



A Subsidiary of Union Pacific Corporation

October 11, 1994

Division of Oil, Gas and Mining  
Utah Department of Natural Resources  
3 Triad Center - Suite 350  
355 North Temple  
Salt Lake City, Utah 84190

ATTN: Mike Hebertson

RE: **Application For Permit To Drill**  
**UPRR 19-1H**  
**Section 19, T. 5 N., R. 8 E., SLBM**  
**Summit County, Utah**

Dear Mike:

Enclosed please find an Application For Permit To Drill (APD) for the above referenced well. The well will be an attempted "stacked" dual lateral with one completion in the Watton Canyon Formation and the second completion in the Rich Formation. Both bottom hole locations are 660' FNL and 660' FEL of section 19, T. 5 N., R. 8 E.

Please be advised the lease for the tract on which the well is located expires at the end of October 1994. It is imperative that Union Pacific Resources Company (UPRC) be drilling on the lease by the end of the month. With that in mind, UPRC will greatly appreciate anything you can do to speed the approval process along.

Please call me at (817) 877-7952, Fax (817) 877-7942, if you have any questions or need additional information.

Yours truly,

UNION PACIFIC RESOURCES COMPANY

A handwritten signature in cursive script that reads "W. F. Brazelton".

W. F. Brazelton  
Senior Regulatory Analyst

OCT 12

enc: APD package, UPRR 19-1H

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

5. Lease Designation and Serial No.  
**UT-PA000Z**

6. If Indian, Allottee or Tribe Name  
**N/A**

7. Unit Agreement Name  
**N/A**

8. Farm or Lease Name  
**UPRR**

9. Well No.  
**19-1H**

10. Field and Pool, or Wildcat  
**Cave Creek**

11. 00, Sec., T., R., N., or Blk. and Survey or Area  
**NE/4 Sec. 19, T.5N., R. 8E., SLBM**

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  
**Union Pacific Resources Company**

3. Address of Operator  
**P.O. Box 7 - MS 3006, Ft. Worth, TX 76101-0007**

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
 At surface **1,320' FNL, 1,980' FEL, Sec. 19, T.5N., R. 8E., SLBM**  
 At proposed prod. zone **1) 660' FSL, 660' FWL, Sec. 19, T. 5N., R. 8E., SLBM**  
**2) 660' FSL, 660' FWL, Sec. 19, T.5N., R. 8E., SLBM**

12. County or Parrish  
**Summit**

13. State  
**Utah**

14. Distance in miles and direction from nearest town or post office\*  
**23 mi, NE from Coalville, UT**

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest dirig. line, if any)  
**1320'**

16. No. of acres in lease  
**640**

17. No. of acres assigned to this well  
**640**

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

19. Proposed depth  
**6,200' TVD/9,700' MD**

20. Rotary or cable tools  
**Rotary**

21. Elevations (Show whether DF, RT, GR, etc.)  
**7182 GR**

22. Approx. date work will start\*  
**Upon approval**

**PROPOSED CASING AND CEMENTING PROGRAM**

| Size of Hole | Size of Casing | Weight per Foot | Setting Depth | Quantity of Cement                    |
|--------------|----------------|-----------------|---------------|---------------------------------------|
| --           | 16"            | --              | 50'           | 5 CY Redi-mix                         |
| 14-3/4"      | 10-3/4"        | 45.5            | 1000'         | 934 cf 35:65:6 POZ + 290 cf class "G" |
| 9-7/8"       | 7-5/8"         | 29.7            | 4000'         | 850 cf class "G"                      |
| 9-7/8"       | 7-3/4"         | 46.1            | 4000'-6135'   | 705 cf 35:65:6 POZ + 275 of class "G" |

Union Pacific Resources Company proposes to drill, test and complete a dual "stacked lateral well" in the 1) Watton Canyon Formation, 2) the Rich Formation. The following are included for review and approval:

- 1) Drilling Program
- 2) Estimated Formation Tops
- 3) Casing/Cementing Program
- 4) Directional Program
- 5) Mud Program
- 6) Testing Program
- 7) BOP Program Schematics
- 8) Location Plats and Schematics

CONFIDENTIAL

OCT 12

Water source for this well is creek water purchased from landowner.

PLEASE CONSIDER ALL SUBMITTALS PERTAINING TO THIS WELL "CONFIDENTIAL".

IF ADDITIONAL INFORMATION IS NEEDED, PLEASE CONTACT THE UNDERSIGNED AT (817) 877-7952.

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. I hereby certify that this report is true and complete to the best of my knowledge.

Signed: W.F. Brantley Title: Sr. Regulatory Analyst Date: 10-11-94

(This space for Federal or State office use)

API NO. 43-043-30309 Approval Date \_\_\_\_\_

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

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

DATE: 10/21/94  
BY: JAN Matthews  
WELL SPACING: Case 189-2

\*See Instructions On Reverse Side



# Union Pacific Resources

A Subsidiary of Union Pacific Corporation

## INTER-OFFICE CORRESPONDENCE

TO: OVERTHRUST DRILLING FOREMEN

OFFICE:

FROM: W. CHARLES

DATE: 09-27-94

SUBJECT: DRILLING PROGRAM: UPRR CAVE CREEK 19-1H

SURFACE LOCATION: 1320' FNL & 1980' FEL SECTION 19-T5N-R8E

BOTTOMHOLE LOCATION: 660' FSL & 660' FWL SECTION 19-T5N-R8E

COUNTY: SUMMIT, UTAH

WATTON CANYON TD: 10827' MD

AFE: 18526

RICH TD: 10870'

DHC: \$ XXXXX M

GROUND ELEVATION: 7182'

CHC: \$ XXXXX M

KB ELEVATION: 7202

API NO.: 43-043-XXXXX

### ESTIMATED TOPS OF GEOLOGICAL MARKERS:

| FORMATION               | VERTICAL DEPTH |       |  |
|-------------------------|----------------|-------|--|
|                         | @ SL           | @ BHL |  |
| Aspen.....              | 1824'          | ..... |  |
| Kelvin.....             | 2154'          | ..... |  |
| Stump.....              | 3974'          | ..... | * The well will be drilled as a dual lateral horizontal well; the first lateral will be drilled in the Watton Canyon target and the second lateral will be drilled in the Rich target. |
| Preuss.....             | 4271'          | ..... |  |
| Salt.....               | 5231'          | ..... |  |
| Base of Salt.....       | 5533'          | ..... |  |
| Giraffe Creek.....      | 5563'          | ..... |  |
| Leeds Creek.....        | 6084'          | ..... |  |
| Watton Canyon.....      | 6439'          | ..... |  |
| *WATTON CANYON TARGET.. | 6592'          | 6462' |  |
| Boundry Ridge.....      | 6629'          | 6499' |  |
| Rich.....               | 6682'          | 6552' |  |
| *RICH TARGET.....       | 6697'          | 6567' |  |

### CASING PROGRAM:

| Hole Size | Setting Depth<br>(Measured Depth) | Size    | Weight | Grade | Thread | Condition |
|-----------|-----------------------------------|---------|--------|-------|--------|-----------|
| ---       | 50'                               | 16"     | ---    | B     | ----   | Used      |
| 14-3/4"   | 0 - 1000'                         | 10-3/4" | 45.5#  | K-55  | STC    | New       |
| 9-7/8"    | 0 - 4000'                         | 7-5/8"  | 29.7#  | S-95  | LTC    | New       |
| 9-7/8"    | 4000 - 6135'                      | 7-3/4"  | 46.1#  | S-125 | LTC    | New       |

### DIRECTIONAL PROGRAM:

|                        | WATTON CANYON TARGET | RICH TARGET |
|------------------------|----------------------|-------------|
| KICK OFF POINT         | - 6171' TVD          | 6460' TVD   |
| BUILD RATE             | - 14°/100'           | 14°/100'    |
| VERTICAL SECTION AT TD | - 4421'              | 4421'       |
| HOLE ANGLE AT TD       | - 91.7°              | 91.7°       |
| HOLE DIRECTION         | - 218.5°             | 218.5°      |

**CEMENTING PROGRAM:**

**Conductor** .....5 yds of Redimix to cement conductor to surface

**Surface** ..... 934 cf 35:65:6 Pozmix w/ 2% CaCl + 0.25 pps celloflake.  
Tail w/ 290 cf Class G w/ 2% CaCl + 0.25 pps celloflake.  
(PROVIDES 1000' COVERAGE)

**Production .STAGE1:** 850 cf Class G + 0.75 gps Saltbond II + 24% Salt +  
0.03 gps Defoamer  
(PROVIDES 2635' COVERAGE)

**STAGE2:** 705 cf 35:65:6 Posmix w/ 2% CaCl  
Tail w/ 275 cf Class G  
(PROVIDES 3000' COVERAGE)

NOTE: A DV MULTI-STAGE CEMENTING COLLAR WILL BE PLACED AT 3500'

**MUD PROGRAM:**

| Interval<br>(TVD) | Mud Weight  | Viscosity | Fluid Loss | Remarks  |
|-------------------|-------------|-----------|------------|--|
| 0- 1000'          | 8.4-9.2 ppg | 27-45 sec | No Control | Fresh water native mud<br>w/ gel & lime addition |
| 1000- 5000'       | 8.7-9.1 ppg | 36-38 sec | 10 - 20 cc | Fresh water native mud<br>w/gel & lime addition  |
| 5000- 6135'       | 9.0-10. ppg | 38-40     | 10-20 cc   | Salt saturated - gel<br>mud                      |
| 6135- TD          | 8.4-9.9 ppg | ----      | No Contrl  | Fresh water or brine as<br>needed.               |

**TESTING, LOGGING, CORING PROGRAMS:**

**Samples:** 30' Intervals.

**Cores-DSTs:** None.

**Mud Logger:** 4000' to TD.

**Logging:** FMS-GR from 6135' to TD.

**Directional Surveys:** Every 180' in vertical portion of hole; every 30' in  
build section; every 60' in tangent section.

**BOP PROGRAM: BOP's To Be Installed After Setting Various Casing Strings**

| <u>Casing String</u> | <u>BOP Size /<br/>BOP Pressure Rating</u> | <u>Max Anticipated<br/>Surface Pressure</u><br>(See Note 1) | <u>Test Pressure</u> |
|----------------------|---|---|----------------------|
| 10-3/4"              | 13-5/8" or 11"                            | 2500 psi  | ----                 |
|                      | 5000 psi annular                          | -----   | 3500 psi             |
|                      | 5000 psi rams                             | -----   | 5000 psi             |
|                      | 5000 psi manifold<br>& valves             | -----   | 5000 psi             |
| 7-5/8"               | 13-5/8" or 11"                            | 2500 psi  | ----                 |
|                      | 5000 psi annular                          | -----   | 3500 psi             |
|                      | 5000 psi rams                             | -----   | 5000 psi             |
|                      | 5000 psi manifold<br>& valves             | -----   | 5000 psi             |

UNION PACIFIC RESOURCES COMPANY  
 CAVE CREEK 19-1H  
 SUMMIT COUNTY, UTAH  
 "WATTON CANYON TARGET"

*Wattson Canyon Target*

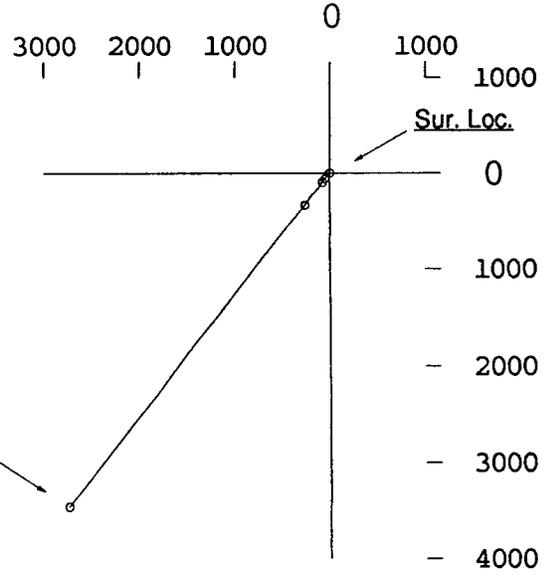


DIRECTIONAL SYSTEMS

P.O. Box 129  
 Broussard, La. 70518  
 1-800-489-1234

Proposed B.H.L.  
 4421' Displacement  
 @ 218.46° Azimuth  
 South-3462' West-2750'  
 TVD-6462' MD-10827'

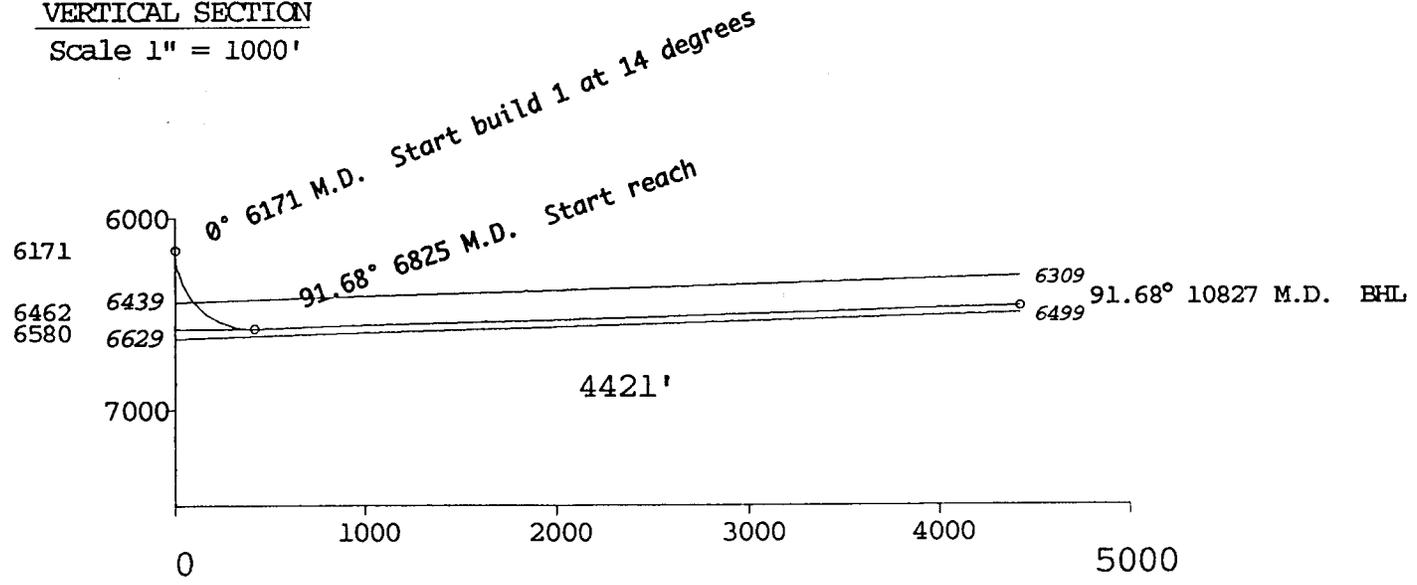
HORIZONTAL PLAN  
 Scale 1" = 2000'



