 HRS. POOH TO PICK UP NEW  
\*02\* PACKER PLUCKER. S.D.O.N.  
\*03\* DATE 5-14-82 STATUS MILL ON PACKER.

LABEL: -----  
DAILY COST: 4900  
CUM COST: 25200  
DATE: 5-14 AND 5-15 AND 5-17-82  
ACTIVITY: 5-14-82 DAILY COST 4900 CUM. COST 20300.  
\*02\* 5-14-82 ACTIVITY: PICK UP NEW PKR. PLUCKER RIH MILL  
\*03\* ON PKR. FOR 45 MIN. SEEMED TO GET PKR. FREE. POOH  
\*04\* LEFT 42 JTS TBG. AND PKR. PLUCKER IN HOLE.  
\*05\* PICK UP JARS BUMPER SUB AND OVERSHOT DRESSED W/2 7/8  
\*06\* INCH GRAPPLE RIH S.D.O.N.  
\*07\* 5-15-82 COST GIVEN IN HEADING STATUS: LATCH  
\*08\* FISH. ACTIVITY: COULD NOT LATCH FISH. POOH  
\*09\* W/FISHING TOOLS. RIH W/IMPRESSION BLOCK. POOH W/  
\*10\* IMP. BLOCK. SHOWS 2 7/8 INCH UPSET LOOKING UP.  
\*11\* START IN HOLE W/FISHING TOOLS DRESSED TO 3 1/16 INCH  
\*12\* S.D.F.WE 5-17-82 STATUS: LATCH FISH.

LABEL: -----  
DAILY COST: 4400  
CUM COST: 29600  
DATE: 5-17 AND 5-18-82  
ACTIVITY: 5-17-82 ACTIVITY: RIH W/FISHING TOOLS. LATCH ON TO  
\*02\* FISH. STING OUT OF PKR. POOH W./FISH TOOLS AND FISH  
\*03\* LAY DOWN FISHING TOOLS. RESET PKR. PLUCKER  
\*04\* START IN HOLE W/ TBG AND PKR. PLUCKER. S.D.O.N.  
\*05\* 5-18-82 STATUS: FINISH MILLING UP PKR.

LABEL: -----  
DAILY COST: 3400  
CUM COST: 33000  
DATE: 5-18 AND 5-19-82  
ACTIVITY: 5-18-82 ACTIVITY: RIH W/PKR. PLUCKER. MILL ON PKR.  
\*02\* GET PKR. FREE. RIH TO TAG LINER TOP. TAG UP 1 JTS.  
\*03\* ABOVE LINER TOP. POOH W/PKR. PICK UP 4 5/8 INCH BLADED MILL.  
\*04\* RIH 20 STANDS. S.D.O.N.  
\*05\* 5-19-82 STATUS: CO 5 1/2 INCH LINER.

ALTAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

LABEL: -----  
DAILY COST: 4700  
CUM COST: 37700  
DATE: 5-19 AND 5-20-82  
ACTIVITY: 5-19-82 ACTIVITY: RIH W/ 4 5/8 INCH BLADE  
\*02\* MILL. TAG UP AT 15850 FT. PICK UP POWER  
\*03\* SWIVEL. PUMP 500 BBLs WIR. START  
\*04\* CIRCULATING . MILL TO 15930 FT. CIR. HOLE OUT. SPOT  
\*05\* 2000 GAL. 15% HCL. POOH 100 FT. ABOVE LINER TOP.  
\*06\* S.D.O.N.  
\*07\* 5-20-82 STATUS: CO 5 1/2 INCH LINER.

LABEL: -----  
DAILY COST: 4000  
CUM COST: 41700  
DATE: 5-20-82  
ACTIVITY: RIH. TAG UP AT 15930 FT. PUMP 500 BBLs. TO GET  
\*02\* CIRCULATION. NOT CIRCULATING GOOD. CIRCULATE 1 HR.  
\*03\* START MILLING. TBG. PLUGGED OFF. MILL 70 FT.  
\*04\* TO 16000 FT. CIRCULATE WELL OUT. S.D.O.N.  
\*05\* DATE 4-21-82 STATUS CO LINER.

LABEL: -----  
DAILY COST: 4500  
CUM COST: 50000  
DATE: 5-21 THRU 5-24-82  
ACTIVITY: 5-21-82 DAILY COST 3800 CUM. COST 45500.  
\*02\* 5-21-82 ACTIVITY: RIH TO 16000 FT. MIRU WESTERN  
\*03\* PUMP TRUCK. START CIR. WELL. MILL FOR 1 HRS.  
\*04\* TBG. PLUGGED OFF. R.D. PUMP TRUCK. FALL THROUGH.  
\*05\* CO TO 16350 FT. MIRU DRESSER WIRE LINE UNIT. RIH  
\*06\* TO SHOOT HOLE IN TBG. WOULD NOT SHOOT.  
\*07\* POOH. RIH W/PERF. GUN 2 ND. TIME. WOULD NOT SHOOT.  
\*08\* R.D. DRESSER. S.D.O.N.  
\*09\* 5-22-82 COSTS GIVEN IN HEADING. STATUS: SHOOT HOLE  
\*10\* IN TBG. W/OWP. ACTIVITY: MIRU OWP RIH TO 16000  
\*11\* FT. SHOOT HOLES IN TBG. POOH W/WIRELINE. R.D.  
\*12\* LUB. POOH W/TBG LAYING DOWN FIRST 96 JTS. RACK 14000  
\*13\* FT. IN DERRICK. R.U. OWP. RIH W/CIRP TO 16310 FT.  
\*14\* POOH. S.U.F.W.E.  
\*15\* 5-24-82 STATUS: SPOT CEMENT. PERF.

ALTAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

LABEL: -----  
DAILY COST: 33900  
CUM COST: 83900  
DATE: 5-24 AND 5-25-82  
ACTIVITY: 5-24-82 ACTIVITY: MIRU OWP. RIH W/DUMP BAILER W/  
\*02\* 2 SKS. CEMENT. SPOT CMT. ON CIBP AT 16310 FT.  
\*03\* POOH W/DUMP BAILER. PICK UP FIRST PERF. GUN. PERF.  
\*04\* W/3 1/8 INCH O.D. GUNS W/14.0 GRAM CHARGES 3 JSPF.  
\*05\* PERF. FROM BOTTOM UP. 14044 FT. TO 12220 FT. IN 5  
\*06\* RUNS. 121 DEPTHS 363 HOLES 0 PSI AFTER EACH  
\*07\* RUN. R.D. OWP RIH W/20 STANDS KILL PIPE. S.D.O.N.  
\*08\* 5-25-82 STATUS: HYDRD TEST TBG. AND PKR. IN HOLE.

LABEL: -----  
DAILY COST: 5200  
CUM COST: 89100  
DATE: 5-25 AND 5-26-82  
ACTIVITY: 5-25-82 ACTIVITY: MIRU CABLE HYDROTESTERS. HYDRD  
\*02\* TEST TBG. IN HOLE. SET PKR. AT 14075 FT. S.D.O.N.  
\*03\* 5-26-82 STATUS: ACID TREAT WELL.

LABEL: -----  
DAILY COST: 87917  
CUM COST: 177014  
DATE: 5-26-82 AND 5-27-82  
ACTIVITY: 5-26-82 ACTIVITY: MIRU NOWSCO. ACID TREAT  
\*02\* PERES 14116 FT. TO 16203 FT. W/35000 GAL 7 1/2% HCL  
\*03\* AS PER PROGNOSIS. HELD 2500 LBS ON CSG. W/RIG  
\*04\* PUMP. ISIP 5100 LBS. 5 MIN SIP 4700 AT 10 MIN SIP  
\*05\* 3800 15 MIN SIP 3500 20 MIN SIP 2700LBS.  
\*06\* MAX RATE 14.9 BPM AVG RATE 12.5 BPM MAX PSI 9050 LBS  
\*07\* AVG PSI 8750 LBS. R.D. NOWSCO. MIRU OWP RIH W/  
\*08\* LOGGING TOOLS. COULD NOT GET IN HOLE PAST 13700 FT.  
\*09\* POOH W/TOOLS. S.D.O.N.  
\*10\* 5-27-82 STATUS: RUN RA LOG.

LABEL: -----  
DAILY COST: 5600  
CUM COST: 182614  
DATE: 5-27 AND 5-28-82  
ACTIVITY: 5-27-82 ACTIVITY: MIRU OWP RIH W/LOGGING TOOLS.  
\*02\* RUN RA LOG FROM 16300 FT. TO 14000 FT. LOG SHOWS

ALTAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

\*03\* 70% TREATMENT. POOH W/LOGGING TOOLS. R.D. OWP.  
\*04\* RELEASE PKR. POOH W/TBG. AND PKR. S.D.O.N.  
\*05\* 5-28-82 STATUS: SET CIBP AND PERF.

LABEL: -----  
DAILY COST: 3200  
CUM COST: 212602  
DATE: 5-28 AND 5-29 AND 6-1-82  
ACTIVITY: 5-28-82 DAILY COST 26788 CUM COST 209402  
\*02\* 5-28-82 ACTIVITY: SET BP AT 14260 FT. PERF. 14044  
\*03\* FT. TO 12220 FT. 121 DEPTHS 363 PERFS AS PER PRUG.  
\*04\* RIH W/MTN. STATES 7 5/8 INCH 39 LBS 32 A PKR W/  
\*05\* UNLOADER 30 STANDS TBG. S.D.O.N.  
\*06\* 5-29-82 COSTS GIVEN IN HEADING. STATUS: GET WELL  
\*07\* READY TO ACIDIZE. ACTIVITY: FINISH RIH AND SET PKR  
\*08\* AT 11711 FT. W/17000 LBS TENSION. TEST BACKSIDE  
\*09\* TO 2500 PSI AND GET READY TO ACIDIZE TUESDAY A.M.  
\*10\* SHUT DOWN FOR WEEKEND.  
\*11\* 6-1-82 STATUS: ACIDIZE WELL.

LABEL: -----  
DAILY COST: 77000  
CUM COST: 289602  
DATE: 6-1 AND 6-2-82  
ACTIVITY: 6-1-82 ACTIVITY: MIRU NOWSCO. TEST LINES TO 9500 LBS  
\*02\* PSI UP ON CSG. W/RIG PUMP TO 2500 LBS. ACID TREAT  
\*03\* PERFS. W/30000 GAL 7 1/2 % HCL AS PER PRUG. TREATMENT  
\*04\* AS FOLLOWS. MAX PSI 8970 LBS. AVG. PSI 8600 LBS  
\*05\* MAX RATE 18.1 RPM AVG RATE 17 RPM. ISIP 3950 LBS.  
\*06\* 5 MIN SIP 3650 LBS. 10 MIN SIP 3400 LBS. 15 MIN SIP  
\*07\* 3390 LBS. 20 MIN SIP 2900 LBS. R.D. NOWSCO.  
\*08\* MIRU OWP. RIH W/RA LOGGING TOOLS. TO 12860 FT.  
\*09\* COULD NOT GET IN HOLE. R.D. OWP. 2200 LBS ON WELL.  
\*10\* S.D.O.N.  
\*11\* 6-2-82 STATUS: RUN RA LOG.

LABEL: -----  
DAILY COST: 4300  
CUM COST: 293902  
DATE: 6-2 AND 6-3-82  
ACTIVITY: 6-2-82 ACTIVITY: MIRU OWP. RIH W/LOGGING TOOLS  
\*02\* TO 12860 FT. COULD NOT GET DEEPER. POOH. R.D.

ALTAMONT OPERATIONS  
 DAILY COMPLETIONS AND REMEDIALS REPORT  
 WELL HISTORY FOR WELL 381  
 ISSUED 07/12/82

\*03\* OWP WELL HAD 2000 LBS. ON TBG. FLOW WELL TO PIT  
 \*04\* FOR 7 HRS. WELL UNLOADING ACID  
 \*05\* WTR. APPROX. 250 BBLs. SHUT WELL IN. S.D.O.N.  
 \*06\* 6-3-82 STATUS: FLOW TEST WELL.

LABEL: -----  
 DAILY COST: 3350  
 CUM COST: 297252  
 DATE: 6-3 AND 6-4-82  
 ACTIVITY: 6-3-82 ACTIVITY: R.U. TO MAKE SWABBING RUNS. SWABBED WELL  
 \*02\* 10 RUNS LOST SWAB CUPS AND SINKER BARS ON LAST  
 \*03\* RUN. REMOVE 10000 LBS. TREE AND PUT ON BUP  
 \*04\* RELEASE PKR. AND POOH. S.D.O.N.  
 \*05\* 6-4-82 STATUS: FISH SINKER BARS AND MILL OUT BP.