PLANE OF PROPOSAL  
 218.46°

AVERAGE ANGLE  
 91.68°

VERTICAL SECTION  
 Scale 1" = 1000'



Delmar Directional Systems

UNION PACIFIC RESOURCES COMPANY  
 CAVE CREEK 19-1H  
 SUMMIT COUNTY, UTAH  
 "WATSON CANYON TARGET"

Slot Elevation: 0.00  
 Plane of Vertical Section: S 38 27 W

Radius of Curvature Calculations

**KOP**

| Measured<br>Depth<br>Feet   | BORE - HOLE<br>Inclination<br>Deg | Direction<br>Deg | TRUE<br>Vertical<br>Depth<br>Feet | RECTANGULAR<br>COORDINATES<br>North/South East/West<br>Feet |         | VERTICAL<br>SECTION<br>Feet | CLOSURES<br>Distance<br>Feet |        | Direction<br>Deg | DLS<br>Deg/100' |
|---|-----------------------------------|------------------|-----------------------------------|---|---------|-----------------------------|------------------------------|--------|------------------|-----------------|
| 6170.56   | 0.00                              | 0.00             | 6170.56                           | 0.00  | 0.00    | 0.00                        | 0.00                         | 0.00   | 0.00             | 0.00            |
| Start build 1 at 14 degrees   |                                   |                  |                                   |   |         |                             |                              |        |                  |                 |
| 6200.56   | 4.20                              | 218.46           | 6200.54                           | .86S  | .68W    | 1.10                        | 1.10                         | 218.46 | 14.00            | 14.00           |
| 6230.56   | 8.40                              | 218.46           | 6230.35                           | 3.44S   | 2.73W   | 4.39                        | 4.39                         | 218.46 | 14.00            | 14.00           |
| 6260.56   | 12.60                             | 218.46           | 6259.84                           | 7.72S   | 6.13W   | 9.86                        | 9.86                         | 218.46 | 14.00            | 14.00           |
| 6290.56   | 16.80                             | 218.46           | 6288.85                           | 13.68S  | 10.86W  | 17.47                       | 17.47                        | 218.46 | 14.00            | 14.00           |
| 6320.56   | 21.00                             | 218.46           | 6317.23                           | 21.28S  | 16.91W  | 27.18                       | 27.18                        | 218.46 | 14.00            | 14.00           |
| 6350.56   | 25.20                             | 218.46           | 6344.82                           | 30.50S  | 24.23W  | 38.95                       | 38.95                        | 218.46 | 14.00            | 14.00           |
| 6380.56   | 29.40                             | 218.46           | 6371.47                           | 41.27S  | 32.78W  | 52.71                       | 52.71                        | 218.46 | 14.00            | 14.00           |
| 6410.56   | 33.60                             | 218.46           | 6397.04                           | 53.54S  | 42.53W  | 68.38                       | 68.38                        | 218.46 | 14.00            | 14.00           |
| 6420.56   | 35.00                             | 218.46           | 6405.30                           | 57.96S  | 46.03W  | 74.01                       | 74.01                        | 218.46 | 14.00            | 14.00           |
| <del>6430.56 39.20 218.46 6429.23 72.12S 57.29W 92.10 92.10 218.46 14.00</del>    |                                   |                  |                                   |   |         |                             |                              |        |                  |                 |
| 6450.56   | 39.20                             | 218.46           | 6429.23                           | 72.12S  | 57.29W  | 92.10                       | 92.10                        | 218.46 | 14.00            | 14.00           |
| 6480.56   | 43.40                             | 218.46           | 6451.76                           | 87.62S  | 69.60W  | 111.90                      | 111.90                       | 218.46 | 14.00            | 14.00           |
| 6491.99   | 45.00                             | 218.46           | 6459.95                           | 93.86S  | 74.55W  | 119.87                      | 119.87                       | 218.46 | 14.00            | 14.00           |
| <del>6500.56 49.20 218.46 6480.37 111.07S 88.22W 141.84 141.84 218.46 14.00</del> |                                   |                  |                                   |   |         |                             |                              |        |                  |                 |
| 6521.99   | 49.20                             | 218.46           | 6480.37                           | 111.07S   | 88.22W  | 141.84                      | 141.84                       | 218.46 | 14.00            | 14.00           |
| 6551.99   | 53.40                             | 218.46           | 6499.12                           | 129.40S   | 102.78W | 165.25                      | 165.25                       | 218.46 | 14.00            | 14.00           |
| 6581.99   | 57.60                             | 218.46           | 6516.11                           | 148.75S   | 118.15W | 189.97                      | 189.97                       | 218.46 | 14.00            | 14.00           |

UNION PACIFIC RESOURCES COMPANY  
 CAVE CREEK 19-1H  
 SUMMIT COUNTY, UTAH  
 "WATTON CANYON TARGET"

| Measured<br>Depth<br>Feet | B O R E - H O L E  |                  | TRUE<br>Vertical<br>Depth<br>Feet | R E C T A N G U L A R<br>C O O R D I N A T E S |                  | VERTICAL<br>SECTION<br>Feet | C L O S U R E S  |        | DLS<br>Deg/100' |
|---------------------------|--------------------|------------------|-----------------------------------|--|------------------|-----------------------------|------------------|--------|-----------------|
|                           | Inclination<br>Deg | Direction<br>Deg | North/South<br>Feet               | East/West<br>Feet                              | Distance<br>Feet |                             | Direction<br>Deg |        |                 |
| 6611.99                   | 61.80              | 218.46           | 6531.24                           | 169.03S  | 134.26W          | 215.86                      | 215.86           | 218.46 | 14.00           |
| 6641.99                   | 66.00              | 218.46           | 6544.44                           | 190.12S  | 151.01W          | 242.80                      | 242.80           | 218.46 | 14.00           |
| 6671.99                   | 70.20              | 218.46           | 6555.63                           | 211.91S  | 168.32W          | 270.63                      | 270.63           | 218.46 | 14.00           |
| 6701.99                   | 74.40              | 218.46           | 6564.74                           | 234.29S  | 186.09W          | 299.20                      | 299.20           | 218.46 | 14.00           |
| 6731.99                   | 78.60              | 218.46           | 6571.75                           | 257.12S  | 204.23W          | 328.36                      | 328.36           | 218.46 | 14.00           |
| 6761.99                   | 82.80              | 218.46           | 6576.59                           | 280.30S  | 222.64W          | 357.96                      | 357.96           | 218.46 | 14.00           |
| 6791.99                   | 87.00              | 218.46           | 6579.26                           | 303.69S  | 241.22W          | 387.84                      | 387.84           | 218.46 | 14.00           |
| 6821.99                   | 91.20              | 218.46           | 6579.73                           | 327.18S  | 259.88W          | 417.83                      | 417.83           | 218.46 | 14.00           |
| 6825.42                   | 91.68              | 218.46           | 6579.64                           | 329.86S  | 262.01W          | 421.25                      | 421.25           | 218.46 | 14.00           |
| Start reach               |                    |                  |                                   |  |                  |                             |                  |        |                 |
| 7325.42                   | 91.68              | 218.46           | 6564.98                           | 721.21S  | 572.86W          | 921.04                      | 921.04           | 218.46 | 0.00            |
| 7825.42                   | 91.68              | 218.46           | 6550.33                           | 1112.57S                                       | 883.71W          | 1420.82                     | 1420.82          | 218.46 | 0.00            |
| 8325.42                   | 91.68              | 218.46           | 6535.67                           | 1503.92S                                       | 1194.56W         | 1920.61                     | 1920.61          | 218.46 | 0.00            |
| 8825.42                   | 91.68              | 218.46           | 6521.01                           | 1895.27S                                       | 1505.41W         | 2420.40                     | 2420.40          | 218.46 | 0.00            |
| 9325.42                   | 91.68              | 218.46           | 6506.35                           | 2286.63S                                       | 1816.26W         | 2920.18                     | 2920.18          | 218.46 | 0.00            |
| 9825.42                   | 91.68              | 218.46           | 6491.69                           | 2677.98S                                       | 2127.11W         | 3419.96                     | 3419.96          | 218.46 | 0.00            |
| 10325.42                  | 91.68              | 218.46           | 6477.03                           | 3069.33S                                       | 2437.96W         | 3919.75                     | 3919.75          | 218.46 | 0.00            |
| 10825.42                  | 91.68              | 218.46           | 6462.37                           | 3460.68S                                       | 2748.81W         | 4419.53                     | 4419.53          | 218.46 | 0.00            |
| 10827.19                  | 91.68              | 218.46           | 6462.32                           | 3462.07S                                       | 2749.91W         | 4421.30                     | 4421.30          | 218.46 | 0.00            |
| Bottom hole               |                    |                  |                                   |  |                  |                             |                  |        |                 |

Final Station Closure Distance: 4421.30 Feet; Direction: S38 27W

UNION PACIFIC RESOURCES COMPANY  
 CAVE CREEK 19-1H  
 SUMMIT COUNTY, UTAH  
 "RICH TARGET"

Rich Target

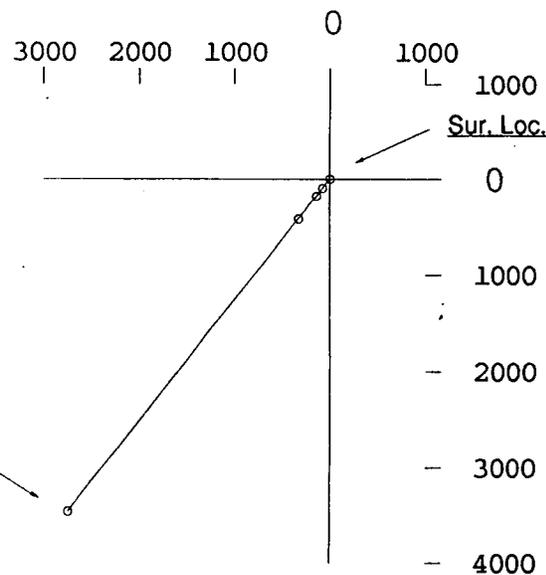
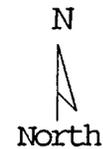


DIRECTIONAL SYSTEMS

P.O. Box 129  
 Broussard, La. 70518  
 1-800-489-1234

Proposed B.H.L.  
 4421' Displacement  
 @ 218.46° Azimuth  
 South-3462' West-2750'  
 TVD-6567' MD-10870'

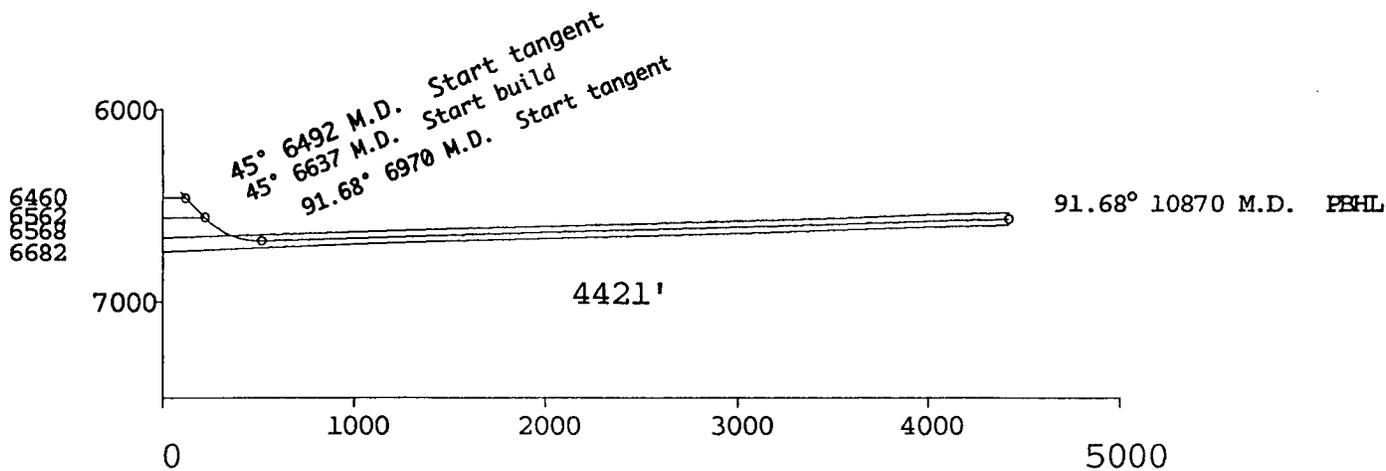
HORIZONTAL PLAN  
 Scale 1" = 2000'



PLANE OF PROPOSAL  
 218.46°

AVERAGE ANGLE  
 91.68°

VERTICAL SECTION  
 Scale 1" = 1000'



Delmar Directional Systems

UNION PACIFIC RESOURCES COMPANY  
 CAVE CREEK 19-1H  
 SUMMIT COUNTY, UTAH  
 "RICH TARGET"