LABEL: -----  
 DAILY COST: 7800  
 CUM COST: 305052  
 DATE: 6-4-82  
 ACTIVITY: RIG UP DELSCO TO FISH SINKER BARS AND SWABBING  
 \*02\* MANDREL AND CUPS. COULD NOT GET DOWN. RIM WITH 30  
 \*03\* STDS. OF TBG. AND CIRCULATE HOLE CLEAN. RIM WITH  
 \*04\* DELSCOS FISHING TOOL. COULD NOT FISH SINKER BARS  
 \*05\* OR SWABBING MANDREL. RIG DOWN DELSCO. RIM WITH WASH  
 \*06\* PIPE AND SHOE. SDON.  
 \*07\* 6-5-82  
 \*08\* CAUGHT REVERSE CIRCULATION. TAGGED UP ON SINKER  
 \*09\* BARS AND STARTED TURNING TO THE RIGHT. MADE ABOUT  
 \*10\* 8 FT. THEN COULD NOT CIRCULATE REVERSE. TRIED  
 \*11\* CIRCULATING CONVENTIONAL AND IT WOULD CIRCULATE.  
 \*12\* COULD NOT MAKE ANY MORE HOLE. POOH WITH WASH PIPE  
 \*13\* AND SHOE. FOUND PART OF SINKER BARS IN WASH PIPE.  
 \*14\* SDON AND SUNDAY.  
 \*15\* 6-7-82 STATUS RIM W/WASH PIPE TO FISH SINKER  
 \*16\* BARS.

LABEL: -----  
 DAILY COST: 4600  
 CUM COST: 309652  
 DATE: 6-7 AND 6-8-82  
 ACTIVITY: 6-7-82 ACTIVITY: RIM W/TBG. AND 1 JT. WASHPIPE.  
 \*02\* TAG UP AT 13570 FT. ESTABLISH CIRCULATION. MILL TO

ALTAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

\*03\* 13900 FT. TBG PLUGGED OFF. COULD NOT CIR. DRY MILL  
\*04\* TO 14190 FT. POOH W/45 STDS TBG. PULLING WET.  
\*05\* S.D.O.N. 6-8-82 STATUS: CONT. W/FISHING JOB  
\*06\* AND C.O.

LABEL: -----  
DAILY COST: 5400  
CUM COST: 315052  
DATE: 6-8 AND 6-9-82  
ACTIVITY: 6-8-82 ACTIVITY: POOH W/TBG AND WASHPIPE.  
\*02\* HAD REMAINDER OF SINKER BARS IN MILL. LAY DOWN WASH  
\*03\* PIPE. PICK UP MILL AND CLEAN OUT TOOL.  
\*04\* RIH. TAG AT 14190 FT. C.O. TO CIBP. MILL UP CIBP.  
\*05\* RIH TO 14600 FT. S.D.O.N.  
\*06\* 6-9-82 STATUS: TAG CIBP AT 16300 FT.

LABEL: -----  
DAILY COST: 5300  
CUM COST: 320352  
DATE: 6-9 AND 6-10-82  
ACTIVITY: 6-9-82 ACTIVITY: RIH W/CLEAN OUT TOOLS TO 16250 FT.  
\*02\* POOH W/TBG. AND TOOLS LAYING DOWN 163 JTS. OF TBG.  
\*03\* POOH W/TBG. AND TOOLS. PICK UP 7 5/8 INCH GUIBERSON  
\*04\* UNIPACKER V1. START IN HOLE W/PKR.  
\*05\* AND G.L. EQUIPMENT. S.D.O.N.  
\*06\* 6-10-82 STATUS: RUN G.L. EQUIP.

LABEL: -----  
DAILY COST: 3000  
CUM COST: 323352  
DATE: 6-10 AND 6-11-82  
ACTIVITY: 6-10-82 ACTIVITY: FINISH RUNNING G.L. EQUIP. SET  
\*02\* PKR. AT 12100 FT. LAND TBG. REMOVE BOPS. INSTALL  
\*03\* TREE. HOOK UP FLOWLINE AND GAS LIFT LINE. PSI UP  
\*04\* CSG. CSG. SPOOL LEAKING. START BLEEDING OFF CSG.  
\*05\* S.D.O.N. 6-11-82 STATUS: REPAIR LEAK . R.D.

LABEL: -----  
DAILY COST: 2000  
CUM COST: 325352  
DATE: 6-11-82  
ACTIVITY: 6-11-82 ACTIVITY: BLEED OFF CSG. PSI. REMOVE

ALTAMONT OPERATIONS  
DAILY COMPLETIONS AND REMEDIALS REPORT  
WELL HISTORY FOR WELL 381  
ISSUED 07/12/82

\*02\* TREE . PULL UP ON TBG. REMOVE DOUGHNUT. STRIP OFF  
\*03\* CSG. SPOOL REPLACE RING GASKET LAND  
\*04\* TBG. INSTALL TREE. R.D. WDW 19 . PUT WELL BACK  
\*05\* ON PRODUCTION. THIS WILL BE THE FINAL RIG REPORT  
\*06\* BUT THERE WILL BE TEST DATA INPUT  
\*07\* FOR A WEEK.

LABEL: FINAL REPORT  
CUM COST: 325352  
DATE: 6-13 THRU 6-19-82  
ACTIVITY: THE RIG MOVED OFF THIS LOCATION ON  
\*02\* 6-11-82. THE FOLLOWING DATA IS FOR 24 HRS. UNLESS  
\*03\* OTHERWISE STATED. 6-13-82  
\*04\* 6-13-82 115 OIL 238 WTR 720 MCF GAS 548 INJ. 75  
\*05\* TBG PSI 1100 CSG PSI 50/64 6-14-82 47 OIL 337  
\*06\* WTR 660 MCF 604 INJ 6-15-82 21 OIL 140 WTR  
\*07\* 255 MCF 88 INJ. FROZE OFF. 6-16-82 36 OIL 280  
\*08\* WTR 445 MCF 441 INJ. 6-17-82 39 OIL 293 WTR  
\*09\* 580 MCF 532 INJ. TBG 50 PSI. 40/64. 6-18-82 34 OIL  
\*10\* 295 WTR 625 MCF 574 INJ. 6-19-82 18 OIL  
\*11\* 139 WTR 430 MCF 301 INJ. . THE TBG PSI AND CSG  
\*12\* PSI AND TBG CHOKES WERE THE SAME ON  
\*13\* THE 13 THRU THE 16. ON THE 17 TBG WAS 50 AND CHOKE  
\*14\* WAS 40/64 FOR THE LAST THREE DAYS.  
\*15\* THIS IS A FINAL REPORT.

STATE OF UTAH  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS, AND MINING

|  |                           |
|--|---------------------------|
| 5. LEASE DESIGNATION AND SERIAL NO.              | Patented                  |
| 6. IF INDIAN, ALLOTTEE OR TRIBE NAME             |                           |
| 7. UNIT AGREEMENT NAME                           |                           |
| 8. FARM OR LEASE NAME                            | Chatwin                   |
| 9. WELL NO.                                      | 1-21A4                    |
| 10. FIELD AND POOL, OR WILDCAT                   | Altamont                  |
| 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA | Sec. 21 T1S R4W SW/4 NE/4 |
| 12. COUNTY OR PARISH                             | Duchesne                  |
| 13. STATE  | Utah                      |

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1.  OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
 Shell Oil Company ATTN: C. A. Miller 6586 WCK.

3. ADDRESS OF OPERATOR  
 P. O. Box 831 Houston, Tx. 77001

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
 At surface  
 2940' FSL & 2462' FEL Sec. 21

14. PERMIT NO. \_\_\_\_\_ 15. ELEVATIONS (Show whether of, ft., gr., etc.)  
 KB 6618'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO:                              |   | SUBSEQUENT REPORT OF:                          |  |
|--|---|--|--|
| TEST WATER SHUT-OFF <input type="checkbox"/>         | FULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/>        | REPAIRING WELL <input type="checkbox"/>  |
| FRACTURE TREAT <input type="checkbox"/>              | MULTIPLE COMPLETE <input type="checkbox"/>    | FRACTURE TREATMENT <input type="checkbox"/>    | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input checked="" type="checkbox"/> | ABANDON* <input type="checkbox"/>             | SHOOTING OR ACIDIZING <input type="checkbox"/> | ABANDONMENT* <input type="checkbox"/>    |
| REPAIR WELL <input type="checkbox"/>                 | CHANGE PLANS <input type="checkbox"/>         | (Other) _____                                  | (Other) _____                            |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Current Status: Currently producing 8 BOPD + 128 BWPD + 37 MCFPD from the Green River formation (12,220'-16,887').

Proposed Work: Set CIBP at ± 12,205'. Perforate and acid treat Green River (11,008'-12,179') with 15,000 gallons 7-1/2% HCL.

APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING  
 DATE: 8/22/83  
 BY: [Signature]

18. I hereby certify that the foregoing is true and correct

SIGNED C. A. Miller TITLE Div. Oper. Engr. DATE 8/10/83

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

PRINT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

3  
M

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

|  |  |   |
|--|--|---|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>   |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>Patented                               |
| 2. NAME OF OPERATOR<br>Shell Oil Company ATTN: C. A. Miller 6494 WCK.  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  |
| 3. ADDRESS OF OPERATOR<br>P. O. Box 831 Houston, Tx. 77001   |  | 7. UNIT AGREEMENT NAME  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)<br>At surface<br>2940' FSL & 2462' FEL Sec. 21 |  | 8. FARM OR LEASE NAME<br>Chatwin  |
| 14. PERMIT NO.<br>KB 6618'   |  | 9. WELL NO.<br>1-21A4   |
| 15. ELEVATIONS (Show whether of, or to, surface)<br>KB 6618'   |  | 10. FIELD AND POOL, OR WILDCAT<br>Altamont                                    |
| DIVISION OF OIL, GAS & MINING<br>NOV 21 1983   |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>Sec. 21 T1S R4W SW/4 NE/4 |
|  |  | 12. COUNTY OR PARISH<br>Duchesne  |
|  |  | 13. STATE<br>Utah   |

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO:                      |   | SUBSEQUENT REPORT OF:                                     |  |
|--|---|---|--|
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/>                   | REPAIRING WELL <input type="checkbox"/>  |
| FRACTURE TREAT <input type="checkbox"/>      | MULTIPLE COMPLETE <input type="checkbox"/>    | FRACTURE TREATMENT <input type="checkbox"/>               | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/>    | ABANDON* <input type="checkbox"/>             | SHOOTING OR ACIDIZING <input checked="" type="checkbox"/> | ABANDONMENT* <input type="checkbox"/>    |
| REPAIR WELL <input type="checkbox"/>         | CHANGE PLANS <input type="checkbox"/>         | (Other) _____   | (Other) _____                            |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

COMPLETED OPERATIONS  
(11/8-16/83)

Set CIBP at 12,205'. Perforated and acid treated perfs (11,008'-12,179') with 15,000 gallons 7-1/2% HCL. Returned well to production.

18. I hereby certify that the foregoing is true and correct

SIGNED C. A. Miller TITLE Div. Oper. Engr. DATE 11/17/83

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

STATE: UTAH  
FIELD: ALTAMONT  
  
WELL: CHATWIN 1-21A4  
  
LABEL: FIRST REPORT  
WO NO.: 593437  
FOREMAN: B.J. THOMPSON  
RIG: WOW 17  
AUTH. AMNT: 68500  
DAILY COST: 1988  
CUM. COST: 1988  
TYPE OF JOB: PERFORATE AND STIMULATE  
OBJECTIVE: GREEN RIVER  
  
DATE(S): 11-8-83  
PRESENT STATUS: POOH W/ PROD TBG  
LATEST TEST: AVE FOR OCT 5 OIL 86 WTR

ACTIVITY: MIRU WOW 17 BLED WELL PUMP DOWN TBG INSTALL AND  
\*02\* TEST 6 IN BOP RELEASE PKR SOOH LAYING DOWN EXCESS  
\*03\* TBG SDON

STATE: UTAH  
FIELD: ALTAMONT  
  
WELL: CHATWIN 1-21A4  
  
LABEL: -----  
WO NO.: 593437  
FOREMAN: B.J. THOMPSON  
RIG: WOW 17  
AUTH. AMNT: 68500  
DAILY COST: 1863  
CUM. COST: 3851  
TYPE OF JOB: PERFORATE AND STIMULATE  
OBJECTIVE: GREEN RIVER

DATE(S): 11-9-83  
PRESENT STATUS: POOH  
  
ACTIVITY: BLED WELL PUMP DOWN WELL FIN POOH PKR WOULDNT GO  
\*02\* THRU TBG SPOOL STRIP BOP AND SPOOL PULL PKR INSTALL  
\*03\* SPOOL AND BOP RIG UP OWP SDON

STATE: UTAH  
FIELD: ALTAMONT  
WELL: CHATWIN 1-21A4  
LABEL: -----  
WD NO.: 593437  
FOREMAN: B.J. THOMPSON  
RIG: WOW 17  
AUTH. AMNT: 68500  
DAILY COST: 1988  
CUM. COST: 5839  
TYPE OF JOB: PERFORATE AND STIMULATE  
OBJECTIVE: GREEN RIVER

DATE(S): 11-10-83  
PRESENT STATUS: PERF

ACTIVITY: BLED WELL OWP RIH W/ 7 5/8 IN CIBP SET AT 12205 FT  
PRESS TEST TO 1500 LBS HELD MADE 1ST PERF RUN  
\*02\* GUN SHORTED OUT HALF WAY THRU HAD PROBLEMS W/ 2ND  
\*03\* GUN W/O NEW GUN COMPLETED RUNS PERF AS PER PROG  
\*04\* 12179 TO 11552 FT 32 SELECTIONS 96 HOLES LACK 12  
\*05\* SHOTS SDON  
\*06\*

STATE: UTAH  
FIELD: ALTAMONT  
WELL: CHATWIN 1-21A4  
LABEL: -----  
WD NO.: 593437  
FOREMAN: B.J. THOMPSON  
RIG: WOW 17  
AUTH. AMNT: 68500  
DAILY COST: 12475 2793  
CUM. COST: 18314 21107  
TYPE OF JOB: PERFORATE AND STIMULATE  
OBJECTIVE: GREEN RIVER

DATE(S): 11-11 AND 11-12-83  
PRESENT STATUS: RIH W/ TBG

ACTIVITY: BLED WELL CONT PERF AS PER PROG R/D OWP RIHW/  
\*02\* 7 5/8 IN HD PKR STRIP OVER BOP SET PKR W/ 24000 LBS  
\*03\* SET ON PKR PRESS TEST BACKSIDE WOULDNT HOLD RESET  
\*04\* PKR STILL WOULDNT SET SDON  
\*05\* 11-12-83 BLED WELL POOH W/ 7 5/8 IN PKR NOTHING  
\*06\* VISIBLY WRONG RIH W/ 7 5/8 IN  
\*07\* 39 32-A MT ST PKR  
\*08\* SET AT 10900 PRESS TEST TO 1500 LBS HELD GAULD THREADS  
\*09\* HAD TO MOVE PKR TO 10870 FT RESET PKR AND LAND  
\*10\* ON DONUT SDON

STATE:  
FIELD:

UTAH  
ALTAMONT

WELL:

CHATWIN 1-21A4

LABEL:

-----

WO NO.:

593437

FOREMAN:

B. J. THOMPSON

RIG:

WOW 17

AUTH. AMNT:

68500

DAILY COST:

14985

CUM. COST:

36092

TYPE OF JOB:

PERFORATE AND STIMULATE

OBJECTIVE:

GREEN RIVER

DATE(S):

11-14-83

PRESENT STATUS:

POOH W/ TBG

ACTIVITY:

\*02\*

\*03\*

\*04\*

\*05\*

\*06\*

\*07\*

\*08\*

\*09\*

WELL FROZE OFF THAW AND BLEED SAME PUMP DOWN TBG  
CHG OUT STACK INSTALL AND TEST 10000 LB FRAC TREE  
R/U NOWSCO AND ACIDIZE AS PER PROG PUMPED 357 BBLs  
7 1/2 % HCL AT AN AVE RATE OF 11.8 BPM AVE PRESS  
7050 PSI USED 106 BALLS AND 2000 LBS OF BAF FLUSH  
W/ 100 BBLs PRODUCED WTR ISIP 1480 5 MIN 1020  
10 MIN 730 15 MIN 560 20 MIN 370 R/D NOWSCO FLOWED  
WELL UNTIL DEAD CHG OUT STACK INSTALL AND TEST  
6 IN BOP RELEASE PKR SOOH SDON

STATE:  
FIELD:

UTAH  
ALTAMONT

WELL:

CHATWIN 1-21A4

LABEL:

-----

WO NO.:

593437

FOREMAN:

B. J. THOMPSON

RIG:

WOW 17

AUTH. AMNT:

68500

DAILY COST:

2193

CUM. COST:

38285

TYPE OF JOB:

PERFORATE AND STIMULATE

OBJECTIVE:

GREEN RIVER

DATE(S):

11-15-83

PRESENT STATUS:

RUN PROD EQUIP

ACTIVITY:

\*02\*

\*03\*

\*04\*

BLEED WELL CIRC WELL AROUND WELL FLOWING ALL WAY  
OUT OF HOLE SET PKR W/ 1 STD IN HOLE BULL HEAD 300  
BBLs WTR DOWN HOLE STRIP OFF BOP RIH W/ 7 5/8 IN  
LOK-SET PKR AND CAMCOS TO 1500 FT SDON

STATE:  
FIELD:

UTAH  
ALTAMONT

WELL:

CHATWIN 1-21A4

LABEL:

-----

WO NO.:

593437

FOREMAN:

B.J. THOMPSON

RIG:

WOW 17

AUTH. AMNT:

68500

DAILY COST:

2233

CUM. COST:

38285

TYPE OF JOB:

PERFORATE AND STIMULATE

OBJECTIVE:

GREEN RIVER

DATE(S):

11-16-83

PRESENT STATUS:

RIG DOWN

ACTIVITY:

\*02\*

BLEED WELL TRY TO KILL WOULD NOT W/ PROD WTR

\*03\*

BULL HEAD 300 BBLs BRINE WTR RIH W/ PROD TBG AND

\*04\*

CAMCOS SET PKR AT 10870 FT W/ 15000 LBS

\*05\*

TENSION ON 7 5/8 IN LOK-SET INSTALL AND TEST  
5000 LB TREE SDON

Shell Oil Company



P.O. Box 831  
Houston, Texas 77001

December 30, 1983

Mr. Norm Stout  
State of Utah  
Natural Resources  
Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, UT 84114

Dear Mr. Stout:

TRANSFER OF OWNERSHIP AND ASSETS  
FROM SHELL OIL COMPANY TO  
SHELL WESTERN E&P INC.  
STATE OF UTAH

In accordance with our recent conversation, the purpose of this letter is to reduce to writing that Shell Western E&P Inc. ("SWEPI"), a subsidiary of Shell Oil Company, has been formed. Shell Western E&P Inc. is a Delaware corporation with its offices located at 200 North Dairy Ashford Road in Houston, Texas. The mailing address is P. O. Box 831, Houston, TX 77001.

Effective January 1, 1984, Shell Oil Company will transfer portions of its oil and gas operations to Shell Western E&P Inc. and Shell Western E&P Inc. will assume all of the rights, interests, obligations and duties which Shell Oil Company currently has as a result of its exploration, development and production operations in the State of Utah.

As you are aware, Shell Oil Company is currently the holder of various permits and agency authorizations. In view of the fact that Shell Western E&P Inc. will assume all of the liabilities and obligations of Shell Oil Company's exploration and production activities within the state, we respectfully request that you transfer all permits or other authorizations from Shell Oil Company to Shell Western E&P Inc., effective January 1, 1984.

To support this request, a copy of the power of attorney appointing the undersigned as Attorney-in-Fact for Shell Western E&P Inc. is enclosed. On behalf of Shell Western E&P Inc., enclosed are recently issued Bond No. Shell 1835 and Bond No. Shell 1841. The bonds were issued by the Insurance Company of North America. In the near future, I shall request that the existing Shell Oil Company bonds be released.

It is my understanding, pursuant to our prior discussion, that this letter will comply with your requirement regarding the change in the name of the permittee.

Sufficient copies of this letter are being provided to your office so that a copy can be placed in each appropriate file. A listing of active wells is enclosed. Thank you in advance for your cooperation in this matter.

Yours very truly,

*G. M. Jobe*

G. M. Jobe  
Administrator, Regulatory-Permits  
Rocky Mountain Division  
Western E&P Operations

GMJ:beb

Enclosures

MONTHLY OIL AND GAS PRODUCTION REPORT

Operator name and address:

Duchesne

UTEX OIL CO.  
% SHELL WESTERN E&P INC.

NICE

PO BOX 576  
HOUSTON TX 77001  
ATTN: P.T. KENT, OIL ACCT.

Operator name  
change

Utah Account No. N0840

Report Period (Month/Year) 8 / 84

Amended Report

| Well Name             | API Number | Entity           | Location | Producing Zone | Days Oper | Production Volume |            |             |
|-----------------------|------------|------------------|----------|----------------|-----------|-------------------|------------|-------------|
|                       |            |                  |          |                |           | Oil (BBL)         | Gas (MSCF) | Water (BBL) |
| X FARNSWORTH 1-07B4   | 4301330097 | 01600 02S 04W 7  | WSTC     | 51             | 0         | 0                 | 0          |             |
| X FARNSWORTH 1-13B5   | 4301330092 | 01610 02S 05W 13 | WSTC     | 21             | 685       | 2847              | 4206       |             |
| X BROTHERSON 1-10B4   | 4301330110 | 01615 02S 04W 10 | WSTC     | 0              | 0         | 0                 | 0          |             |
| X BROTHERSON 2-10B4   | 4301330443 | 01615 02S 04W 10 | WSTC     | 23             | 2785      | 1640              | 12686      |             |
| X CHATWIN 1-21A4      | 4301330101 | 01620 01S 04W 21 | GRRV     | 23             | 1604      | 1584              | 6220       |             |
| X POWELL 1-33A3       | 4301330105 | 01625 01S 03W 33 | WSTC     | 0              | 0         | 0                 | 0          |             |
| X BADCOCK 1-12B4      | 4301330104 | 01630 02S 04W 12 | WSTC     | 22             | 923       | 1016              | 7871       |             |
| X HANSON TRUST 1-05B3 | 4301330109 | 01635 02S 03W 5  | GR-WS    | 21             | 576       | 1038              | 4377       |             |
| X HANSON 1-32A3       | 4301330141 | 01640 01S 03W 32 | WSTC     | 21             | 65        | 1069              | 3080       |             |
| X FARNSWORTH 1-12B5   | 4301330124 | 01645 02S 05W 12 | WSTC     | 31             | 2326      | 546               | 12710      |             |
| X DTE TRIBAL 1-20B5   | 4301330376 | 01650 02S 05W 20 | WSTC     | 17             | 1211      | 0                 | 1160       |             |
| X ELLSWORTH 1-08B4    | 4301330112 | 01655 02S 04W 8  | WSTC     | 0              | 0         | 0                 | 0          |             |
| X ELLSWORTH 1-09B4    | 4301330118 | 01660 02S 04W 9  | WSTC     | 20             | 758       | 418               | 4322       |             |
| TOTAL                 |            |                  |          |                |           | 10933             | 10218      | 56632       |

Comments (attach separate sheet if necessary)

I have reviewed this report and certify the information to be accurate and complete.

Date 9-28-84

Authorized signature

Telephone

**STATE OF UTAH**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF OIL, GAS, AND MINING**

SUBMIT IN TRIPLICATE\*  
 (Other instructions on reverse side)

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
 Use "APPLICATION FOR PERMIT—" for such proposals.)

|  |  |   |
|--|--|---|
| 1. <b>OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>  |  | 5. <b>LEASE DESIGNATION AND SERIAL NO.</b><br>Patented                                |
| 2. <b>NAME OF OPERATOR</b><br>UTEX OIL COMPANY   |  | 6. <b>IF INDIAN, ALLOTTED OR TRIBE NAME</b><br><br>N/A                                |
| 3. <b>ADDRESS OF OPERATOR</b><br>1245 E. Brickyard Rd., Ste. 600, Salt Lake City, Utah 84106   |  | 7. <b>UNIT AGREEMENT NAME</b><br><br>N/A  |
| 4. <b>LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.*<br>See also space 17 below.)<br>At surface<br><br>2,940' FSL; 2,462' FEL |  | 8. <b>FARM OR LEASE NAME</b><br>Chatwin   |
| 14. <b>PERMIT NO.</b><br>43-013-30101  |  | 9. <b>WELL NO.</b><br>1-21A4  |
| 15. <b>ELEVATIONS</b> (Show whether DF, RT, GR, etc.)<br>6,594' GL   |  | 10. <b>FIELD AND POOL, OR WILDCAT</b><br>Altamont                                     |
|  |  | 11. <b>SEC., T., R., M., OR BLK. AND SURVEY OR AREA</b><br><br>Sec. 31, T1S, R4W, USM |
|  |  | 12. <b>COUNTY OR PARISH</b> 18. <b>STATE</b><br>Duchesne Utah                         |

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

|  |   |  |  |
|--|---|--|--|
| NOTICE OF INTENTION TO:                      |   | SUBSEQUENT REPORT OF:  |  |
| TEST WATER SHUT-OFF <input type="checkbox"/> | PULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/>                                      | REPAIRING WELL <input type="checkbox"/>  |
| FRACTURE TREAT <input type="checkbox"/>      | MULTIPLE COMPLETE <input type="checkbox"/>    | FRACTURE TREATMENT <input type="checkbox"/>                                  | ALTERING CASING <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/>    | ABANDON* <input type="checkbox"/>             | SHOOTING OR ACIDIZING <input type="checkbox"/>                               | ABANDONMENT* <input type="checkbox"/>    |
| REPAIR WELL <input type="checkbox"/>         | CHANGE PLANS <input type="checkbox"/>         | (Other) <u>Convert to Hydraulic Pump</u> <input checked="" type="checkbox"/> |  |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The artificial lift system in the above well was converted from gas lift to hydraulic pump on January 26, 1986.