Slot Elevation: 0.00  
 Plane of Vertical Section: S 38 27 W

Minimum Curvature Calculations

| Measured<br>Depth<br>Feet | B O R E - H O L E  |                  | TRUE<br>Vertical<br>Depth<br>Feet | R E C T A N G U L A R<br>C O O R D I N A T E S |                   | VERTICAL<br>SECTION<br>Feet | C L O S U R E S  |                  | DLS<br>Deg/100' |
|---------------------------|--------------------|------------------|-----------------------------------|--|-------------------|-----------------------------|------------------|------------------|-----------------|
|                           | Inclination<br>Deg | Direction<br>Deg |                                   | North/South<br>Feet                            | East/West<br>Feet |                             | Distance<br>Feet | Direction<br>Deg |                 |
| 6170.56                   | 0.00               | 0.00             | 6170.56                           | 0.00   | 0.00              | 0.00                        | 0.00             | 0.00             | 0.00            |
| 6200.56                   | 4.20               | 218.46           | 6200.54                           | .86S   | .68W              | 1.10                        | 1.10             | 218.46           | 14.00           |
| 6230.56                   | 8.40               | 218.46           | 6230.35                           | 3.44S  | 2.73W             | 4.39                        | 4.39             | 218.46           | 14.00           |
| 6260.56                   | 12.60              | 218.46           | 6259.84                           | 7.72S  | 6.13W             | 9.86                        | 9.86             | 218.46           | 14.00           |
| 6290.56                   | 16.80              | 218.46           | 6288.85                           | 13.68S   | 10.86W            | 17.47                       | 17.47            | 218.46           | 14.00           |
| 6320.56                   | 21.00              | 218.46           | 6317.23                           | 21.28S   | 16.91W            | 27.18                       | 27.18            | 218.46           | 14.00           |
| 6350.56                   | 25.20              | 218.46           | 6344.82                           | 30.50S   | 24.23W            | 38.95                       | 38.95            | 218.46           | 14.00           |
| 6380.56                   | 29.40              | 218.46           | 6371.47                           | 41.27S   | 32.78W            | 52.71                       | 52.71            | 218.46           | 14.00           |
| 6410.56                   | 33.60              | 218.46           | 6397.04                           | 53.54S   | 42.53W            | 68.38                       | 68.38            | 218.46           | 14.00           |
| 6420.56                   | 35.00              | 218.46           | 6405.30                           | 57.96S   | 46.03W            | 74.01                       | 74.01            | 218.46           | 14.00           |
| 6450.56                   | 39.20              | 218.46           | 6429.23                           | 72.12S   | 57.29W            | 92.10                       | 92.10            | 218.46           | 14.00           |
| 6480.56                   | 43.40              | 218.46           | 6451.76                           | 87.62S   | 69.60W            | 111.90                      | 111.90           | 218.46           | 14.00           |
| 6491.99                   | 45.00              | 218.46           | 6459.95                           | 93.86S   | 74.55W            | 119.87                      | 119.87           | 218.46           | 13.99           |
| Start tangent<br>6637.00  | 45.00              | 218.46           | 6562.49                           | 174.15S  | 138.33W           | 222.40                      | 222.40           | 218.46           | 0.00            |
| Start build<br>6667.00    | 49.20              | 218.46           | 6582.91                           | 191.35S  | 151.99W           | 244.37                      | 244.37           | 218.46           | 14.00           |
| 6697.00                   | 53.40              | 218.46           | 6601.66                           | 209.68S  | 166.55W           | 267.78                      | 267.78           | 218.46           | 14.00           |
| 6727.00                   | 57.60              | 218.46           | 6618.65                           | 229.04S  | 181.92W           | 292.50                      | 292.50           | 218.46           | 14.00           |

TOP CONTACT  
 →

UNION PACIFIC RESOURCES COMPANY  
 CAVE CREEK 19-1H  
 SUMMIT COUNTY, UTAH  
 "RICH TARGET"

| Measured<br>Depth<br>Feet | B O R E - H O L E  |                  | TRUE<br>Vertical<br>Depth<br>Feet | R E C T A N G U L A R<br>C O O R D I N A T E S |                   | VERTICAL<br>SECTION<br>Feet | C L O S U R E S  |                  | DLS<br>Deg/100' |
|---------------------------|--------------------|------------------|-----------------------------------|--|-------------------|-----------------------------|------------------|------------------|-----------------|
|                           | Inclination<br>Deg | Direction<br>Deg |                                   | North/South<br>Feet                            | East/West<br>Feet |                             | Distance<br>Feet | Direction<br>Deg |                 |
| 6757.00                   | 61.80              | 218.46           | 6633.78                           | 249.32S  | 198.03W           | 318.39                      | 318.39           | 218.46           | 14.00           |
| 6787.00                   | 66.00              | 218.46           | 6646.98                           | 270.41S  | 214.78W           | 345.33                      | 345.33           | 218.46           | 14.00           |
| 6817.00                   | 70.20              | 218.46           | 6658.16                           | 292.20S  | 232.09W           | 373.16                      | 373.16           | 218.46           | 14.00           |
| 6847.00                   | 74.40              | 218.46           | 6667.28                           | 314.57S  | 249.86W           | 401.73                      | 401.73           | 218.46           | 14.00           |
| 6877.00                   | 78.60              | 218.46           | 6674.29                           | 337.41S  | 268.00W           | 430.89                      | 430.89           | 218.46           | 14.00           |
| 6907.00                   | 82.80              | 218.46           | 6679.13                           | 360.59S  | 286.41W           | 460.49                      | 460.49           | 218.46           | 14.00           |
| 6937.00                   | 87.00              | 218.46           | 6681.80                           | 383.98S  | 304.99W           | 490.37                      | 490.37           | 218.46           | 14.00           |
| 6967.00                   | 91.20              | 218.46           | 6682.27                           | 407.46S  | 323.65W           | 520.36                      | 520.36           | 218.46           | 14.00           |
| 6970.44                   | 91.68              | 218.46           | 6682.19                           | 410.15S  | 325.78W           | 523.79                      | 523.79           | 218.46           | 14.00           |
| Start tangent             |                    |                  |                                   |  |                   |                             |                  |                  |                 |
| 7470.44                   | 91.68              | 218.46           | 6667.53                           | 801.51S  | 636.63W           | 1023.58                     | 1023.58          | 218.46           | 0.00            |
| 7970.44                   | 91.68              | 218.46           | 6652.87                           | 1192.86S                                       | 947.48W           | 1523.36                     | 1523.36          | 218.46           | 0.00            |
| 8470.44                   | 91.68              | 218.46           | 6638.21                           | 1584.21S                                       | 1258.33W          | 2023.15                     | 2023.15          | 218.46           | 0.00            |
| 8970.44                   | 91.68              | 218.46           | 6623.55                           | 1975.56S                                       | 1569.18W          | 2522.93                     | 2522.93          | 218.46           | 0.00            |
| 9470.44                   | 91.68              | 218.46           | 6608.89                           | 2366.92S                                       | 1880.03W          | 3022.72                     | 3022.72          | 218.46           | 0.00            |
| 9970.44                   | 91.68              | 218.46           | 6594.23                           | 2758.27S                                       | 2190.88W          | 3522.50                     | 3522.50          | 218.46           | 0.00            |
| 10470.44                  | 91.68              | 218.46           | 6579.57                           | 3149.63S                                       | 2501.74W          | 4022.29                     | 4022.29          | 218.46           | 0.00            |
| 10869.62                  | 91.68              | 218.46           | 6567.87                           | 3462.07S                                       | 2749.91W          | 4421.30                     | 4421.30          | 218.46           | 0.00            |

PBHL

Final Station Closure Distance: 4421.30 Feet; Direction: S38 27W

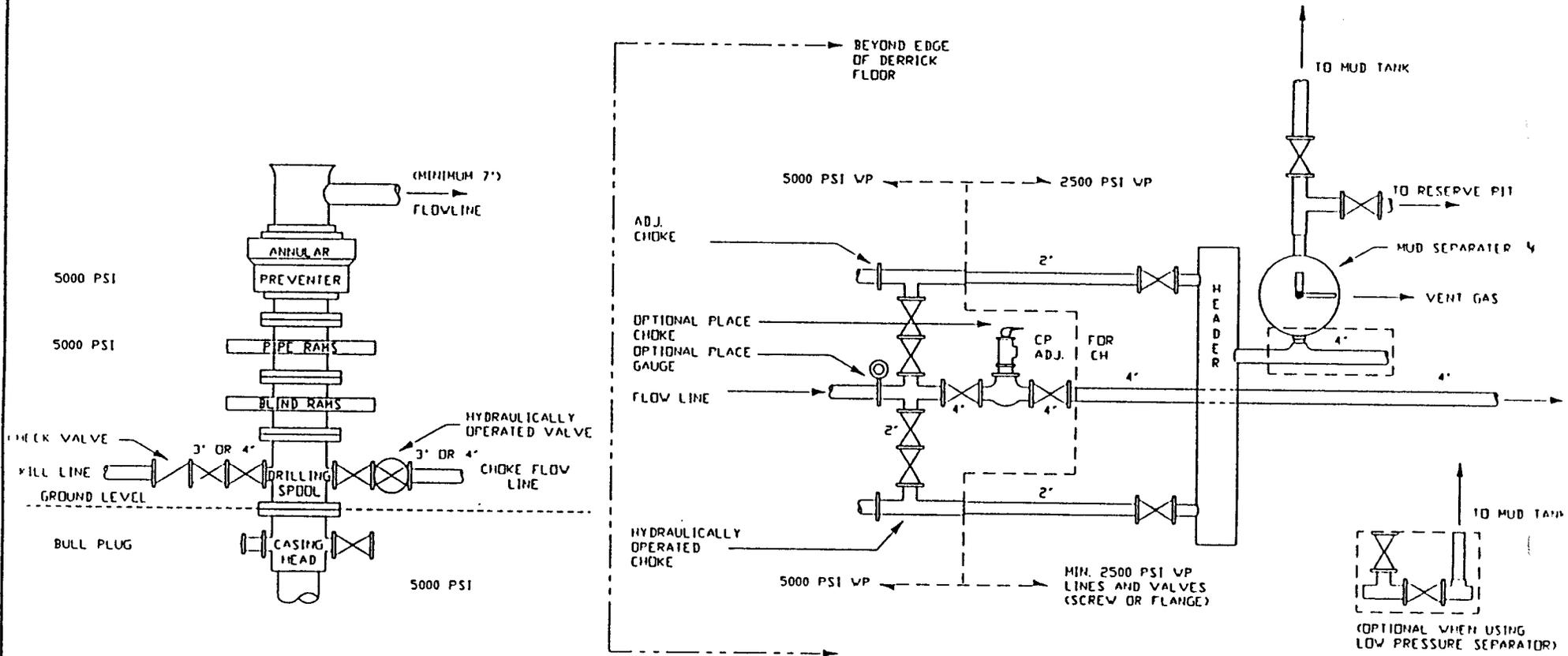


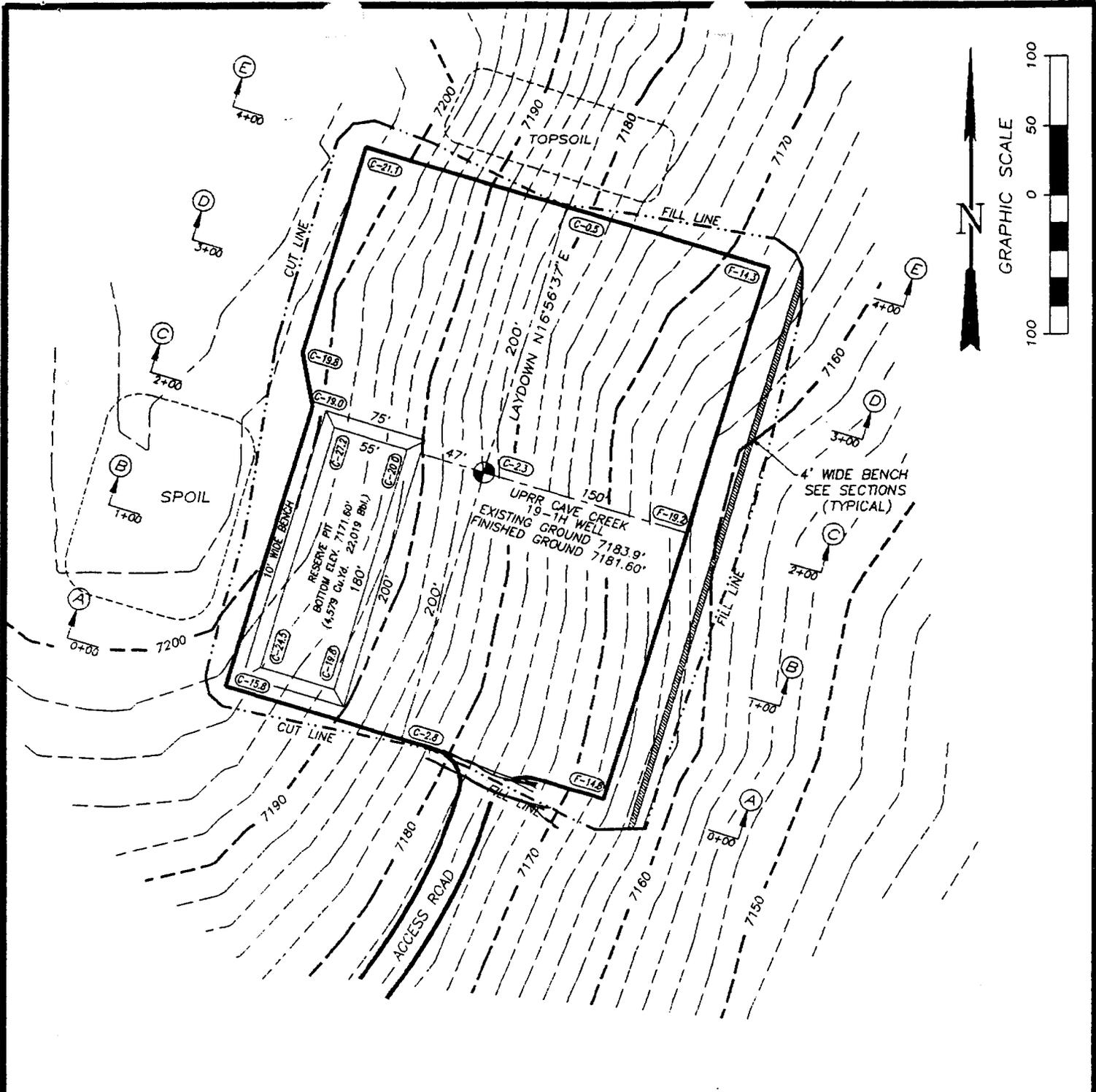
Union Pacific  
Resources

A Subsidiary of Union Pacific Corporation

# DRAWING NUMBER 7

## 5000 # WORKING PRESSURE





**BASIS OF ELEVATION:**  
 ELEVATIONS BASED ON U.S.G.S. TRIANGULATION  
 STATION NEEDLES ELEV. 7610'

FINISHED PAD ELEVATION TO BE 7181.60'

**QUANTITIES**

EXCAVATION INCLUDING PIT = 31,646 C.Y.  
 EMBANKMENT = 22,909 C.Y.

TOPSOIL = 2,621 C.Y.

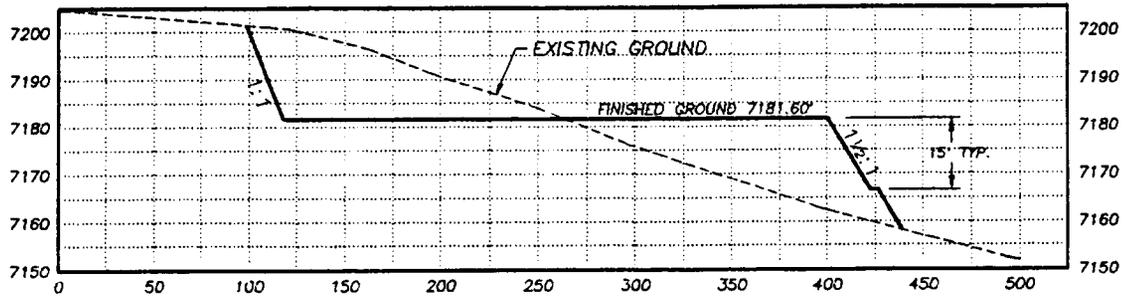
ALL CUT SLOPES ARE 1 : 1  
 ALL FILL SLOPES ARE 1.5 : 1

**MAP TO ACCOMPANY  
 APPLICATION FOR PERMIT TO DRILL  
 U.P.R.R. CAVE CREEK  
 19-1H WELL  
 1320 FNL 1980 FEL  
 SECTION 19  
 T 5 N, R 8 E, SLBM  
 SUMMIT COUNTY, UTAH**

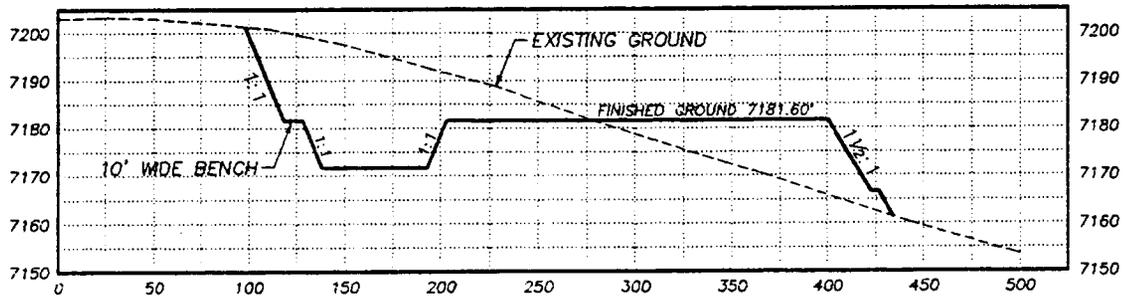
UINTA ENGINEERING & SURVEYING, INC.  
 808 MAIN STREET  
 EVANSTON, WYOMING 82930  
 (307) 789-3602

DATE: 09-20-94 JOB #: 94-26-20  
 DISK #: 116 FILE: 94-26-20

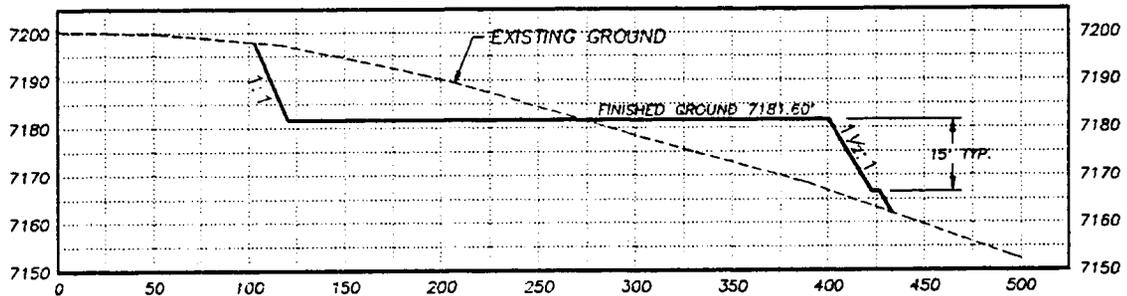
### SECTION C - C



### SECTION B - B



### SECTION A - A



MAP TO ACCOMPANY  
 APPLICATION FOR PERMIT TO DRILL  
 U.P.R.R. CAVE CREEK  
 19-1H WELL  
 1320 FNL 1980 FEL  
 SECTION 19  
 T 5 N, R 8 E, SLBM  
 SUMMIT COUNTY, UTAH

UINTA ENGINEERING & SURVEYING, INC.  
 808 MAIN STREET  
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 (307) 789-3602

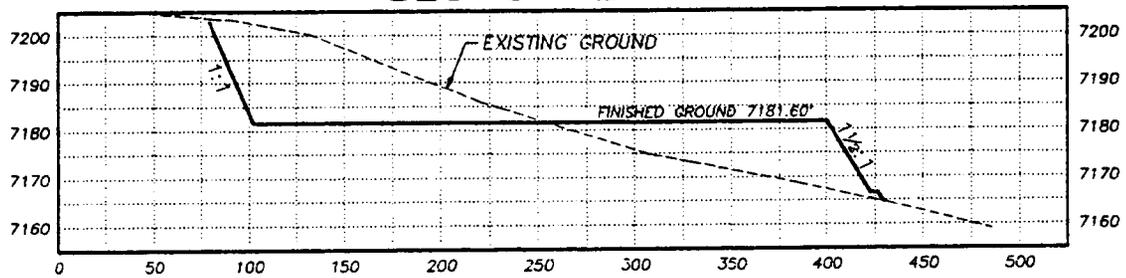
DATE: 09-20-94 JOB #: 94-26-20  
 DISK #: 116 FILE: 94-26-20

**SCALE:**

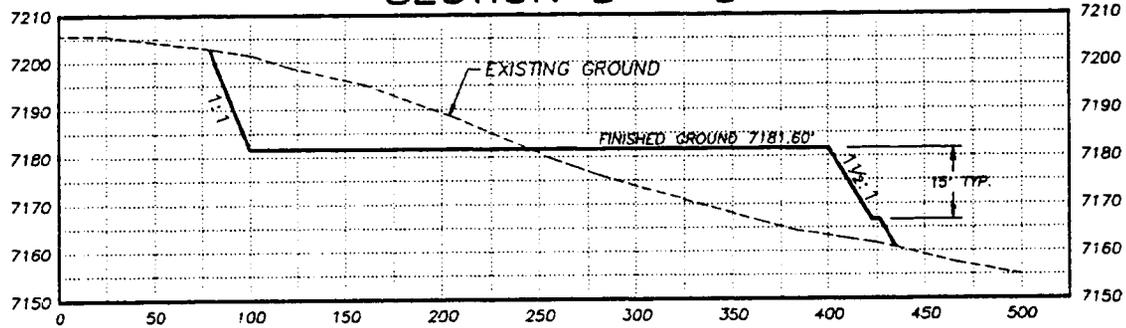
HORIZ: 1" = 100'  
 VERT: 1" = 40'

ALL CUT SLOPES ARE 1 : 1  
 ALL FILL SLOPES ARE 1.5 : 1

### SECTION E - E



### SECTION D - D



MAP TO ACCOMPANY  
 APPLICATION FOR PERMIT TO DRILL  
 U.P.R.R. CAVE CREEK  
 19-1H WELL  
 1320 FNL 1980 FEL  
 SECTION 19  
 T 5 N, R 8 E, SLBM  
 SUMMIT COUNTY, UTAH

UINTA ENGINEERING & SURVEYING, INC.  
 808 MAIN STREET  
 EVANSTON, WYOMING 82930  
 (307) 789-3602

DATE: 09-20-94 JOB #: 94-26-20  
 DISK #: 116 FILE: 94-26-20

SCALE:  
 HORIZ: 1" = 100'  
 VERT: 1" = 40'

ALL CUT SLOPES ARE 1 : 1  
 ALL FILL SLOPES ARE 1.5 : 1

DRAWN BY: Brent Sanders

SHEET 4 OF 4

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/12/94

API NO. ASSIGNED: 43-043-30309

WELL NAME: UPRR 19-1H  
OPERATOR: UNION PACIFIC RESOURCES (N9465)

PROPOSED LOCATION:  
NWNE 19 - T05N - R08E  
SURFACE: 1320-FNL-1980-FEL  
BOTTOM: 0660-FSL-0660-FWL  
SUMMIT COUNTY  
UNDESIGNATED FIELD (002)

INSPECT LOCATION BY: 10/20/94

| TECH REVIEW | Initials           | Date                         |
|-------------|--------------------|------------------------------|
| Engineering | <i>JAM</i>         | 10/21/94                     |
| Geology     | <i>[Signature]</i> | <del>10/21/94</del> 10/21/94 |
| Surface     | <i>JA</i>          | 10/29/94                     |

LEASE TYPE: FEE  
LEASE NUMBER: LAND GRANT

PROPOSED PRODUCING FORMATION: TWNCR

|   |   |
|---|---|
| <p>RECEIVED AND/OR REVIEWED:</p> <p><input checked="" type="checkbox"/> Plat</p> <p><input checked="" type="checkbox"/> Bond: Federal[] State[] Fee[<input checked="" type="checkbox"/>]<br/>(Number <u>2447222</u>)</p> <p><input checked="" type="checkbox"/> Potash (Y/N)</p> <p><input checked="" type="checkbox"/> Oil shale (Y/N)</p> <p><input checked="" type="checkbox"/> Water permit<br/>(Number _____)</p> <p><input checked="" type="checkbox"/> RDCC Review (Y/N)<br/>(Date: _____)</p> | <p>LOCATION AND SITING:</p> <p><input type="checkbox"/> R649-2-3. Unit: _____</p> <p><input type="checkbox"/> R649-3-2. General.</p> <p><input type="checkbox"/> R649-3-3. Exception.</p> <p><input checked="" type="checkbox"/> Drilling Unit.<br/>Board Cause no: <u>189-2</u><br/>Date: <u>2/25/83</u><br/><b>GAS 640 ACRE TWNCR</b></p> |
|---|---|

CONFIDENTIAL  
PERIOD  
EXPIRED  
ON 2-8-96

COMMENTS: \_\_\_\_\_

STIPULATIONS: 1. The reserve pit should be located on the northwest side of location. ~~4~~ 2. A 12 mil plastic liner will be required for the reserve pit. The pit should be prepared sufficient to avoid puncture of the liner. 3. The stockpiled topsoil should be stored between the location and the access road. 4. A culvert should be installed at a point where the access road enters the location. 5. A berm and ditch should be constructed around the location to divert any run off into the natural drainage and brush.

b. H<sub>2</sub>S equipment and safety training for all personnel will be provided at the drill site while drilling operations are underway.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
CEMENTING OPERATIONS

COMPANY NAME: UNION PACIFIC RES API NO: 43-043-30309

WELL NAME: UPRR 19-1H

QTR/QTR NW/NE SECTION 19 TOWNSHIP 5N RANGE 8E

CEMENTING COMPANY: DOWELL WELL SIGN: \_\_\_\_\_

INSPECTOR: J. THOMPSON DATE: 11/5/94

CEMENTING OPERATIONS: PLUGBACK: \_\_\_\_\_ SQUEEZE: \_\_\_\_\_ P&A ZONE: \_\_\_\_\_

SURFACE CASING: 10 3/4 INTERMEDIATE: \_\_\_\_\_ PROD CASING: \_\_\_\_\_

PERFORATIONS: \_\_\_\_\_ SQUEEZE PRESSURE: \_\_\_\_\_

CASING INFORMATION:

SIZE: 10 3/4 GRADE: 45.5 HOLE SIZE: 14 3/4 DEPTH: 999'

SLURRY INFORMATION:

1. CLASS: "G" 1/4 SX CELLO FLAK  
LEAD: 167 BBLs TAIL: 46 BBLs

2. SLURRY WEIGHT LBS. PER GALLON:  
LEAD: 12.7 TAIL: 15.8

3. WATER (GAL/SX)  
LEAD: 93.7 BBLs TAIL: \_\_\_\_\_

4. COMPRESSIVE STRENGTH:  
PSI @ \_\_\_\_\_ HRS. \_\_\_\_\_ HRS

PIPE CENTRALIZED: 1 EVERY 180' CEMENTING STAGES: \_\_\_\_\_

LOST RETURNS: \_\_\_\_\_ REGAIN RETURNS: \_\_\_\_\_ BARRELS LOST: \_\_\_\_\_

TOP OF CEMENT: \_\_\_\_\_ PERFORATED INTERVAL: \_\_\_\_\_

PRIMARY CEMENT TO SURFACE: Y

1 INCH INFORMATION: WEIGHT: \_\_\_\_\_ CEMENT TO SURFACE: Y

FEET: 23' SX: 125 CLASS: G %SALTS: \_\_\_\_\_ RETURNS: Y

ADDITIONAL COMMENTS: SET 90' OF CONDUCTOR PIPE. BUMPED PLUG 500  
#'S OVER. PRESSURE TESTED TO 2000 #'S.

BOB WILLIAMS-COMPANY MAN.

**DRILLING LOCATION ASSESSMENT**  
**State of Utah**  
**Division of Oil, Gas and Mining**

OPERATOR: UNION PACIFIC RESOURCES WELL NAME: CAVE CREEK 19-1H  
SEC:19 TWP:5 N RNG:8 E SUR.LOC:1320 FNL 1980 FEL QTR/QTR NW NE  
BOTTOM HOLE LOCATION: 660 FSL 660 FWL (2 LATERALS SAME LOCATION)  
SEC: 19 QTR/QTR: SW SW  
COUNTY: SUMMIT FIELD: UNDESIGNATED SURFACE OWNER: FEE  
SURFACE AGREEMENT: FEE LAND OWNER  
SPACING: SEE CAUSE No. 189-2 TWIN CREEK  
GEOLOGIST: HEBERTSON, 1:00 PM OCT 19, 1994

**PARTICIPANTS:**

MIKE HEBERTSON, JIMMIE THOMPSON, STATE OF UTAH, DON PRESENKOWSKI

**REGIONAL SETTING/TOPOGRAPHY:** WASATCH MOUNTAINS NORTHEAST PORTION OF THE STATE OVERTHRUST, HIGH ALPINE SLOPES, STEEP HILLS AND NARROW CANYONS. MOSTLY VEGETATED WITH TREES AND BUSHES.

**LAND USE:**

CURRENT SURFACE USE: GRAZING FOR DOMESTIC LIVESTOCK, WINTER RANGE FOR DEER AND WILDLIFE.