December 1985 average daily production: 66.75 BOPD, 199 BWPD, 49 MCFD

February 1986 average daily production: 142.71 BOPD, 227 BWPD, 67 MCFG

**RECEIVED**  
 MAY 08 1986

DIVISION OF  
 OIL, GAS & MINING

**CONFIDENTIAL**

18. I hereby certify that the foregoing is true and correct

SIGNED *Raymond Kellomaki* TITLE Geologist DATE 4/24/86

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

PERMIT IN TRIPLICATE 010941  
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

|  |  |  |
|--|--|--|
| 1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>   |  | 5. LEASE DESIGNATION AND SERIAL NO.                                      |
| 2. NAME OF OPERATOR<br>ANR Limited Inc.  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                     |
| 3. ADDRESS OF OPERATOR<br>P. O. Box 749, Denver, Colorado 80201-   |  | 7. UNIT AGREEMENT NAME   |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any requirements. See also space 17 below.)<br>At surface<br>See attached list   |  | 8. FARM OR LEASE NAME<br><i>Chateau</i>                                  |
| 14. PERMIT NO.<br><i>43-013-30101</i>  |  | 9. WELL NO.<br><i>1-21 A4</i>  |
| 15. ELEVATIONS (Show whether OF, RT, OR, etc.)   |  | 10. FIELD AND POOL, OR WILDCAT   |
| 16. PERMIT NO. <i>43-013-30101</i>   |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br><i>Sec. 21 15 4w</i> |
| 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) |  | 12. COUNTY OR PARISH<br><i>Duchesne</i>                                  |
| 13. STATE  |  | 18. STATE  |

RECEIVED  
DEC 31 1986

DIVISION OF OIL, GAS & MINING

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANS

(Other) \_\_\_\_\_

(Other) - Change Operator

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

ANR Limited has been elected successor Operator to Utex Oil Company on the oil wells described on the attached Exhibit "A".

18. I hereby certify that the foregoing is true and correct

SIGNED

*Don K. Nelson*

TITLE

*Dist. Land Mgr.*

DATE

*12/24/86*

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:



UTAH  
NATURAL RESOURCE  
Oil, Gas & Mining

355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Ut  
84180-1203. (801-538-5340)

## MONTHLY OIL AND GAS PRODUCTION REPORT

Operator name and address:

• ANR LIMITED INC./COASTAL  
P O BOX 749  
DENVER CO 80201 0749  
ATTN: RANDY WAHL

Utah Account No. N0235

Report Period (Month/Year) 11 / 87

Amended Report

| Well Name                   | Producing | Days     | Production Volume |      |           |            |             |
|-----------------------------|-----------|----------|-------------------|------|-----------|------------|-------------|
| API Number                  | Entity    | Location | Zone              | Oper | Oil (BBL) | Gas (MSCF) | Water (BBL) |
| UTE UNIT 1-34A4             |           |          |                   |      |           |            |             |
| 4301330076 01585 01S 04W 34 | WSTC      |          |                   |      |           |            |             |
| MONSEN 1-21A3               |           |          |                   |      |           |            |             |
| 4301330082 01590 01S 03W 21 | GR-WS     |          |                   |      |           |            |             |
| BROADHEAD 1-21B6            |           |          |                   |      |           |            |             |
| 4301330100 01595 02S 06W 21 | WSTC      |          |                   |      |           |            |             |
| FARNSWORTH 1-07B4           |           |          |                   |      |           |            |             |
| 4301330097 01600 02S 04W 7  | WSTC      |          |                   |      |           |            |             |
| FARNSWORTH 1-13B5           |           |          |                   |      |           |            |             |
| 4301330092 01610 02S 05W 13 | WSTC      |          |                   |      |           |            |             |
| BROTHERSON 1-10B4           |           |          |                   |      |           |            |             |
| 4301330110 01614 02S 04W 10 | WSTC      |          |                   |      |           |            |             |
| BROTHERSON 2-10B4           |           |          |                   |      |           |            |             |
| 4301330443 01615 02S 04W 10 | WSTC      |          |                   |      |           |            |             |
| CHATWIN 1-21A4              |           |          |                   |      |           |            |             |
| 4301330101 01620 01S 04W 21 | GRRV      |          |                   |      |           |            |             |
| POWELL 1-33A3               |           |          |                   |      |           |            |             |
| 4301330105 01625 01S 03W 33 | WSTC      |          |                   |      |           |            |             |
| BABCOCK 1-12B4              |           |          |                   |      |           |            |             |
| 4301330104 01630 02S 04W 12 | WSTC      |          |                   |      |           |            |             |
| HANSON TRUST 1-05B3         |           |          |                   |      |           |            |             |
| 4301330109 01635 02S 03W 5  | GR-WS     |          |                   |      |           |            |             |
| HANSON 1-32A3               |           |          |                   |      |           |            |             |
| 4301330141 01640 01S 03W 32 | WSTC      |          |                   |      |           |            |             |
| FARNSWORTH 1-12B5           |           |          |                   |      |           |            |             |
| 4301330124 01645 02S 05W 12 | WSTC      |          |                   |      |           |            |             |
| TOTAL                       |           |          |                   |      |           |            |             |

Comments (attach separate sheet if necessary)

I have reviewed this report and certify the information to be accurate and complete.

Date

Authorized signature

Telephone

# ANR

**ANR Production Company**  
a subsidiary of The Coastal Corporation

012712

RECEIVED  
JAN 25 1988

DIVISION OF  
OIL, GAS & MINING

January 19, 1988

Natural Resources  
Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Attention: Ms. Lisha Romero

This letter includes the information you requested on January 12, 1988 concerning the recent merger of ANR Limited, Inc. into ANR Production Company. Effective December 31, 1987 (December, 1987 Production), ANR Limited, Inc. merged into ANR Production Company; and henceforth, will continue operations as ANR Production Company.

ANR Production Company will begin reporting and remitting the Utah Conservation and Occupation Taxes effective December, 1987 production for leases previously reported by ANR Limited, Inc. (Utah Account No. N-7245). ANR Production Company will use the new Utah Account No. N-0675, as assigned by the State of Utah.

Please contact me at (713) 877-6167 if I can answer any questions on this matter.

Very truly yours,

*Roger W. Sparks*  
Roger W. Sparks  
Manager, Crude Revenue Accounting

*The computer shows the ANR Limited wells listed under account no. N0235.  
DTS  
1-26-88*

CC: AWS

CTE:mmw

*Lisha,  
I don't see any problem w/this.  
I gave a copy to Arlene so she could check on the bond situation. She didn't think this would affect their bond as the bond is set up for Coastal and its subsidiaries (ANR, etc.)  
No Entity Number changes are necessary. DTS 1-26-88*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: September 30, 1990

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.

SUBMIT IN TRIPLICATE

RECEIVED  
JUL 30 1990

|  |   |
|--|---|
| 1. Type of Well<br><input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other | 5. Lease Designation and Serial No.<br>Patented     |
| 2. Name of Operator<br>ANR Production Company  | 6. If Indian, Allottee or Tribe Name<br>N/A         |
| 3. Address and Telephone No.<br>P. O. Box 749, Denver, Colorado 80201-0749 (303) 573-4476  | 7. If Unit or CA, Agreement Designation<br>CA #9661 |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)<br>2940' FSL & 2462' FEL (SWNE)<br>Section 21, T1S-R4W    | 8. Well Name and No.<br>Chatwin #1-21A4             |
|  | 9. API Well No.<br>43-013-30101                     |
|  | 10. Field and Pool, or Exploratory Area<br>Altamont |
|  | 11. County or Parish, State<br>Duchesne, Utah       |

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                                   |
|---|--|
| <input type="checkbox"/> Notice of Intent             | <input type="checkbox"/> Abandonment             |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Recompletion            |
| <input type="checkbox"/> Final Abandonment Notice     | <input type="checkbox"/> Plugging Back           |
|   | <input type="checkbox"/> Casing Repair           |
|   | <input type="checkbox"/> Altering Casing         |
|   | <input type="checkbox"/> Other                   |
|   | <input type="checkbox"/> Change of Plans         |
|   | <input type="checkbox"/> New Construction        |
|   | <input type="checkbox"/> Non-Routine Fracturing  |
|   | <input type="checkbox"/> Water Shut-Off          |
|   | <input type="checkbox"/> Conversion to Injection |

**Site Security Diagram**  
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Please see attached Site Security Diagram for the above-referenced well

| OIL AND GAS |     |
|-------------|-----|
| DFN         | RJF |
| JFB         | GLH |
| DPS         | SLS |
| 1-DME       |     |
| 2 MICROFILM |     |
| 3 FILE      |     |

14. I hereby certify that the foregoing is true and correct

Signed Eileen Danni Dey Title Regulatory Analyst Date 7-27-90

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



CHATWIN # 1-21A4  
WELLHEAD

✓ = CHECK VALVE

☒ = VALVE

SPO = SALES PHASE OPEN

SPC = SALES PHASE CLOSED

PRO = PRODUCTION PHASE OPEN

PPC = PRODUCTION PHASE CLOSED

SP = SEALED DURING PRODUCTION

SS = SEALED DURING SALES

SITE SECURITY DIAGRAM  
ANR PRODUCTION COMPANY  
CHATWIN # 1-21A4 &  
JESSEN # 2-21A4 BATTERY  
SW/NE SECTION 21, T1S-R4W  
DUCHE SNE COUNTY, UTAH  
FEDERAL CA # 9661

LOAD RACK

TRANSFER PUMP

POWER H<sub>2</sub>O LINE  
PRODUCTION LINE

HEAT TRACE LINES  
THROUGHOUT SYSTEM  
(NOT SHOWN)

CIRCULATING PUMP

LINE HEATER

POWER H<sub>2</sub>O LINE

TRIPLEX

POWER H<sub>2</sub>O TANK  
500 BBL

H<sub>2</sub>O TANK  
300 BBL

CHATWIN # 1-21A4  
HEATER TREATER

EMERGENCY  
RUPTURE DISC LINE

PRESSURE  
RELIEF LINE

TO PIT

TO \*2-27A4  
WATER DISPOSAL

OIL SALES LINE  
RECYCLE LINE

SP  
PPC  
SPO

OIL TANK  
1000 BBL

OIL TANK  
1000 BBL

EQUALIZER  
VALVE  
SS  
SPC  
PPD

RECYCLE  
PUMP

GAS VENT LINE  
EMERGENCY  
RUPTURE DISC LINE

PRESSURE  
RELIEF LINE

GAS METER

GAS LINE

OIL LINE

H<sub>2</sub>O LINE

JESSEN # 2-21A4  
HEATER TREATER

GAS METER

GAS VENT LINE

TO GAS PLANT

PRODUCTION LINE FROM  
JESSEN 2-21A4 WELLHEAD

THIS LEASE IS SUBJECT TO THE SITE SECURITY PLAN  
FOR DENVER DISTRICT OPERATIONS. THE PLAN IS  
LOCATED: ANR PRODUCTION COMPANY  
P.O. BOX 749  
DENVER, CO 80201-0749

DIAGRAM NOT TO SCALE

EDD 7/24/90

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

|  |                 |
|--|-----------------|
| 6. Lease Designation and Serial Number | Patented        |
| 7. Indian Allottee or Tribe Name       | N/A             |
| 8. Unit or Communitization Agreement   | CA #9661        |
| 9. Well Name and Number                | Chatwin #1-21A4 |
| 10. API Well Number                    | 43-013-30101    |
| 11. Field and Pool, or Wildcat         | Altamont        |

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells; deepen existing wells; or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT for such proposals.

|  |  |
|--|--|
| 1. Type of Well<br><input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify) |  |
| 2. Name of Operator<br>ANR Production Company  |  |
| 3. Address of Operator<br>P. O. Box 749, Denver, Colorado 80201-0749   |  |
| 4. Telephone Number<br>(303) 573-4476  | 5. Location of Well<br>Footage : 2940' FSL & 2462' FEL<br>QQ. Sec. T., R., M. : SWNE Section 21, T1S-R4W |
| County : Duchesne  | State : UTAH   |

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| NOTICE OF INTENT<br>(Submit in Duplicate)                      | SUBSEQUENT REPORT<br>(Submit Original Form Only) |
|--|--|
| <input type="checkbox"/> Abandonment                           | <input type="checkbox"/> Abandonment             |
| <input type="checkbox"/> Casing Repair                         | <input type="checkbox"/> Casing Repair           |
| <input type="checkbox"/> Change of Plans                       | <input type="checkbox"/> Change of Plans         |
| <input type="checkbox"/> Conversion to Injection               | <input type="checkbox"/> Conversion to Injection |
| <input type="checkbox"/> Fracture Treat                        | <input type="checkbox"/> Fracture Treat          |
| <input type="checkbox"/> Multiple Completion                   | <input type="checkbox"/> Other                   |
| <input checked="" type="checkbox"/> Other <u>Emergency Pit</u> |  |
| <input type="checkbox"/> New Construction                      | <input type="checkbox"/> New Construction        |
| <input type="checkbox"/> Pull or Alter Casing                  | <input type="checkbox"/> Pull or Alter Casing    |
| <input type="checkbox"/> Recompletion                          | <input type="checkbox"/> Shoot or Acidize        |
| <input type="checkbox"/> Shoot or Acidize                      | <input type="checkbox"/> Vent or Flare           |
| <input type="checkbox"/> Vent or Flare                         | <input type="checkbox"/> Water Shut-Off          |
| <input type="checkbox"/> Water Shut-Off                        |  |

Approximate Date Work Will Start \_\_\_\_\_

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
\* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

ANR Production Company requests permission to close the existing emergency pit on the above-referenced location using microbial remediation and install a lined pit. The liner will be seamless, 30 MIL, and 20 year warranted. Any emergency use of this pit will be reported to your office as soon as possible and the pit will be emptied and the liquids disposed of in an approved manner within 48 hours following its use, unless otherwise instructed by your office.

(Please see the attached letter submitted to your office 5/7/91 further describing this project.)

**RECEIVED**

JUL 0 1 1991

14. I hereby certify that the foregoing is true and correct

Name & Signature Eden Daniels **DIVISION OF OIL, GAS & MINING** Title Regulatory Analyst Date 6/27/91

(State Use Only)

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 7-9-91  
BY: [Signature]



**Coastal**  
The Energy People

MICHAEL E. McALLISTER, Ph. D.  
DIRECTOR  
ENVIRONMENTAL & SAFETY AFFAIRS  
COASTAL OIL & GAS CORPORATION

May 7, 1991

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Attention: Dianne R. Nielson, Ph.D.  
Division Director

*ALL*  
JUL 01 1991

**DIVISION OF  
OIL, GAS & MINING**

Dear Ms. Nielson:

Coastal Oil & Gas Corporation and ANR Production Co., Inc., known hereafter as COG welcomes the opportunity to provide the State of Utah with information regarding our emergency pits in the Altamont/Bluebell producing areas.

COG shares your concern for protecting ground water and other natural resources. We recognize our responsibility to conduct our operations lawfully, ethically and in an environmentally responsible manner.

COG acknowledges the potential environmental liabilities with emergency pits. Therefore, we are currently conducting a pilot program using bioremediation technology as the closure technique. It is anticipated that the microbial treatment process will achieve a cost effective closure while eliminating long term waste disposal liabilities associated with conventional closure technologies.

COG is currently 90 days into the pilot program. The selected pits have been inoculated and filled to the desired liquid level. The pit walls and bottoms have been manually turned to achieve maximum microbial contact. To date, we are able to photographically document the success of our efforts. If the program continues to progress as expected, we will use this technology as our plan of action for the remaining pits.

Utilizing microbes or any other type of closure technique will necessitate the need for emergency containment in the event of an operating system upset and/or failure. COG respectfully requests, as part of our plan of action, the State of Utah's approval to utilize lined emergency pits to meet this need.

**Coastal Oil & Gas Corporation**

NEW YORK OFFICE: 212-877-7000  
HOUSTON OFFICE: 713-877-7000  
SALT LAKE CITY OFFICE: 801-466-0000 • TEL 577-4630 • TEL 166008 • FAX 713-877-7000

RECEIVED

JUL 01 1991

DIVISION OF  
OIL, GAS & MINING

State of Utah  
May 7, 1991  
Page - 2 -

Our intent is simple. COG will construct an emergency pit immediately adjacent to the existing pits. The new pit's size will be held to a minimum, yet large enough to provide adequate protection. The new pit will be lined using a 30 mil, 20 year warranty, seamless liner. All emergency piping will be removed from the pit to be closed and diverted to the new lined excavation. The old pit will be closed by microbe or other closure technology.

COG feels we are eliminating the potential environmental liability exposure of the past practice of unlined pits. Additionally, the now lined pits afford COG, as a prudent operator, the opportunity to keep the pits clean, remove any liquids as a result of upset conditions within 48 hours and most importantly the pit liner will be inspected on a documented scheduled basis for maximum efficiency. If a problem is noted, corrections will receive priority attention.

The pits listed in your letters to Coastal Oil & Gas Corporation and ANR Production Company Co., Inc. will be the first pits on our state leases to be closed.

To re-confirm our position, COG conducts it's operations in an environmentally sound manner. With the State of Utah's approval for the installation of "lined emergency pits", we will continue with our planned pit closure program. At the same time this program offers future protection to the groundwater and other natural resources in Utah.

Your approval of COG's request to install "lined emergency pits" would be appreciated. Additionally, at your request COG will provide the State of Utah with a copy of our Waste Management Program.

If there are any questions or if additional information is needed, please do not hesitate to call.

Very truly yours,



Michael E. McAllister, Ph.D.

MEM:sc

bcc: R.L. Bartley  
E. Dey  
W.L. Donnelly  
L.P. Streeb

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number

Patented

7. Indian Allottee or Tribe Name

N/A

8. Unit or Communitization Agreement

CA #9661

9. Well Name and Number

Chatwin #1-21A4

10. API Well Number

43-013-30101

11. Field and Pool, or Wildcat

Altamont

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells; deepen existing wells; or to reenter plugged and abandoned wells.

Use APPLICATION FOR PERMIT for such proposals.

1. Type of Well

- Oil Well       Gas Well       Other (specify)

2. Name of Operator

ANR Production Company

3. Address of Operator

P. O. Box 749      Denver, CO 80201-0749

4. Telephone Number

(303) 573-4476

5. Location of Well

Footage : 2940' FSL & 2462' FEL

QQ. Sec. T. R. M. : SW/NE Section 21, T1S-R4W

County : Duchesne

State : UTAH

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT  
(Submit in Duplicate)

- |  |   |
|--|---|
| <input type="checkbox"/> Abandonment             | <input type="checkbox"/> New Construction     |
| <input type="checkbox"/> Casing Repair           | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans         | <input type="checkbox"/> Recompletion         |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize     |
| <input type="checkbox"/> Fracture Treat          | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Multiple Completion     | <input type="checkbox"/> Water Shut-Off       |
| <input type="checkbox"/> Other _____             |   |

Approximate Date Work Will Start \_\_\_\_\_

SUBSEQUENT REPORT  
(Submit Original Form Only)

- |   |  |
|---|--|
| <input type="checkbox"/> Abandonment              | <input type="checkbox"/> New Construction            |
| <input checked="" type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing        |
| <input type="checkbox"/> Change of Plans          | <input checked="" type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Conversion to Injection  | <input type="checkbox"/> Vent or Flare               |
| <input type="checkbox"/> Fracture Treat           | <input type="checkbox"/> Water Shut-Off              |
| <input type="checkbox"/> Other _____              |  |

Date of Work Completion 12/22/91

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

• Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Please see the attached chronological report for the casing leak repair and acid job performed on the above referenced well.

RECEIVED

JAN 21 1992

DIVISION OF  
OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name & Signature

*Robert Dennis Day*

Title Regulatory Analyst

Date 1/17/92

(State Use Only)

THE COASTAL CORPORATION  
PRODUCTION REPORT

CHRONOLOGICAL HISTORY

CHATWIN #1-21A4 (REPAIR CSG LEAK & ACDZ)  
ALTAMONT/BLUEBELL FIELD  
DUCHESNE COUNTY, UTAH  
WI: 53.72267% ANR AFE: 63697  
TD: 17,012' PBSD: 16,310'  
5-1/2" LINER @ 13,093'-17,010'  
PERFS: 11,008'-12,179'  
CWC(M\$): \$186.0

PAGE 1

11/4/91 MIRU CU.  
DC: \$1,422 TC: \$1,422

11/5/91 POH w/tbg. ND tree, NU BOP's. POH w/2-3/8" tbg. SOH w/2-7/8" tbg.  
DC: \$2,548 TC: \$3,970

11/6/91 WOC. RIH w/MSOT 7-5/8" 32-A pkr. Set pkr @ 3583'. Pump 300 sx cmt.  
Sqz leak in csg to 2500 psi.  
DC: \$8,110 TC: \$12,080

11/7/91 Drill cmt. RIH w/6-1/2" drag bit. Tag cmt top @ 4603'. DO hard cmt  
to 4725'. SDFN.  
DC: \$2,605 TC: \$14,685

11/8/91 Cont DO cmt. Drill hd cmt to 4974'.  
DC: \$2,896 TC: \$17,581

11/11/91 RIH w/pkr. CO hd cmt to 5166', stringers to 5240'. Pmp into leak @  
1100 psi, 1 BPM. Prep to resqueeze.  
DC: \$2,934 TC: \$20,515

11/12/91 Rls pkr & POOH w/tbg. Set pkr @ 4600'. Pmp 100 sx cmt to 2500 psi.  
DC: \$5,450 TC: \$25,965

11/13/91 Drill cmt. RIH w/6-1/2" drag bit. Tag cmt @ 4912'. CO soft cmt to  
5086'. SDFN.  
DC: \$3,394 TC: \$29,359

11/14/91 PT csg. CO cmt to 5382'. PT sqz to 1400 psi. Leaked off 1-1/2 BPM.  
PU & RIH w/pkr. Attempt to isolate leak.  
DC: \$4,188 TC: \$33,547

11/15/91 RIH w/pkr. Found top of leak @ 5093' and btm of leak @ 5652'. Set  
pkr @ 4875'. PT csg to 2000 psi, held. Pump 300 sxs cmt. Sqz leak  
to 2500 psi.  
DC: \$8,155 TC: \$41,702

11/18/91 Drlg cmt. RIH w/6-1/2" drag bit. Tag cmt @ 4979'. DO hard cmt to  
5091'. SDFN.  
DC: \$3,338 TC: \$45,040

11/19/91 Pressure tstg. CO hard cmt to 5270'. PT csg to 2000 psi. Lost 1200  
psi/5 min. POOH w/drlg equip.  
DC: \$2,908 TC: \$47,948

11/20/91 Prep to resqueeze. Open 7-5/8" x 10-3/4" annulus. Set pkr @ 5093'.  
Test backside to 2000 psi, held. Pump down tbg. Est inj rate @ 1/4  
BPM @ 2000 psi. Broke down to 2 BPM @ 1700 psi. No returns. Set  
pkr @ 4782'. Prep to resqueeze.  
DC: \$3,718 TC: \$51,666

11/21/91 Prep to DO cmt. Pmp 65 sx Dowell RFC cmt followed by 100 sx Class  
"G" cmt. Sqz leak to 2500 psi. Rls pkr & reverse out. Reset pkr @  
3738'.  
DC: \$7,074 TC: \$58,740

THE COASTAL CORPORATION  
PRODUCTION REPORT

CHRONOLOGICAL HISTORY

CHATWIN #1-21A4 (REPAIR CSG LEAK & ACDZ)  
ALTAMONT/BLUEBELL FIELD  
DUCHESNE COUNTY, UTAH  
WI: 53.72267% ANR AFE: 63697

PAGE 2

11/22/91 RIH w/6-1/2" drag bit, tag cmt @ 4860'. DO cmt to 5085'.  
DC: \$3,394 TC: \$62,134

11/25/91 Drlg cmt. DO cmt to 5157'. Fell through. Re-tag cmt @ 5270'. PT  
upper leak (5093'-5123') to 2200 psi, held. Continue drlg. DO hard  
cmt to 5382'.  
DC: \$36,664 TC: \$98,798

11/26/91 Prep to resqueeze. DO hard cmt to 5611'. Circ hole clean. PT to  
2000 psi. Lost 1000 psi in 3 minutes.  
DC: \$3,613 TC: \$102,411

11/27/91 WOC. DO to 5724'. Spot 50 sx Class "G" cmt. POOH to 4987'. Unable  
to stage cmt. Pump away. Spot 100 sx Class "G" cmt. POOH to 4495'.  
Sqzd cmt to 2500#.  
DC: \$7,800 TC: \$110,211

12/2/91 DO cmt. Tag cmt @ 5081'. DO hard cmt to 5265'. Circ hole clean.  
DC: \$4,119 TC: \$114,330

12/3/91 DO cmt. DO hard cmt from 5265' to 5426'. Circ hole clean.  
DC: \$3,089 TC: \$117,419

12/4/91 Swab test csg leak. DO hard cmt from 5426'-5693'. PT csg to 2000#.  
Lost 500 psi in 5 minutes.  
DC: \$2,743 TC: \$120,162

12/5/91 Retrieve RBP. RIH w/7-5/8" pkr & set @ 5093'. Swab csg dry. No  
entry. POOH.  
DC: \$4,148 TC: \$124,310

12/6/91 POOH w/tbg & RBP. RIH w/retrieving head. Tag fill @ 10,722'. CO  
hole to RBP @ 10,900'. Release BP. SOH w/tbg.  
DC: \$3,430 TC: \$127,740

12/9/91 Prep to run pkr. POOH w/RBP. RIH w/6-1/8" mill & CO tools to  
12,143'. CO fill to 12,234'. POOH w/tbg.  
DC: \$5,938 TC: \$133,678

12/10/91 WO 3-1/2" tbg. POOH w/2-7/8" tbg & CO tools.  
DC: \$2,652 TC: \$136,330

12/11/91 WO 3-1/2" tbg.