PROPOSED SURFACE DISTURBANCE: 7 ACRE LOCATION, RESERVE PIT AND ROAD ACCESS 16' WIDE.

AFFECTED FLOODPLAINS AND/OR WETLANDS: DIVERSIONS AROUND THE LOCATION WILL BE REQUIRED. THIS IS A WATER RUNOFF AREA DURING HIGH MOISTURE PERIODS FALL AND SPRING SEASONS.

FLORA/FAUNA: SAGEBRUSH, BITTER BRUSH, GRASSES; DEER, ELK, MOOSE, SQUIRRELS LIZARDS, HAWKS, EAGLES, SMALLER BIRDS, COYOTE, BOBCAT, INSECTS.

**ENVIRONMENTAL PARAMETERS:**

**SURFACE GEOLOGY:**

SOIL TYPE AND CHARACTERISTICS: CLAY AND SILT, GRAVEL FROM THE FOWKES FORMATION.

SURFACE FORMATION & CHARACTERISTICS: FOWKES. WEATHERS TO SLIGHTLY SANDY CLAY MEDIUM TO LIGHT BRN. WITH ANGULAR TO SUBANGULAR PEBBLES.

EROSION/SEDIMENTATION/STABILITY: NONE.

PALEONTOLOGICAL POTENTIAL: NONE.

**SUBSURFACE GEOLOGY:**

OBJECTIVES/DEPTHS: THE OBJECTIVE FORMATION IS THE TWIN CREEK FORMATION.

ABNORMAL PRESSURES-HIGH AND LOW: NONE

CULTURAL RESOURCES/ARCHAEOLOGY: NONE HAVE BEEN SITED.

CONSTRUCTION MATERIALS: LOCATION WILL BE CONSTRUCTED WITH MATERIALS AT THE SITE USING CUT & FILL AS AVAILABLE, OTHER MATERIAL WILL BE HAULED IN TO GRADE THE ROAD. SPOIL PILES WILL BE PLACED ON THE NORTHWEST OF THE LOCATION.

SITE RECLAMATION: AS REQUIRED BY THE SURFACE OWNER AGREEMENT.

RESERVE PIT:

CHARACTERISTICS: WILL BE PLACED ON THE NORTHWEST SIDE OF THE LOCATION. PIT WILL BE PARALLEL TO THE PREVAILING WIND DIRECTION.

LINING: A LINER OF 12 MIL PLASTIC (MINIMUM) WILL BE REQUIRED AND THE PIT WILL BE PADDED OR SMOOTHED SO AS TO PREVENT THE LINER FROM BEING PUNCTURED.

MUD PROGRAM: AS SPECIFIED IN THE APD AND DRILLING PLAN. SALT SATURATED AFTER THE SALT SECTION IS CUT.

DRILLING WATER SUPPLY: WILL BE PURCHASED FROM THE ANSCHUTZ RANCH.

STIPULATIONS FOR APD APPROVAL:

- ✓1. PIT WILL BE PLACED IN CUT MATERIAL ON THE NORTHWEST SIDE OF THE LOCATION.
- ✓2. PIT WILL BE PADDED OR SMOOTHED IN SUCH A WAY THAT A LINER OF 12 MIL PLASTIC WILL NOT PUNCTURE.
3. A BERM AND DITCH WILL BE PLACED AROUND THE EDGE OF THE LOCATION TO PREVENT EROSION OFF THE LOCATION. TO DIVERT THE RUNOFF INTO THE NATURAL DRAINAGE AND BRUSH.
- ✓4. TOP SOIL WILL BE PLACED BETWEEN THE LOCATION AND THE ROAD.
- ✓5. A CULVERT WILL BE PLACED AT THE ENTRANCE OF THE LOCATION FROM THE ACCESS ROAD.
6. H2S EQUIPMENT AND SAFETY TRAINING FOR ALL PERSONNEL WILL BE PLACED ON LOCATION WHILE DRILLING OPERATIONS ARE UNDERWAY.

ATTACHMENTS

PHOTOGRAPHS WILL BE PLACED OF FILE.

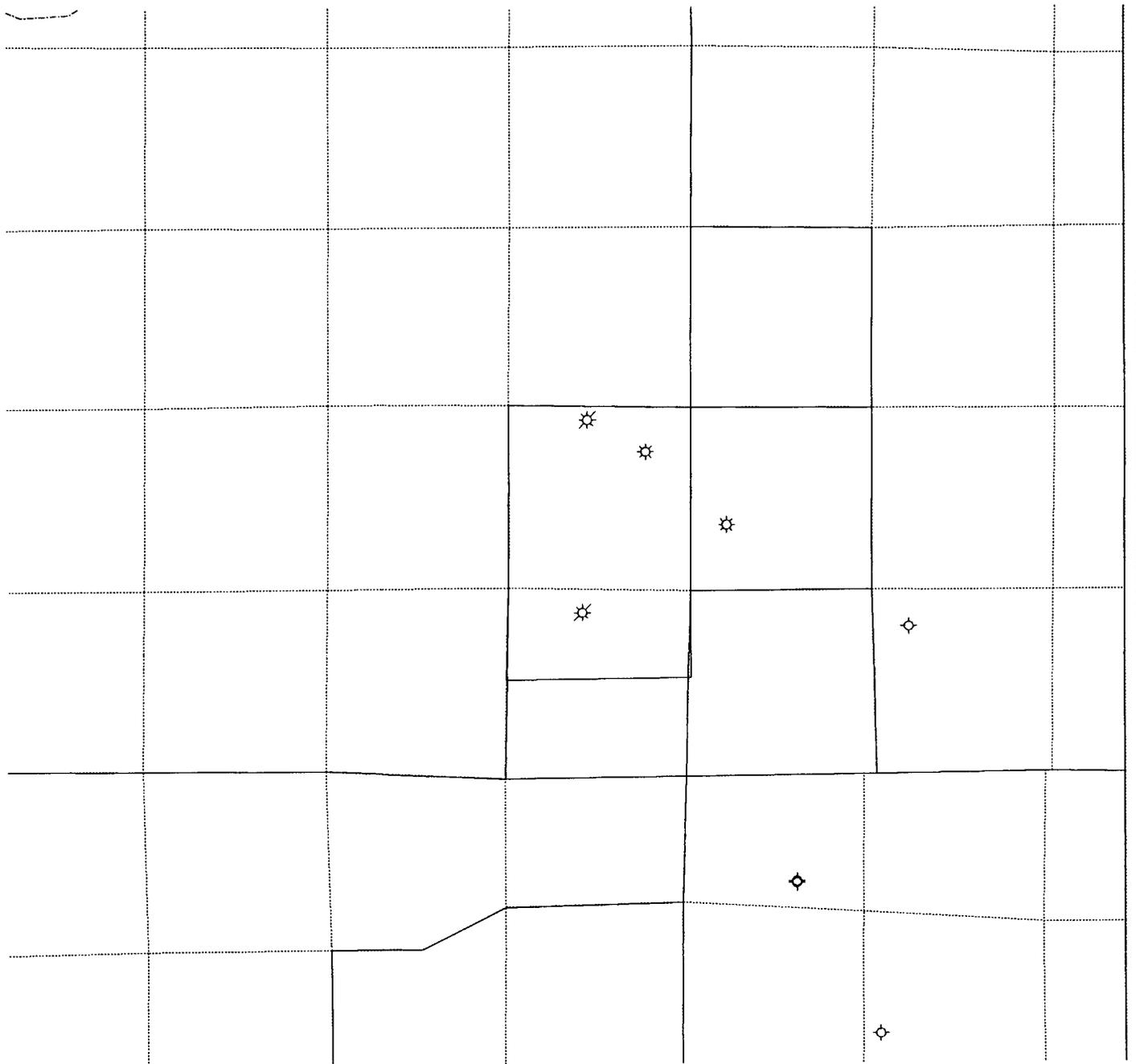
Evaluation Ranking Criteria and Ranking Score

| Site-Specific Factors   | Ranking Score            | Final Ranking Score |
|---|--------------------------|---------------------|
| Distance to Groundwater<br>>200'<br>100 to 200'<br>75 to 100'<br>25 to 75'<br><25' or recharge area | 0<br>5<br>10<br>15<br>20 | 5                   |
| Distance to surface Water<br>>1000'<br>300 to 1000'<br>200 to 300'<br>100 to 200'<br>< 100'         | 0<br>2<br>10<br>15<br>20 | 2                   |
| Distance to Nearest Municipal Well<br>>5280'<br>1320 to 5280'<br>500 to 1320'<br><500'              | 0<br>5<br>10<br>20       | 0                   |
| Distance to Other Wells<br>>1320'<br>300 to 1320'<br><300'  | 0<br>10<br>20            | 0                   |
| Native Soil Type:<br>Low permeability<br>Mod. permeability<br>High permeability                     | 0<br>10<br>20            | 10                  |

|   |                          |    |
|---|--------------------------|----|
| <b>Drilling Fluid</b><br>Air/mist<br>Fresh Water<br>5000< TDS <10000<br>TDS > 10000<br>Oil Based Mud or<br>mud containing<br>hazardous constituents | 0<br>5<br>10<br>15<br>20 | 20 |
| <b>Drill Cuttings</b><br>Normal Rock<br>Salt or detrimental   | 0<br>10                  | 10 |
| <b>Annual Precipitation</b><br><10<br>10 to 20<br>>20   | 0<br>5<br>10             | 5  |
| <b>Affected Populations</b><br><10<br>10 to 30<br>30 to 50<br>>50   | 0<br>10<br>15<br>20      | 0  |
| <b>Presence of Nearby<br/>Utility Conduits</b><br>Not Present<br>Unknown<br>Present   | 0<br>5<br>15             | 0  |

|             |    |
|-------------|----|
| Final Score | 52 |
|-------------|----|

UNION PACIFIC RESOURCES  
UPRR 19-1H  
SEC. 19, T5N, R8E, SUMMIT COUNTY



**STATE OF UTAH**

|                                     |  |
|-------------------------------------|--|
| <b>Operator: UNION PACIFIC RES.</b> | <b>Well Name: UPRR 19-1H</b>           |
| <b>Project ID: 43-043-30309</b>     | <b>Location: SEC. 19 - T05N - R08E</b> |

Design Parameters:

Mud weight ( 9.90 ppg) : 0.514 psi/ft  
 Shut in surface pressure : 2741 psi  
 Internal gradient (burst) : 0.067 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using buoyed weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

|   | Length<br>(feet) | Size<br>(in.) | Weight<br>(lb/ft) | Grade  | Joint | Depth<br>(feet) | Drift<br>(in.) | Cost |
|---|------------------|---------------|-------------------|--------|-------|-----------------|----------------|------|
| 1 | 4,000            | 7.625         | 29.70             | S-95   | LT&C  | 4,000           | 6.750          |      |
| 2 | 2,135            | 7.750         | 46.10             | LS-125 | LT&C  | 6,135           | 6.500          |      |

|   | Load<br>(psi) | Collapse<br>Strgth<br>(psi) | S.F.  | Burst<br>Load<br>(psi) | Min Int<br>Strgth<br>(psi) | Yield<br>S.F. | Load<br>(kips) | Tension<br>Strgth<br>(kips) | S.F.    |
|---|---------------|-----------------------------|-------|------------------------|----------------------------|---------------|----------------|-----------------------------|---------|
| 1 | 2057          | 6923                        | 3.365 | 3011                   | 8180                       | 2.72          | 184.34         | 668                         | 3.62 J  |
| 2 | 3155          | 16610                       | 5.264 | 3155                   | 16400                      | 5.20          | 83.53          | 1279                        | 15.31 J |

Prepared by : FRM, Salt Lake City, UT  
 Date : 10-21-1994  
 Remarks :

**HORIZONTAL**

Minimum segment length for the 6,135 foot well is 1,000 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 105°F (Surface 74°F , BHT 135°F & temp. gradient 1.000°/100 ft.)  
 The mud gradient and bottom hole pressures (for burst) are 0.514 psi/ft and 3,155 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.  
 Costs for this design are based on a 1987 pricing model. (Version 1.06)



**Union Pacific Resources**

A Subsidiary of Union Pacific Corporation

**FACSIMILE TRANSMISSION**

**UNION PACIFIC RESOURCES COMPANY**

TO: Frank Matthews DATE: 10-19-94 TIME: \_\_\_\_\_

LOCATION: SLC, UTAH FAX NO: (801) 359-3940

FROM: Bill Charles \*\*TELEPHONE NO.: (817) 877-7678

MAIL STATION NO: \_\_\_\_\_ LOCATION: Ft Worth, Tx

NUMBER OF PAGES: 1 + cover

REMARKS: Verbal permission to commence dirt work on Cave Creek 19-1 H by surface owner.

\*\*In case of difficulty with transmission, or to confirm receipt of telecopy, contact sender at telephone number listed.

PLEASE NOTE: The information contained in this facsimile is privileged and confidential, and is intended only for the use of the individual named above and others who have been specifically authorized to receive such. If the recipient is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone.

OCT-19-94 WED 12:57 DANCASPER  
OCT-19-1994 12:54 FROM THE ANSCHUTZ CORP.

TO

98408196

P.01  
P.02



2400 ANACONDA TOWER  
355 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303-298-1000

October 19, 1994

Union Pacific Resources Company  
P. O. Box 7  
Fort Worth, TX 76101-0007

Attention: Mr. Jim Neuner

RE: Access and Surface Use  
UPRC Cave Creek #19-1H Well  
Township 5 North, Range 8 East  
Sections 19 and 20  
Summit County, Utah

Ladies and Gentlemen:

In accordance with my conversation on October 19, 1994, with Mr. Randy Miller and Mr. Jim Neuner, this letter confirms that Anschutz Land & Livestock Co. (AL&L) has authorized Union Pacific Resources Company (UPRC) to commence building the road and location for the referenced well.

AL&L and UPRC agree that the authorization granted in the subject conversations is subject to UPRC notifying and obtaining permission from Max Arneson - Ranch Manager prior to entering the referenced lands and is further subject to mutual agreement of AL&L and UPRC as to placement of the subject access road across Section 19, Township 5 North, Range 8 East.

The verbal authority granted to UPRC is limited to construction of the road and location for the referenced well and no further activity shall take place on the subject lands until a formal agreement is entered into between AL&L and UPRC.

If you are not in full agreement with the above, please notify the undersigned prior to 5 PM, MDST, October 19, 1994.

Sincerely,

A handwritten signature in dark ink, appearing to read 'William J. Miller', written in a cursive style.