12/12/91 WO 3-1/2" tbg.

12/13/91 WO 3-1/2" tbg.

12/16/91 PU 3-1/2" tbg & TIH.

12/17/91 Prep to acidize. PU & RIH w/7-5/8" HD pkr & 3-1/2" tbg. Set pkr @  
10,894'. PT csg to 1000 psi.  
DC: \$5,326 TC: \$141,656

12/18/91 Swabbing. Acidized perfs from 11,008' to 12,179' w/15,000 gals 15%  
HCl w/additives, benzoic acid flakes, rock salt & 200 - 1.1 BS's.  
MTP 8100 psi, ATP 7700 psi. MTR 30 BPM, ATR 28 BPM. ISIP 1280 psi,  
10 min - 0 psi. TLTR 878 bbls. Fair diversion. Made 24 swab trips.  
IFL @ 4900', FFL @ 3600'. Total fluid rec 199 bbls, 99% wtr.  
DC: \$38,431 TC: \$180,087

THE COASTAL CORPORATION  
PRODUCTION REPORT

CHRONOLOGICAL HISTORY

CHATWIN #1-21A4 (REPAIR CSG LEAK & ACDZ)  
ALTAMONT/BLUEBELL FIELD  
DUCHESNE COUNTY, UTAH  
WI: 53.72267% ANR    AFE: 63697

PAGE 3

12/19/91    RIH w/prod equip. Rls pkr & POOH w/3-1/2" tbg.  
            DC: \$4,687            TC:\$184,774

12/20-22/91    Prep to put on pump. RIH w/2-7/8" tbg, testing to 8000 psi. Set  
                  @ 10,978'. RIH w/2-3/8" tbg. Space out and sting into pump cavity.  
                  Test to 4000 psi. Circ well with Triplex.  
                  DC: \$8,890            TC: \$193,664

12/23/91    RDMO.  
            DC: \$1,206            TC: \$194,870

12/23/91    Pmpd 20 BO, 381 BW, 50 MCF, 2200 psi, 88 SPM.

12/24/91    Pmpd 31 BO, 597 BW, 38 MCF, 2200 psi, 88 SPM.

12/25/91    Pmpd 35 BO, 509 BW, 23 MCF, 2200 psi, 88 SPM.

12/26/91    Pmpd 34 BO, 499 BW, 20 MCF, 2200 psi, 88 SPM.

12/27/91    Pmpd 37 BO, 619 BW, 1 MCF, 2200 psi, 80 SPM.

12/28/91    Pmpd 5 BO, 502 BW, 17 MCF, 2200 psi, 80 SPM, frozen scrubber.

12/29/91    Pmpd 39 BO, 470 BW, 36 MCF, 2200 psi, 80 SPM.

12/30/91    Pmpd 7 BO, 469 BW, 22 MCF, 2200 psi, 80 SPM.

12/31/91    Pmpd 41 BO, 433 BW, 15 MCF, 2200 psi, 80 SPM.

1/1/92      Pmpd 10 BO, 421 BW, 8 MCF, 2200 psi, 80 SPM.

1/2/92      Pmpd 5 BO, 457 BW, 10 MCF, 2200 psi, 80 SPM.

1/3/92      Pmpd 8 BO, 409 BW, 10 MCF, 2200 psi, 80 SPM.

1/4/92      Pmpd 6 BO, 430 BW, 12 MCF, 2200 psi, 80 SPM.

1/5/92      Pmpd 7 BO, 450 BW, 6 MCF, 2200 psi, 80 SPM.

            Unsuccessful workover - final report.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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Patented

7. Indian Allottee or Tribe Name

N/A

8. Unit or Communitization Agreement

CA #9661

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43-013-30101

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Altamont

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Use APPLICATION FOR PERMIT— for such proposals.

1. Type of Well

Oil Well     Gas Well     Other (specify)

2. Name of Operator

ANR Production Company

3. Address of Operator

P. O. Box 749, Denver, Colorado 80201-0749

4. Telephone Number

(303) 573-4476

5. Location of Well

Footage : 2940' FSL & 2462' FEL

Q.Q. Sec. T., R., M. : SWNE Section 21, T1S-R4W

County : Duchesne

State : UTAH

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT  
(Submit in Duplicate)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate Date Work Will Start 3/15/92

SUBSEQUENT REPORT  
(Submit Original Form Only)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of Work Completion \_\_\_\_\_

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Please see the attached procedure to locate and isolate water production from the above-referenced well.

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 2-24-92

BY: [Signature]

RECEIVED

FEB 21 1992

DIVISION OF  
OIL GAS & MINING

14. I hereby certify that the foregoing is true and correct.

Name & Signature

(State Use Only)

[Signature]  
Elizabeth Danner Day

Title

Regulatory Analyst

Date

2/18/92

CASING REPAIR AND ACIDIZING PROCEDURE

Chatwin #1-21A4  
Section 21, T1S, R4W  
Altamont Field  
Duchesne County, Utah

January 21, 1992

WELL DATA

Location: 2640' FEL, 2940' FSL  
Elevation: 6618' KB, 6594' GL  
TD: 17,012'  
PBSD: 16,310'  
Casing: 10-3/4", 40.5#, K-55, ST&C @ 1988'  
7-5/8", 39.0#, C-95 set @ 13,366'  
5-1/2", 20 & 23#, N-80 liner from 13,093-17,010'  
Tubing: 2-7/8", 6.5#, N-80 8rd & 2-3/8", 4.7#, N-80, DSS-HT  
Bridge Plugs: 12,205' and 16,300'  
Perforations: 11,008-12,179', total 44 feet and 132 holes

Tubular Data:

| <u>Description</u> | <u>ID</u> | <u>Drift</u> | <u>Capacity</u><br>(B/F) | <u>Burst</u><br>(psi) | <u>Collapse</u><br>(psi) |
|--------------------|-----------|--------------|--------------------------|-----------------------|--------------------------|
| 7-5/8" 39.0# C-95  | 6.625"    | 6.500"       | 0.0426                   | 10900                 | 9980                     |
| 5-1/2" 20# S00-95  | 4.778"    | 4.653"       | 0.0211                   | 10910                 | 10810                    |
| 5-1/2" 23# P-110   | 4.670"    | 4.545"       | 0.0221                   | 13580                 | 14520                    |
| 2-7/8" 6.5# N-80   | 2.441"    | 2.347"       | 0.00579                  | 10570                 | 11160                    |

PRESENT STATUS

SI due to economics on January 8, 1992 making 0 BO, 747 BW, 18 MCF.

PROCEDURE

1. MIRU service rig. Kill well if necessary. Release TAC and POOH w/2-7/8" and 2-3/8" tbg.
2. PU and RIH w/7-5/8" CO tools. CO 7-5/8" csg to CIBP at 12,205'. POOH.
3. PU and RIH w/7-5/8" 39# RBP, full bore pkr, and seating nipple. Set RBP on top of CIBP. Set FBP at  $\pm 11,800'$  (between perfs at 11,768' and 11,815'). Swab well in. Determine inflow rate and type of fluid.  
NOTE: All settings per Schlumberger CNL dated 8/25/72.
4. Release pkr. RIH and retrieve bridge plug. Set RBP at  $\pm 11,800'$ . Press test. POOH and set pkr @  $\pm 10,990'$ . Swab well in. Determine inflow rate and type of fluid. Consult with Denver office about need for additional isolation and testing.
5. RIH and release RBP. POOH and LD FBP and RBP. RIH w/production equipment.

SCP:cam



110 I-logs shows in Green River  
were perforated

PRESENTLY PRODUCING INTERVAL  
AS OF 1/14/92

ATTACHMENT I  
PERFORATION DEPTHS

Depth reference is CNL dated 8-26-72

|        |   |        |
|--------|---|--------|
| 11,008 |   | 11,887 |
| 11,126 |   | 11,902 |
| 11,155 |   | 11,904 |
| 11,184 |   | 11,906 |
| 11,252 |   | 11,917 |
| 11,332 |   | 11,936 |
| 11,348 |   | 11,943 |
| 11,392 |   | 11,951 |
| 11,401 |   | 11,973 |
| 11,487 |   | 11,975 |
| 11,499 |   | 11,977 |
| 11,521 |   | 11,994 |
| 11,552 |   | 12,000 |
| 11,555 |   | 12,005 |
| 11,635 |   | 12,025 |
| 11,749 |   | 12,039 |
| 11,768 |   | 12,102 |
| 11,815 | ↓ | 12,113 |
| 11,843 |   | 12,115 |
| 11,848 |   | 12,124 |
| 11,864 |   | 12,144 |
| 11,870 |   | 12,179 |

Total 44 depths, 132 perforations

3 SPF

11/83



THE COASTAL CORPORATION  
PRODUCTION REPORT

CHRONOLOGICAL HISTORY

PAGE 4

CHATWIN #1-21A4 (WATER SHUT-OFF)  
ALTAMONT/BLUEBELL FIELD  
DUCHESNE COUNTY, UTAH  
WI: 53.72267% ANR AFE: 63914  
TD: 17,012' PBD: 12,205'  
5-1/2" LINER @ 13,093'-17,010'  
PERFS: 11,008'-12,179'  
CWC(M\$): \$40.4

- 4/2/92 Prep to ND WH. MIRU service rig.  
DC: \$1,827 TC: \$1,827
- 4/3/92 RIH w/CO tools. ND WH, NU BOP's. POOH w/2-3/8" tbg & stinger. Rel  
TAC @ 10,978'. POOH w/hyd pump cavity & BHA on 2-7/8" tbg.  
DC: \$3,354 TC: \$5,181
- 4/6/92 RIH w/isolation pkr. RIH w/6-1/2" mill & CO tools to 12,220'. POOH.  
CO tools filled w/heavy drlg mud, frac balls, shale, scale and rocks.  
DC: \$4,381 TC: \$9,562
- 4/7/92 Swab test. RIH w/7-5/8" pkr and set @ 11,793'. RU swab equip. IFL  
@ 2600'. Swabbed 13 runs. FFL @ 5000'. Rec'd 30 BO & 13 BW.  
Swabbing drlg mud.  
DC: \$3,029 TC: \$12,591
- 4/8/92 POOH w/pkr. IFL @ 3300'. Swabbed 14 runs, FFL @ 5000'. Rec'd 12 BO  
& 98 BW. Rel pkr.  
DC: \$3,776 TC: \$16,367
- 4/9/92 Swab test perfs. RIH w/7-5/8" pkr & RBP. Set RBP @ 11,817' and test  
to 2000#. Reset pkr @ 10,991'. PT csg to 2000#. Bled off 500# in  
5 min. RU swab equip. IFL @ 2400'. Swabbed 3 runs. FFL @ 2800'.  
Rec'd 26 BW.  
DC: \$4,025 TC: \$20,392
- 4/10/92 Cont swab test. Made 21 swab trips. IFL @ 2200', FFL @ 2800'. Rec  
20 BO & 94 BW.  
DC: \$2,160 TC: \$22,552
- 4/13/92 Prep to run prod equip. Made 8 swab trips. IFL @ 2200', FFL @  
2800'. First trip 4% oil, next 7 trips 100% wtr w/trace of oil. Rls  
RBP & pkr, POOH.  
DC: \$3,322 TC: \$25,874
- 4/14/92 Finish RIH w/2-3/8" side string. RIH w/2-7/8" prod string. Set TAC  
@ 10,978'. SIH w/2-3/8" side string.  
DC: \$3,889 TC: \$29,763
- 4/15/92 Finish NU wellhead. Tbg hanger galled. Sent in for repairs.  
DC: \$2,644 TC: \$32,407
- 4/16/92 Evaluate future workover. Finish NU WH. Final report.  
DC: \$2,470 TC: \$34,877