William J. Miller

WJM/pkk



# Union Pacific Resources

subsidiary of Union Pacific Corporation

Union Pacific Resources Company  
P.O. Box 7, MS 3006  
Fort Worth, TX 76101-0007  
FAX number (817) 877-7942

## FACSIMILE TRANSMISSION

To: ~~\_\_\_\_\_~~

Date: 10-20-94

Location: SLC, Utah

From: Bill Bragerton

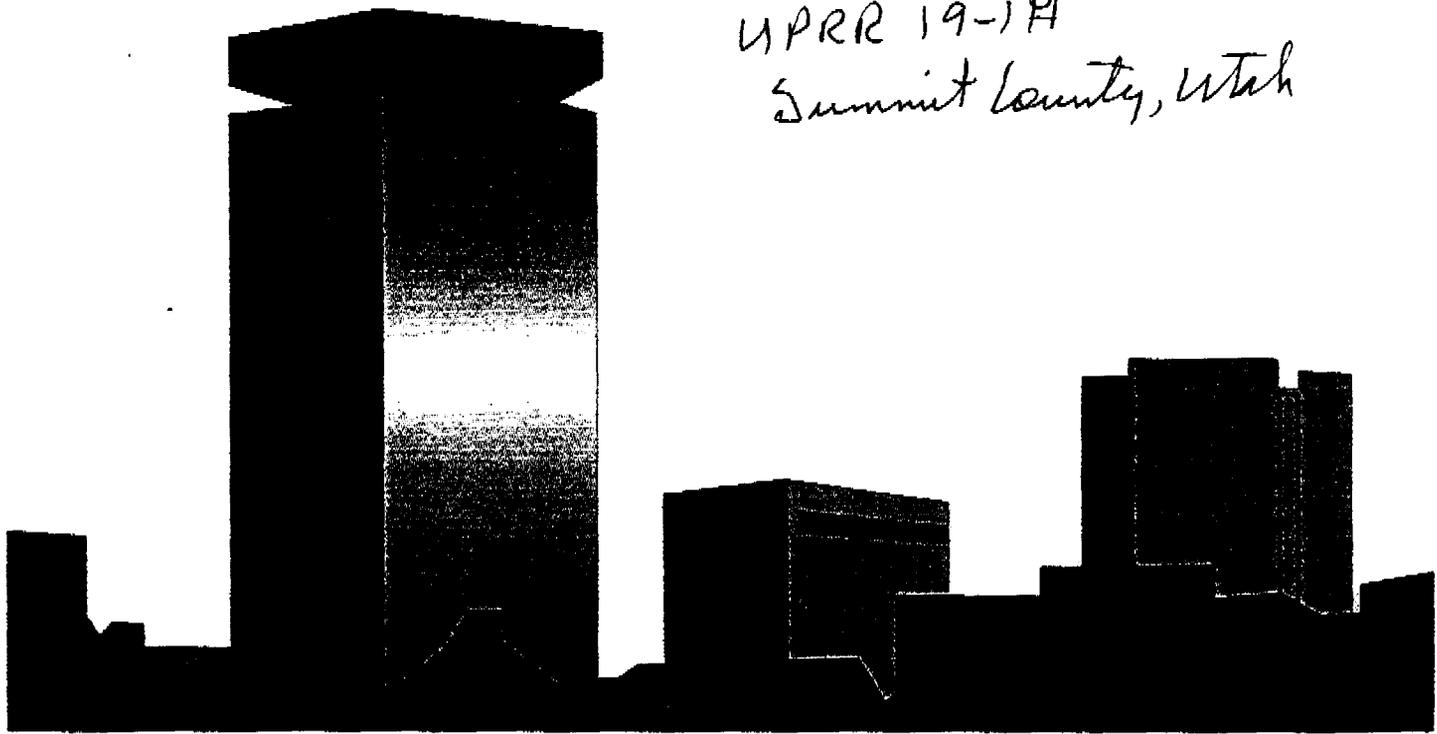
Time: 3:02

Phone #: (817) 877-7952

Fax #: (801) 359-3940

Number of Pages 1 + Cover

*Access Arrangements  
UPRR 19-1H  
Summit County, Utah*



If you have questions, please call Gaylene Reier (817) 877-7953

The information contained in this facsimile is privileged and confidential, and is intended only for the use of the individual named above and others who have been specifically authorized to receive such. If the recipient is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited.

**Union Pacific  
Resources**

A Subsidiary of Union Pacific Corporation

October 20, 1994

Division of Oil Gas, and Mining  
Department of Natural Resources  
3 Triad Center - Suite 350  
355 North Temple Street  
Salt Lake City, Utah 84190

ATTN: Mike Hebertson

RE: Access Arrangements  
UPRR 19-1H  
Summit County, Utah

Dear Mike:

Please be advised that this date, Union Pacific Resources Company (UPRC) representative, Don Presenkowski, contacted Mr. Max Arneson, Ranch Manager for Anschutz Land and Livestock Company, pertaining to access and site construction work for the subject well. A mutually satisfactory agreement was reached between the parties and Mr. Arneson has no objection to UPRC constructing the site and access to it and has no objection to UPRC drilling the subject well.

Please call me at (817) 877-7952, or Don Presenkowski at (801) 640-1484, if you have any questions or need additional information.

Yours truly,

UNION PACIFIC RESOURCES COMPANY

W. F. Brazelton  
Senior Regulatory Analyst



# Union Pacific Resources

A Subsidiary of Union Pacific Corporation

Union Pacific Resources Company  
P.O. Box 7, MS 3006  
Fort Worth, TX 76101-0007  
FAX number (817) 877-7942

## FACSIMILE TRANSMISSION

To: *Mike Hebertson*

Date: *10-20-94*

Location: *SLC, Utah*

From: *Bill Brazestoy*

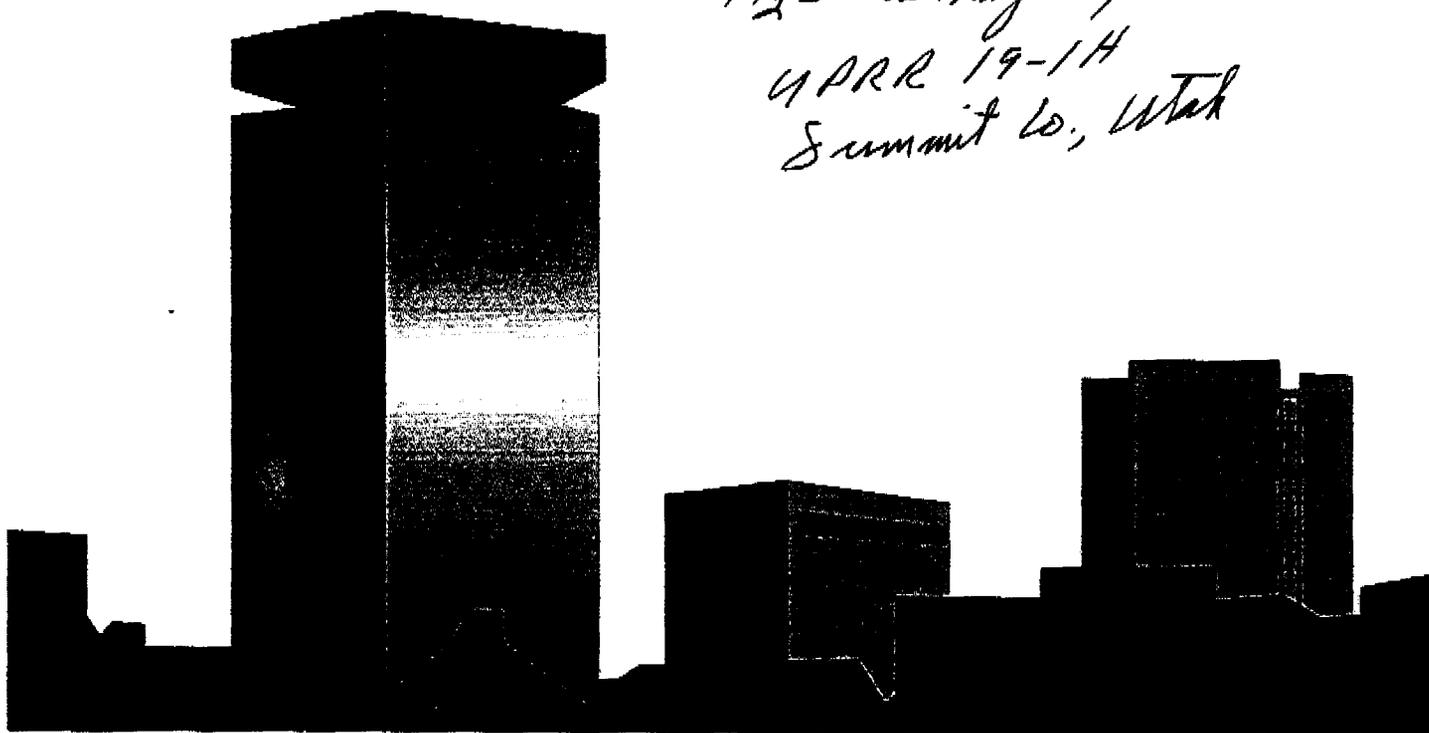
Time: *2:20*

Phone #: *(817) 877-7952*

Fax #: *(801) 359-3940*

Number of Pages *20* + Cover

*H2S Contingency Plan  
UPRR 19-14  
Summit Co., Utah*



If you have questions, please call Gaylene Reier (817) 877-7953

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**H2S Contingency Plan**  
**for**  
**Union Pacific Resources CO**

**Cave Creek # 19-1 H**

**Section 19**  
**T 5N R 8E**

**Summit County , Utah**

**Union Pacific Resources Co**  
**P.O. Box 7**  
**Ft. Worth, TX. 76101-0007**

**UPRC**  
**H<sub>2</sub>S**  
**CONTINGENCY PLAN**

## **I. INTRODUCTION**

It is Union Pacific Resources Company (UPRC) policy to conduct its business responsibly by providing employees a safe place to work, by making a good faith effort to comply with laws and regulations relative to occupational safety and health issues and to manage risk in the absence of regulatory requirements. UPRC is committed to establishing a leadership position in managing occupational health and safety affairs.

The following is a detailed and systematic H<sub>2</sub>S Contingency Plan dealing specifically with Cave Creek # 1- 19 H

It encompasses aspects of on-site training, procedures used during an H<sub>2</sub>S related emergency as well as resident notification and evacuation. Used in conjunction with appropriate charts and maps it provides guidance to employees, government agencies, contractors, law enforcement, fire departments, and emergency medical services with a workable and efficient system of communication, in an emergency situation.

In the event of a release of a potentially hazardous amount of H<sub>2</sub>S, all personnel will immediately proceed upwind to the nearest designated safe area and be prepared to don their protective breathing equipment. The UPRC Representative will immediately, upon assessing the situation, set this plan into action by taking the proper procedures to contain the gas and notify the appropriate people and agencies. If an UPRC Representative is not on location or unable carry out his/her duties, the responsibility will be given to the Rig Supervisor.

All personnel on location will understand and readily adhere to this plan.

### **DIRECTIONS TO LOCATION: Cave Creek # 1-19 H**

Start from the Evanston I-80 west exit. Take the Yellow Creek road ( county road # 151 ) south for 9.0 miles. Turn right onto a dirt road and go through a gate that has a Anschutz Cave Creek sign. Follow this dirt road for about 1.0 miles to the location. The total distance from the I-80 exit to location is 11.5 miles.

## II. RESPONSIBILITIES AND DUTIES

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and in complete charge of implementing the following procedures. The order of responsibility will be as follows:

- Union Pacific Representative on location - if unable to perform his/her duties
- Alternate UPRC Representative - if unable to perform his/her duties
- Rig Supervisor - if unable to perform his/her duties -
- Safety Consultant Representative, if available.

### A. General

1. Always be alert for possible detection of H<sub>2</sub>S
2. Listen for announcements - voice, horn, or otherwise. Watch for visible warning system.
3. Be familiar with location of Safe Briefing Areas and protective breathing apparatuses.
4. Don't panic - remain calm and follow instructions of person in charge.
5. Familiarize yourself with nearest escape route for possible evacuation.
6. Be aware of the wind direction at all times - observe wind direction indicators.
7. If the H<sub>2</sub>S alarm sounds:
  - a. Non-essential personnel shall evacuate to a safe area and essential personnel shall don the appropriate respiratory equipment. Continue to wear respiratory equipment until the area is deemed safe (H<sub>2</sub>S concentration less than 10 PPM).
  - b. Initiate well control, if necessary.
  - c. Initiate rescue procedures (if applicable).

8. Any questions from media representatives should be directed to a UPRC company representative.

**B. Union Pacific Resources Company Representative  
Drilling Foreman**

1. The UPRC Representative is responsible for declaring an extreme danger condition and for taking whatever action is deemed necessary in an emergency situation to insure the personnel's safety, to protect the well, and to prevent property damage.
2. It is the responsibility of the UPRC representative to see that all safety and emergency procedures are observed by all personnel at all times.
3. The UPRC Representative will keep the number of personnel on the rig floor to a minimum during an extreme H<sub>2</sub>S condition.
4. The UPRC Representative shall be trained in the proper use of personnel safety equipment and be thoroughly knowledgeable of other equipment and materials necessary to control and contain releases of H<sub>2</sub>S gas.
5. When an extreme danger exists (H<sub>2</sub>S detected at 10 PPM or more), the UPRC Representative will be responsible for the following:
  - a. Assess the situation and advise all personnel by appropriate means of communication.
  - b. Go to Safe Briefing Area (SBA) and give clear instructions relative to the hazardous nature of the situation, and ensure the SBA is free of H<sub>2</sub>S.
  - c. Display operational warning signs.
  - d. Notify Area Superintendent/Foreman and Safety Consultant (if applicable).
  - e. Proceed to rig floor and supervise operations with Rig Supervisor and will direct corrective actions to control the flow of gas (if possible).
  - f. Maintain 24-hour availability.
  - g. Check H<sub>2</sub>S scavenging chemical in mud (if applicable), and if necessary, add chemicals.

- h. **Make sure all non-essential personnel are in a safe gas-free area. Non-working personnel should be in the designated SBA.**
  - i. **Essential working personnel will have protective equipment on and in use (extreme danger classification).**
  - j. **Commence ignition procedures, if any of the ignition criteria are met (Refer to Section VII).**
  - k. **Responsible for contacting Emergency Services (i.e. Sheriff, Ambulance, Fire Department, etc.).**
  - l. **Responsible for notifying regulatory agencies.**
6. **Ensure all non-working personnel (visitors, vendors, etc.) have proper orientation concerning emergency procedures.**
  7. **Responsible for authorizing the evacuation of persons on local residents if H<sub>2</sub>S threatens their safety.**
  8. **All questions from the news media should be directed to the Public Affairs Department.**

**C. Rig Supervisor**

1. **If the UPRC Representative is unable to perform his/her duties or the alternate UPRC Representative is not available, the Rig Supervisor will assume command of wellsite operations and all responsibilities listed above.**
2. **Ensure that all rig personnel are properly trained to work in an H<sub>2</sub>S environment and fully understand purpose of detection and alarms, prevailing winds, buddy system, briefing areas, warning systems, and evacuation procedures.**
3. **When an operational condition exists that is classified as extreme danger (H<sub>2</sub>S detected at 10 PPM or more), the Rig Supervisor is responsible for assisting the UPRC Representative in the following:**
  - a. **Proceeding to the rig floor and assist in supervising rig operations.**
  - b. **Ensuring that only working personnel necessary to carry on operations, remain in the danger area.**

- c. Ensuring all crew members that remain in the vicinity of the rig have breathing apparatus available and ready for immediate use, if necessary.
- d. Assisting in controlling flow of H<sub>2</sub>S gas.
- e. Checking H<sub>2</sub>S scavenging chemicals in mud (if applicable), add chemicals if required.
- f. Assigning a crew member to block the entrance of the location. No unauthorized personnel will be allowed entry into the location.
- g. Determining danger zones with portable gas detectors and positioning fans to reduce H<sub>2</sub>S.

If the UPRC Representative or alternate is not available, the Rig Supervisor will be responsible for implementing all parts of this plan.

#### D. Safety Consultant

1. During normal drilling operations (no H<sub>2</sub>S present), the Safety Consultant will be responsible for the following:
  - a. Ensure wellsite equipment is in place and operational.
  - b. Ensure wellsite personnel are familiar with location and operation of safety equipment.
2. When an operational condition is classified as extreme danger the Safety Consultant will be responsible for the following:
  - a. Account for all wellsite personnel.
  - b. Assess any injuries and direct first aid measures.
  - c. Ensure safety and monitoring equipment is functioning properly.
  - d. Monitor safety of wellsite personnel.
  - e. Maintain close communication with UPRC Representative.
  - f. Maintain 24-hour availability.



### III. DRILLING RIG LAYOUT

#### A. Location

1. The Drilling Rig will be situated on location such that prevailing winds blow across the rig toward the mud circulation tanks at right angles to a line from the rig to the circulation tank.
2. The entrance to the location is designed so that it can be barricaded if a Hydrogen Sulfide emergency condition arises. An auxiliary exit (or entrance) will be available so that in case of an emergency, a shift in wind direction would not preclude escape from the location.
3. A minimum of two briefing areas shall be designated for assembly of personnel during emergency conditions, located a minimum of 150 feet or as practical from the wellbore and in such a location that at least one area will be upwind of the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated briefing area for instructions.
4. Appropriate smoking areas will be designated and smoking will be prohibited elsewhere.
5. Reliable 24-hour radio and/or telephone communications will be available at the rig.

#### B. Detection Equipment

1. The drilling rig shall have an H<sub>2</sub>S detection and monitoring system that automatically activates a visible alarm at 10 PPM H<sub>2</sub>S and audible alarm at airborne H<sub>2</sub>S concentrations levels of 15 PPM or more.
2. H<sub>2</sub>S sensors shall be located at the wellbore, the shale shaker, the rig floor, and the mud mixing area.
3. Detection equipment shall be properly calibrated as recommended by the manufacturer. All calibration and bump test results will be recorded in the driller's report.

4. Rig crews will participate in H2S/ BOP drills at least once/ week and the drills will be recorded in the driller's log.

**C. Wind Direction Indicator**

1. **At least three wind direction windsocks will be on location. They shall be visible from all principal working areas on location. In addition, a wind direction indicator shall be place at or near each of the 2 briefing areas if the one mentioned above is not visible from the briefing areas. One wind sock will be on the rig floor to be visible for all personnel working on the rig floor.**

**D. Respiratory Equipment**

1. **All respiratory equipment will be pressure demand and approved by MSHA/NIOSH.**
2. **There will be at least 12 SCBA's on location.**
3. **There will be 10 work line masks with egress bottles on site to allow the crew to perform their duties in a contaminated atmosphere.**

## **IV. SAFETY PROCEDURES**

### **A. Training**

All personnel which come on the location must be properly H<sub>2</sub>S trained and the general training requirements should cover, but not be limited to the following:

1. Hazards associated with H<sub>2</sub>S/SO<sub>2</sub> gas.
2. Proper use and care of personal protection equipment.
3. Detection equipment.
4. First Aid/CPR
5. Well site planning.
6. Work practices to reduce potential H<sub>2</sub>S exposures.
7. Evacuation procedures.
8. Buddy system.

### **B. Operating Conditions.**

Operating conditions will be posted on a warning sign at the entrance of all well locations and defined as follows:

1. Condition: **GREEN - NORMAL OPERATIONS**
2. Condition: **YELLOW - Caution- Hydrogen Sulfide may be present under 10 PPM.**
3. Condition: **RED - EXTREME DANGER** when atmospheric H<sub>2</sub>S concentration levels exceed 10 PPM - flashing Strobe Light

### **C. Evacuation Plan**

1. Any evacuation will be conducted with and coordinated by the County Sheriff and supported by the State Highway Patrol.
2. The included maps detail the area of the wellsite, including the inventory of the public within the radius exposure of the well.

3. Evacuation procedures will follow appropriate consideration for wind conditions.
4. Other supplemental contractors will be contacted and called in as needed.

**D. Emergency Rescue Procedures**

Well site personnel should not attempt emergency rescues unless they have been properly trained. However if you are properly trained in rescue procedures and you discover a person who has been overcome by H<sub>2</sub>S, do not attempt a rescue without donning the proper breathing equipment. When making an emergency rescue, use the following procedures:

1. Don appropriate breathing apparatus before attempting the rescue.
2. Remove the victim from contaminated area to a safe area with fresh air by moving crosswind then upwind.
3. If the person is not breathing, begin mouth-to-mouth resuscitation immediately until normal breathing has been restored or until medical attention is obtained. Administer cardiopulmonary resuscitation (CPR), if necessary. When possible, replace mouth-to-mouth with a bag mask or automatic resuscitator. Administer oxygen to the victim, if available.
4. Treat for shock, keep the person warm and calm. Never leave the person alone.
5. All person who are rendered unconscious must be taken to a hospital for examination.

**E. Buddy System**

The buddy system requires an additional person or "buddy" while one or more persons are working where H<sub>2</sub>S concentrations exceed or may exceed 300 PPM. This additional person should maintain visual and/or audible contact in a safe area, supplied with an independent air supply, and equipped with a Self Contained Breathing Apparatus (SCBA).

## V. EMERGENCY PHONE DIRECTORY

A. Union Pacific Resources Company (817) 877-6000  
 801 Cherry St.  
 Ft. Worth, TX. 76101

| <u>Title</u>                            | <u>Name</u>     | <u>Bus. Phone</u>   |
|---|-----------------|---|
| Drilling Superintendent                 | Bill Charles    | (817) 877-7678<br>Home (817) 599-9438<br>Mobil (817) 832-9251 |
| Senior Drilling Foreman                 | Lyle Woelich    | (307) 237-8039<br>Home (307) 234-9432<br>Mobil (307) 262-1261 |
| Operations Superintendent               | Pete Straub     | (307) 789-1573<br>Home (307) 789-1576<br>Mobil (307) 799-7848 |
| Safety Department - Ft. Worth office    | Joe Gay         | (817) 877-7018<br>Home (817) 236-8418                         |
| Safety Department - Rock Springs office | Kevin McDermott | (307) 352-6000<br>(307) 362-6717                              |
| Public Relations - Ft. Worth office     | Jim Sailor      | (817) 877-7527<br>Home (817) 477-2333                         |

### B. Government Agencies

1. Utah Oil, Gas & Mining Division (801) 538-5340  
 Salt Lake City, Utah

- 2. Bureau of Land Management - Utah State office (801) 977-4300
  
- C. Law Enforcement Agencies
  - Police Department - Evanston, WY. 911 or (307) 789-2331
  - Sheriff Department - Summit County, Utah (801) 336-4461
  - Highway Patrol - Utah (801) 965-4089
  
- D. Fire Department
  - Fire Department - Evanston/ Uinta County, WY 911 or (307) 789-2331
  
- E. Ambulance Services
  - Uinta County, WY 911 or (307) 789-2331
  
- F. Hospitals
  - IHC Memorial Hospital - Evanston, WY. (307) 789-3636
  
- G. Safety Consultant
  - Inter-Mountain Safety Co Inc. (307) 789-3882

**VI. SAFETY EQUIPMENT**

| <u>ITEM</u> | <u>AMOUNT</u> | <u>DESCRIPTION</u>   |
|-------------|---------------|--|
| 1           | 10            | 300 Cubic Feet Cylinder Cascade Air Supply System  |
| 2           | 750 ft        | Low Pressure Air Line Hose for each Work Unit/ Ska-Pak, length of hose not to exceed 250 feet per unit. Enough air hose to supply breathing air to the rig floor, substructure, derrick, shale shaker area, and other essential work areas |
| 3           | 5             | Low Pressure Manifolds   |
| 4           | 10            | Scott Ska-Paks   |
| 5           | 12            | Self Contained Breathing Apparatuses (SCBA)  |
| 6           | 3             | Wind Indicators  |
| 7           | 1             | 36-Unit First Aid Kit  |
| 8           | 1             | Manual Bag Mask Resuscitator with Spare Oxygen Bottle  |
| 9           | 2             | Fire Extinguisher - 30 # cartridge   |
| 10          | 1             | Well Condition Sign with Three Color Flag Warning System   |
| 11          | 1             | Stokes Stretcher   |
| 12          | 2             | Bug Blowers  |
| 13          | 2             | Safe Briefing Area Signs   |
| 14          | 2             | Manual Pump Type Gas Detectors with Ample Supply of H <sub>2</sub> S/SO <sub>2</sub> Detector Tubes  |
| 15          | 1             | Portable Combustible Gas Detector (Explosimeter)   |
| 16          | 2             | Flare gun with flares (one for ignition and one for spare)   |
| 17          | 2             | 500 ft. fire resistant retrieval rope  |

- |    |   |   |
|----|---|---|
| 18 | 1 | Automatic Fixed Electronic H <sub>2</sub> S Monitoring System with Visible and Audible Alarms - 4 channel |
| 19 | 6 | Battery powered Voice Mikes   |

## VII. IGNITION PROCEDURES

### A. Ignition Criteria

If it is apparent that the hydrogen sulfide gas being released may endanger the health and safety of the public or wellsite personnel or may cause serious environmental contamination, the UPRC Representative will ignite the gas cloud.

### B. Ignition Equipment

The following equipment will be available and on-site for use by the ignition team personnel.

- 2 - Flare gun with two dozen flares (one for ignition and one for spare)
- 2 - 500 ft. fire resistant retrieval rope
- 1 - Portable Combustible Gas Detector
- 3 - Minimum number of SCBA's for ignition team members
- 1 - Backup vehicle with communication equipment (two-way radio, etc.)

### C. Ignition Procedures

The UPRC Representative or alternate will ensure that wellsite personnel are evacuated to a safe location upwind of the well. The UPRC Representative will then proceed with the following ignition procedures:

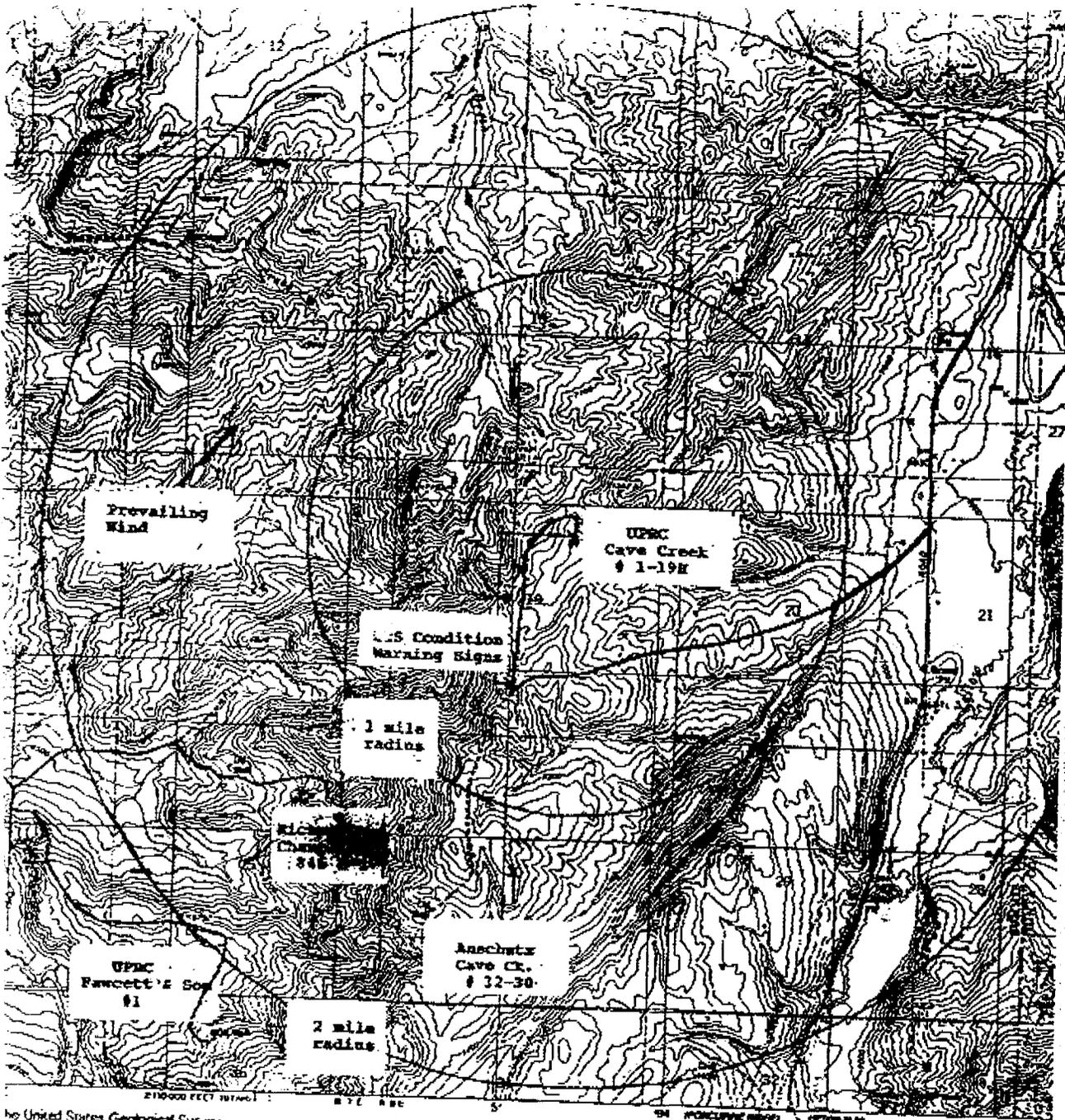
1. The UPRC representative and a designated assistant (either rig supervisor or safety consultant), backed up by one or two designated wellsite personnel, will comprise the ignition team.
2. The backup member(s) will be positioned by a radio equipped vehicle at a safe distance from the sour gas release. They will standby to rescue the UPRC representative and assistant with the retrieval ropes, if necessary.