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

|   |  |   |
|---|--|---|
| 1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:              |  | 5. Lease Designation and Serial Number:<br>Patented |
| 2. Name of Operator:<br>ANR Production Company  |  | 6. If Indian, Allottee or Tribe Name:<br>N/A        |
| 3. Address and Telephone Number:<br>P. O. Box 749 Denver, CO 80201-0749 (303) 573-4476                    |  | 7. Unit Agreement Name:<br>CA #9661                 |
| 4. Location of Well<br>Footages: 2940' FSL & 2462' FEL<br>CQ, Sec., T., R., M.: SW/NE Section 21, T1S-R4W |  | 8. Well Name and Number:<br>Chatwin #1-21A4         |
|   |  | 9. API Well Number:<br>43-013-30101                 |
|   |  | 10. Field and Pool, or Wildcat:<br>Altamont         |
|   |  | County: Duchesne                                    |
|   |  | State: Utah   |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| NOTICE OF INTENT<br>(Submit in Duplicate)   | SUBSEQUENT REPORT<br>(Submit Original Form Only)   |
|---|--|
| <input type="checkbox"/> Abandonment<br><input type="checkbox"/> Casing Repair<br><input type="checkbox"/> Change of Plans<br><input type="checkbox"/> Conversion to Injection<br><input type="checkbox"/> Fracture Treat<br><input type="checkbox"/> Multiple Completion<br><input type="checkbox"/> Other _____ | <input type="checkbox"/> Abandonment *<br><input type="checkbox"/> Casing Repair<br><input type="checkbox"/> Change of Plans<br><input type="checkbox"/> Conversion to Injection<br><input type="checkbox"/> Fracture Treat<br><input checked="" type="checkbox"/> Other <u>Annual Status Report</u> |
| <input type="checkbox"/> New Construction<br><input type="checkbox"/> Pull or Alter Casing<br><input type="checkbox"/> Recompletion<br><input type="checkbox"/> Shoot or Acidize<br><input type="checkbox"/> Vent or Flare<br><input type="checkbox"/> Water Shut-Off   | <input type="checkbox"/> New Construction<br><input type="checkbox"/> Pull or Alter Casing<br><input type="checkbox"/> Shoot or Acidize<br><input type="checkbox"/> Vent or Flare<br><input type="checkbox"/> Water Shut-Off   |
| Approximate date work will start _____  | Date of work completion _____  |
|   | Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.<br>* Must be accompanied by a cement verification report.  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The above referenced well is shut-in due to the Green River formation being uneconomical to produce. This well is a future candidate for a Green River recompletion procedure.

**RECEIVED**  
FEB 16 1993

DIVISION OF  
OIL, GAS & MINING

13. Name & Signature: Eileen Danni Dey Title: Regulatory Analyst Date: 2/11/93

(This space for State use only)

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

5. Lease Designation and Serial Number:

Patented

6. If Indian, Allottee or Tribe Name:

N/A

7. Unit Agreement Name:

CA #9661

8. Well Name and Number:

Chatwin #1-21A4

9. API Well Number:

43-013-30101

10. Field and Pool, or Wildcat:

Altamont

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:

ANR Production Company

3. Address and Telephone Number:

P. O. Box 749 Denver, CO 80201-0749

(303) 573-4454

4. Location of Well

Footages: 2940' FSL & 2462' FEL

QQ, Sec., T., R., M.: SW/NE Section 21, T1S-R4W

County: Duchesne

State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT

(Submit in Duplicate)

- Abandonment
- Casing Repair
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- Fracture Treat
- Multiple Completion
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate date work will start 12/2/93

SUBSEQUENT REPORT

(Submit Original Form Only)

- Abandonment \*
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Please refer to the attached procedure to plug and abandon the subject well.

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 11-22-93

BY: M. D. Ernest

*approved as per attached stipulations*

NOV 19 1993

OIL, GAS, AND MINING

13.

Name & Signature:

Marc D. Ernest

Title: Production Superintendent

Date: 11/2/93

(This space for State use only)

## PLUG AND ABANDONMENT PROCEDURE

Chatwin #1-21A4  
Altamont Field  
Duchesne County, Utah

### WELL DATA

Location: 2940' FSL & 2640' FEL  
Elevation: 6594' GL, 6618' KB  
Total Depth: 17,012' PBD: 16,892'  
Casing: 10-3/4", 40.5#, K-55 set @ 1988'  
7-5/8", 39# S-95 set @ 13,366'  
5-1/2", 20 & 23#, S00-95 set 13,093-17,010'  
Tubing: 2-7/8", 6.5#, N-80 tubing set @ 10,629' w/National pump cavity.  
2-3/8", 4.7#, N-80 DSS-HT set @ 10,650'.

### TUBULAR DATA

| <u>Description</u>  | <u>ID</u> | <u>Drift</u> | <u>B/F<br/>Capacity</u> | <u>psi<br/>Burst</u> | <u>psi<br/>Collapse</u> |
|---------------------|-----------|--------------|-------------------------|----------------------|-------------------------|
| 7-5/8", 39#, S-95   | 6.625"    | 6.500        | .0426                   | 10900                | 10600                   |
| 5-1/2", 20#, S00-95 | 4.778"    | 4.653        | .0221                   | 10910                | 10810                   |
| 5-1/2", 23#, S00-95 | 4.670"    | 4.545        | .0211                   | 11730                | 13040                   |
| 2-7/8", 6.5#, N-80  | 2.441"    | 2.347        | .00579                  | 10570                | 11160                   |

Present Status: Presently shutin with Green River perforations open and CIBP on top of Wasatch perms at 12,205'.

### PROCEDURE

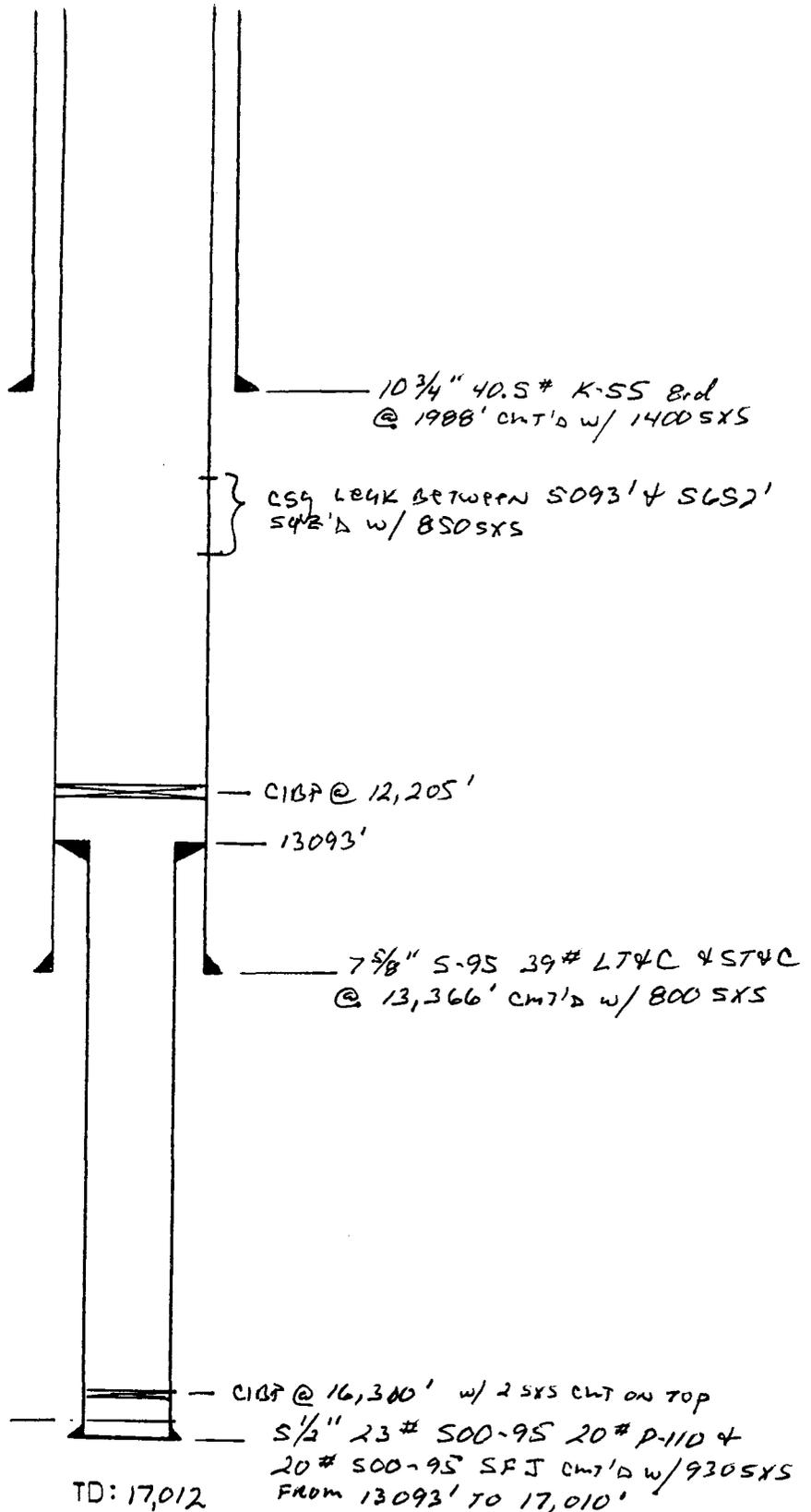
1. MIRU service rig. Kill well. POOH with 2-3/8" and 2-7/8" tubing.
2. TIH with 2-7/8" tubing and spot 25 sks cement on top of CIBP (12,205-11,955'). POOH with tubing. PU 5-1/2" cement retainer on 2-7/8" tubing and TIH. Set retainer @ 10,900'. Pump 40 sks cement below retainer (10,900-11,100'). Sting out of retainer and spot 80 sks cement on top of retainer (10,500-10,900').
3. POOH to 2170' and spot 75 sks cement (1800-2170').
4. Cut off braden head and casing 5' below ground level. Place 50 sk plug across surface (surf-250'). Install dry hole marker with necessary information.
5. Reclaim location as needed.

PRESENT WELLBORE SCHEMATIC

CHATWIN # 1-2194

S.C. Prutch

12/22/92



Perforated Interval  
11,008' TO 16,867'

1007 TOTAL HOLES

NOTE: 1) 15 PERFS BELOW CIBP  
@ 16,300'

2) 8 perfs BETWEEN  
CIBP @ 12,205' &  
CIBP @ 16,300'

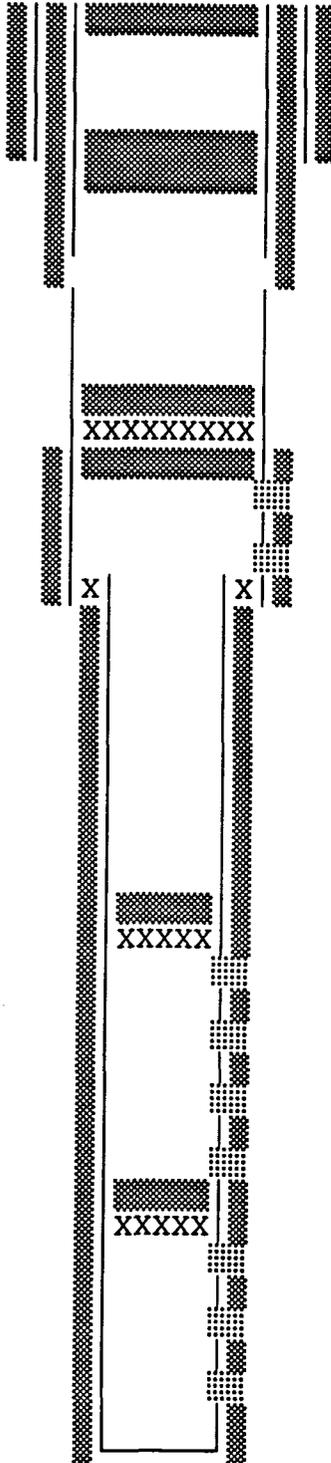
3) 132 perforations,  
presently producing  
FROM 11,008' TO 12,179'

Orig 7BTD  
@ 16,842

CHATWIN #1-21A4

SECTION 21-T1S-R4W  
ALTAMONT FIELD

DUCHESNE CO., UTAH



50 SK PLUG at SURF.

SURFACE CASING: 10-3/4", 40.5#, K-55 LT&C  
SET @ 1988'

75 SK PLUG 1800-2150'

CASING LEAK @ 5093-5652' repaired with 850  
sks.

INTERMEDIATE CASING: 7-5/8", 39# S-95, LT&C  
SET @ 13,366'

CIBP @ 10,900' WITH CEMENT TO 10,500' ABOVE  
AND CEMENT TO 11,100' BELOW

GREEN RIVER PERFS 11,008'-12,179'

PRODUCTION LINER: 5-1/2", 20#, SOO-95 & P-  
110, & 20# P-110 SET @ 13,093-17,010'

CIBP @ 12,205' WITH CEMENT 12,000-12,205' AND  
12,205-12,350'

WASATCH PERFS: 12,220'-16,887'  
TOTAL 875 HOLES

CIBP @ 16,300' WITH 2 SKS CEMENT

TD @ 17,012' PBD @ 16,892'



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

STIPULATION FOR PLUGGING AND ABANDONMENT  
Chatwin 1-21A4  
Section 21, Township 1 South, Range 4 West  
Duchesne County, Utah  
API No. 43-013-30101

1. After Step 2 POOH to  $\pm 5675$  and pump 375' balanced cement plug to cover bad section of casing. Top of plug to be  $\pm 5050'$ . Tag plug.
2. Continue POOH to  $\pm 4650'$  set 100' balanced cement plug  $\pm 4650 - 4550'$ .
3. Fill all annuli after cut off with cement to surface.
4. Notify DOGM 24 hours prior to plugging.

A handwritten signature in cursive script, appearing to read "J. Matthews".



STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

11 - 51334

**SUNDRY NOTICES AND REPORTS ON WELLS**

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5. Lease Designation and Serial Number:  
Patented

6. If Indian, Allottee or Tribe Name:  
N/A

7. Unit Agreement Name:  
CA #9661

8. Well Name and Number:  
Chatwin #1-21A4

9. API Well Number:  
43-013-30101

10. Field and Pool, or Wildcat:  
Altamont

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:  
ANR Production Company

3. Address and Telephone Number:  
P.O. Box 749, Denver, CO 80201-0749 (303) 573-4476

4. Location of Well  
Footages: 2940' FSL & 2462' FEL  
QQ, Sec., T., R., M.: SW/NE Section 21-T1S-R4W

County: Duchesne  
State: Utah

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

**NOTICE OF INTENT**  
(Submit in Duplicate)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

- Abandonment \*
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of work completion 6/9/94

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Please see attached chronological history to P&A the above referenced well.

13. Name & Signature: N.O. Shiflett / sub Title: N.O. Shiflett Dist. Drlg. Manager Date: 6/29/94

(This space for State use only)

THE COASTAL CORPORATION  
PRODUCTION REPORT

CHRONOLOGICAL HISTORY

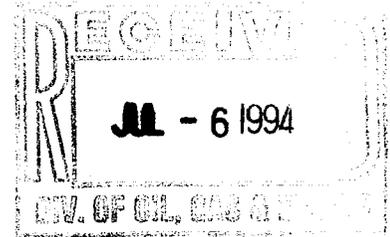
CHATWIN #1-21A4 (PLUG & ABANDONMENT)  
ALTAMONT/BLUEBELL FIELD  
DUCHESNE COUNTY, UTAH  
WI: 58.72577% ANR     AFE: 64949  
TD: 17,012'  
5-1/2" LINER @ 13,093'-17,010'  
CWC(M\$): 52.3

PAGE 5

5/22-6/9/94 Well P&A'd.

MIRU Wisco on 5/22/94. ND WH, NU BOP. POH w/171 jts 2<sup>3</sup>/<sub>8</sub>" & LD. POH w/223 jts 2<sup>7</sup>/<sub>8</sub>" & BHA. RIH w/open-ended 2<sup>7</sup>/<sub>8</sub>", tag CIBP @ 12,205'. Spot 25 sx cmt @ 12,000'-12,205' (Class "G", 15.8 ppg). RIH w/CICR, RET set @ 4622'. DO RET. RIH w/2<sup>7</sup>/<sub>8</sub>", tag cmt @ 11,699'. Spot 200 sx Class "G" (15.8 ppg) @ 12,000'-11,688'. POH, check TOC @ 11,688'. RIH w/CICR, RET set @ 5000' while RIH. DO RET. Set CICR @ 10,852'. Attempt to PI, PT to 2000#. Spot 50 sx Class "G" (15.8 ppg) @ 10,640'-10,852'. Attempt to spot 2 plugs (125 sx, 150 sx) Class "G" (15.8 ppg) @ 5656' - would not hold, on VAC, set 7<sup>5</sup>/<sub>8</sub>" CICR @ 5695'. Est inj rate @ 2 BPM, 150#. Spot 100 sx Class "G" (15.8 ppg) @ 5110'-5695'. Set CICR @ 5010'. Spot 25 sx Class "G" (15.8 ppg) @ 4887'-5010'. Spot 25 sx same @ 4527'-4650', 75 sx same @ 1742'-2170'. Spot 330 sx cmt @ sfc & annulus from 0-250'. Cut off csg. Weld on plate & DHM. P&A witnessed by Dave Hackford, State of Utah. Well P&A'd 6/9/94. Final report.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ABANDONMENT OPERATIONS



COMPANY NAME: ANR PRODUCTION COMPANY, INC.

WELL NAME: CHATWIN #1-21A4

QTR/QTR: SW/NE SECTION: 21 TOWNSHIP: 01S RANGE: 04W

COUNTY: DUCHESNE API NO: 43-013-30101

CEMENTING COMPANY: BASIN CONCRETE WELL SIGN: YES

INSPECTOR: DENNIS INGRAM TIME: 5:30 P.M. DATE: 6/6/94

CEMENTING OPERATIONS: PLUGBACK: \_\_\_\_\_ SQUEEZE: \_\_\_\_\_ P&A WELL: Y

SURFACE PLUG: 1801--2152 INTERMEDIATE PLUG: 5010' AND 5690'

BOTTOM PLUG SET @: 12205 WIRELINE: N MECHANICAL: CIBP

PERFORATIONS: 11008'-12179' SQUEEZE PRESSURE: 125 PSI @1.75BB

CASING SIZE: SURFACE: 10 3/4", 40.5# PRODUCTION: 7 5/8", 39#

GRADE: SURFACE: K-55 PRODUCTION: S-95

PRODUCTION CASING TESTED TO: 600 PSI TIME: 15 F/O-5010'

SLURRY INFORMATION: (INCLUDE NO. OF SACKS CLASS AND ADDITIVES)

1. SURFACE PLUG: 75 SACKS 'G' (15 BBLs) FROM 1801' TO 2152'

2. INTERMEDIATE PLUGS: RETAINER 5690' & 5010'. 655 SKS TOTAL.

3. BOTTOM PLUG: 100 SACKS 'G' BELOW RETAINER (476 FEET).

4. CEMENT ON TOP OF PLUG: 25 SACKS 'G' ON TOP (117.2 FEET)

5. ANNULUS CEMENTED: 180 SKS FIRST STAGE; 77 SKS 'G' SECOND.

6. FLUID IN WELL BORE: 9.0 PPG FORM. WATER W/CORROSION INHIB.

ABANDONMENT MARKER SET:

PLATE: \_\_\_\_\_ PIPE: Y CORRECT INFORMATION: Y

REHABILITATION COMPLETED: NO

COMMENTS: WITNESS CASING TEST BETWEEN 0' AND 5010' WHERE RETAINER WAS SET; 600 PSI F/15 MINUTES. RETAINERS WERE SET AT: 5010', 5690', 10,851', TAGGED CIBP @ 12205'.

P&A INFORMATION ON CHATWIN #1-21A4; SEC 21; T1S; R4W;  
43-013-30101:

- 5/24/94 Witness tagging of CIBP @12,205 and pumping of 25 sacks 'G' at same depth.
- 5/25/94 TIH w/7 5/8" retainer which set at 4622' (drill out same).
- 5/26/94 TIH open ended to cover perfs. Tagged cement @ 11,950. pumped 200 sacks 'G' (42 bbl slurry, joint count was 388 x 30.75 = 11,931 feet).
- 5/27/94 Tagged cement @ 11,688' and need to 682 more feet of perfs. Made clean out run w/bit & scraper.
- 5/31/94 retainer set at 1800 feet -- drill out same.
- 6/02/94 Witness setting of 7 5/8" retainer @ 10,851. Try to inject into formation -- 2000 psi bled back to 1600 in 10 minutes. Gained permission to pump 50 sacks on top of retainer -- was 10 bbl slurry or 234 feet.
- 6/04/94 TIH to tag plug which was pumped the day before at 5675' NO TAG. Spotted 165 sacks 'G' at 5675 feet -- POOH & WOC.
- 6/05/94 Make bit & scraper run. TIH & set 7 5/8 " retainer 5690 feet. Pumped 165 sacks 'G' on top of same - WOC.
- 6/06/94 Tagged solid cement at 5506'. Bill McGaughey requested injection rate. Pressured to 500 psi and broke to 125 psi @ 1.75 Barrels per minute. ANR requested permission from DOGM to set retainer above hole -- permission was granted. Set 7 5/8" retainer @163 JTS x 30.75 was (5010). Sting out & test casing to 600 psi for 15 minutes -- leaked off to 575 psi. Pumped 100 sacks 'G' (476 feet) below retainer & 25 sacks (117.2 feet) above same. Est top 4893".
- Down 12 joints.  
Pumped 30 sacks 'G' (140.7 feet) across saline zone. Was pumped @ 151 jts x 30.75 = 4643 feet. Est top 4502'.  
Lay down 8 jts.
  - Pumped 75 sacks balanced plug @ 70 jts x 30.75 = 2152.2'.  
Est top was 1801 feet. Lay down 62 jts.
  - Circulate cement to surface with 8 joints in hole (246 feet).
- 6/07/94 Pumped 180 sacks 'G' on first day -- cement moving down hole.
- 6/08/94 Pumped 77 sacks 'G' until full (all annulars are full). Install marker and weld shut. Photos were taken.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
WORKOVER AND COMPLETION FORM

COMPANY: ANR PRODUCTION CO, INC COMPANY REP: HARLEN HODGE

WELL NAME: CHATWIN #1-21A4 API NO: 43-013-30101

SECTION: 21 TWP: 01S RANGE: 04W

CONTRACTOR: PENNANT WELL SERVICE RIG NUMBER: #11

INSPECTOR: INGRAM TIME: 2:15 PM AM/PM DATE: 5/24/94

OPERATIONS AT THE TIME OF INSPECTION: TIH TO TAG CIBP @12,205.

=====

WELL SIGN: Y TYPE OF WELL: OIL STATUS PRIOR TO WORKOVER: SOW

H2S: NO ENVIRONMENTAL: NO PIT: YES BOPE: YES

DISPOSITION OF FLUIDS USED: FRACK, AND TRUCK.

PERFORATED: \_\_\_\_\_ STIMULATED: \_\_\_\_\_ SAND CONTROL: \_\_\_\_\_

WATER SHUT OFF: \_\_\_\_\_ WELLBORE CLEANOUT: \_\_\_\_\_ WELL DEEPENED: \_\_\_\_\_

CASING OR LINER REPAIR: \_\_\_\_\_ ENHANCED RECOVERY: \_\_\_\_\_ THIEF ZONE: \_\_\_\_\_

CHANGE OF LIFT SYSTEM: \_\_\_\_\_ TUBING CHANGE: \_\_\_\_\_ OTHER CEMENT SQUEEZE: Y

=====

REMARKS:

HAVE RIGGED UP TO DO P&A. WITNESS TAGGING OF CIBP WITH 15,000 POUNDS.

ALSO WITNESS THE PUMPING OF 25 SACKS OF CLASS 'G' CEMENT ON TOP OF SAME.

PRODUCTION TANKS ARE ADEQUATELY BERMED, HOWEVER, 400 BARREL PIT TANK

HAS NO BERMING, NOR DOES LOCATION. EMERGENCY PIT IS FENCED AND LINED

AND CLEAN.