3. The assistant of the team will carry an explosimeter and will continuously monitor the area for explosive gases.
4. The UPRC representative will carry the flare gun. (Flare shells are to be carried in a separate container - not in your pocket).
5. The ignition team will determine the hazardous area (10% of lower flammable limits) and establish safe perimeters. Once this is determined, the ignition team should move to the upwind area of the leak perimeter and fire a flare into the area. If the leak is not ignited on the first attempt, move in 20 to 30 feet and fire again. If trouble is incurred in igniting the gas, attempt to fire a flare at 40 to 90 degrees to each side of the area where you have been firing. If ignition is not possible, the toxic leak perimeter must be established and maintained to ensure evacuation is completed and continued until the emergency is secured.

**VII. RESIDENT LISTINGS**

| <b>Map Reference</b>                       | <b>Name of Resident</b>             | <b>Number of Persons</b> | <b>Contact &amp; Numbers</b>  |
|--|-------------------------------------|--------------------------|---|
| <b>Richardson<br/>Champlin<br/>846 B-1</b> | <b>Richardson Oil Co</b>            | <b>1-2</b>               | <b>Dave Oiree<br/>Pumper<br/>Office (307) 783-2982<br/>Home (307) 789-2426</b>                  |
| <b>Compressor<br/>Operator</b>             | <b>Halliburton Energy</b>           | <b>1</b>                 | <b>Rock Springs<br/>Office (307) 362-4421<br/>24 hour contact number</b>                        |
| <b>Cave Creek<br/># 12-30</b>              | <b>Arnschutz Corporation</b>        |                          |   |
| <b>Pumper</b>                              | <b>Questar Pipeline</b>             | <b>1-2</b>               | <b>Jim Mathson<br/>Foreman<br/>Office (307) 789-6395<br/>24 hour gas control (801) 534-5626</b> |
| <b>Compressor<br/>Operator</b>             | <b>Production Operators<br/>Inc</b> | <b>1-3</b>               | <b>Dennis Morgan<br/>Foreman<br/>Office (307) 789-5331</b>                                      |
| <b>Dehy Operator</b>                       | <b>Questar<br/>Pipeline</b>         | <b>1-2</b>               | <b>Jim Mathson<br/>Foreman<br/>Office (307) 789-6395</b>  |

**There are no residences within a 2 mile radius of the well.**



United States Geological Survey

Scale and other technical details



**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)

October 21, 1994

**Union Pacific Resources Company**  
P. O. Box 7 MS/3006  
Fort Worth, Texas 76101-0007

Re: UPRR 19-1H Well  
Surface Location 1320' FNL, 1980' FEL, Sec. 19, T. 5 N., R. 8 E. Summit Co., Ut.  
BHL 660' FSL & 660' FWL, Sec. 19, T. 5 N., R. 8 E.

Gentlemen:

Pursuant to the order issued by the Board of Oil, Gas and Mining in Cause No. 189-2 dated August 25, 1983, and Utah Admin. R.649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to horizontally drill the referenced well at the location described above, is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

1. The reserve pit should be located on the northwest side of location.
2. A 12 mil plastic liner will be required for the reserve pit. The pit should be prepared sufficiently to avoid puncture of the liner.
3. The stock-piled topsoil should be stored between the location and the access road.
4. A culvert should be installed at the point where the access road enters the location.
5. A berm and ditch should be constructed around the location to divert any runoff into the natural drainage and brush.
6. H<sub>2</sub>S equipment and safety training for all personnel will be provided at the drill site while drilling operations are underway.



Page 2  
Union Pacific Resources Company  
UPRR 19-1H Well  
October 21, 1994

- 7.. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.
8. Notification to the Division within 24 hours after drilling operations commence.
9. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
10. Submittal of the Report of Water Encountered During Drilling, Form 7.
11. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.
12. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

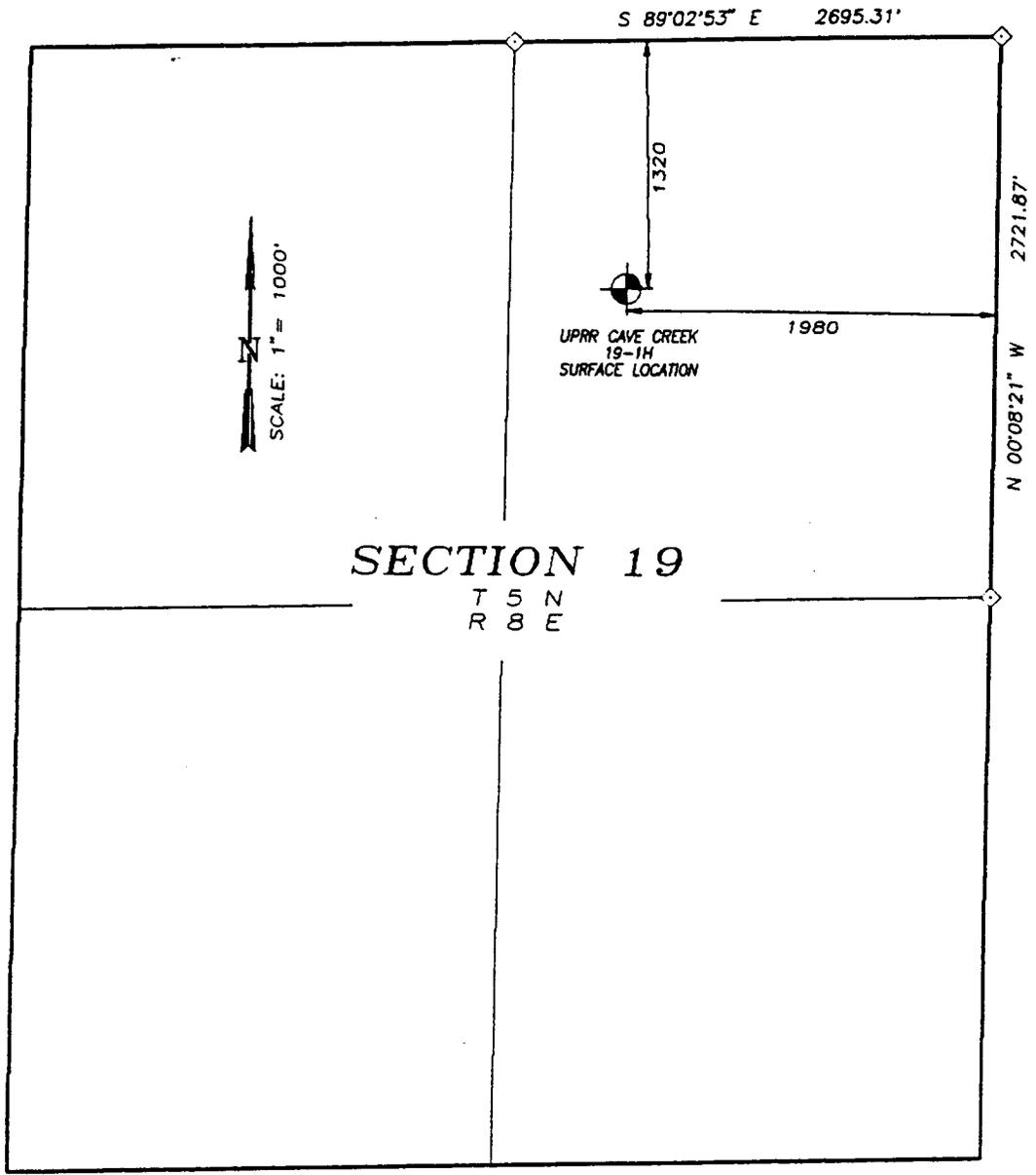
This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-043-30309.

Sincerely,



R.J. Firth  
Associate Director

ldc  
Enclosures  
cc: Summit County Assessor  
Bureau of Land Management, Salt Lake City District Office  
WOI1



SECTION 19  
T 5 N  
R 8 E

LOCATION MAP

SURVEYED UNDER MY SUPERVISION  
IN SEPTEMBER 1994

*John A. Proffitt*  
2860  
9/20/94  
Registered  
Land Surveyor  
STATE OF UTAH

MAP TO ACCOMPANY  
APPLICATION FOR PERMIT TO DRILL  
U.P.R.R. CAVE CREEK  
19-1H WELL  
1320 FNL 1980 FEL  
SECTION 19  
T 5 N, R 8 E, SLBM  
SUMMIT COUNTY, UTAH

UINTA ENGINEERING & SURVEYING, INC.  
808 MAIN STREET  
EVANSTON, WYOMING 82930  
(307) 789-3602

DATE: 09-20-94 JOB #: 94-26-20  
DISK #: 116 FILE: 94-26-20

**CONFIDENTIAL**

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: UPRC

WELL NAME: UPRR 19-1H

API NO. 43-043-30309

Section 19 Township 5N Range 8E County SUMMIT

Drilling Contractor CARDINAL

Rig # 16

SPUDDED: Date 10/28/94

Time \_\_\_\_\_

How DRY HOLE

Drilling will commence \_\_\_\_\_

Reported by DON

Telephone # \_\_\_\_\_

Date 10/28/94 SIGNED FRM

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

6. Lease Designation and Serial Number

UT-PA00Z

7. Indian Allottee or Tribe Name

NA

8. Unit or Communitization Agreement

NA

**SUNDRY NOTICES AND REPORTS ON WELLS**

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)

9. Well Name and Number

UPRR 19-1H

2. Name of Operator

Union Pacific Resources Company

10. API Well Number

43-043-30309

3. Address of Operator

P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007

4. Telephone Number

(817) 877-6000

11. Field and Pool, or Wildcat

Cave Creek

5. Location of Well

Footage : 1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM

County : Summit

QQ, Sec. T., R., M. : NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM

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 type="checkbox"/> Casing Repair                                  | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                                | <input 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 checked="" type="checkbox"/> Other <u>Weekly Progress Report</u> |   |

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.)

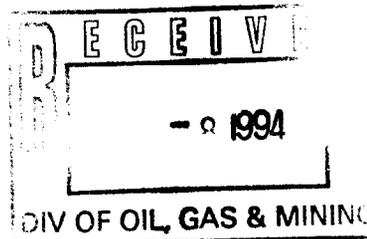
Weekly Progress Report No. 1, Week Ending Nov. 7, 1994

Please be advised that the well spudded Nov. 4, 1994.

Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".

Please contact the undersigned at (817) 877-7952 if additional information is required.

**CONFIDENTIAL**



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

Name & Signature

W.F. Brazelton

*W.F. Brazelton*

Title Sr. Regulatory Analyst

Date 94-11-07

(Use Only)

## OPERATION SUMMARY REPORT

WELLNAME :UPRR CAVE CREEK 19-1H  
 AFE No. :018526  
 FIELD :CAVE CREEK UTAH

WELL No. :#1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 1 TO REPORT No. 4

| DATE     | DEPTH | TIME   | WORK DESCRIPTION DIARY   |
|----------|-------|--|--|
| 11/04/94 | 113.0 |  | <p>UNION PACIFIC RESOURCES PROVIDING 1.589 M TO DRILL, TEST &amp; EQUIP. THE CAVE CREEK 19 1-H AS A DUAL LATERAL WELL IN THE WATTON CANYON &amp; RICH FORMATIONS. LOCATED 1,320' FNL, 1,980 FEL, IN SEC. 19, T-5N, R-8E, SUMMIT CO. UTAH. M.D. TD @ 10,827' &amp; 10,870'. API # 43-043-30309, LEASE # UT PA000Z</p> <p>DIRECTIONS TO LOCATION:<br/>           FROM I-80 AT EVANSTON, WY. GO SOUTH ON THE YELLOW CREEK RD. 8.9 MILES. TURN RIGHT AT CARDINAL 16E RIG SIGN, GO 1.6 MILES, TURN RIGHT ON LEASE ROAD AND GO .25 MILES TO LOCATION. RIG SITE PHONE: 801-640-0726</p> <p>FIRST REPORT OF OPERATIONS<br/>           NOTIFIED UTAH DIVISION OF OIL, GAS &amp; MINING 0945 HRS. ON SPUD. CONTACT JIM TOMPSON</p> <p style="padding-left: 20px;">05:00 03:00 RIG UP ROTARY TOOLS.<br/>           03:00 05:00 MIX MUD, STRAP B.H.A. RIG ON DAYWORK @ 0300 HR. 11/4/94.</p> <p>WATER WELL: DRILLED TO 60', HIT ROCK, SET 60' 10" CSG. CMT WITH 4 YDS. READY MIX.</p> <p>FMC 11"-3000# STARTER HEAD ON LOCATION. 10 .75" CSG. TO ARRIVE TODAY.</p> |
| 11/05/94 | 867.0 | 05:00 09:00<br>09:00 10:00<br>10:00 11:00<br>11:00 11:30<br>11:30 12:15<br><br>12:15 15:00<br>15:00 15:30<br>15:30 17:45<br>17:45 18:15<br>18:15 22:00<br>22:00 22:30<br>22:30 02:00<br>02:00 04:00<br>:<br>04:00 04:30<br>04:30 05:00 | <p>WEATHER: DAY CLEARING, 25 DEG. NIGHT 0. DEG.</p> <p>MIX MUD TO 36 VIS.</p> <p>TAG CMT @ 92' DRILL TO 152'.</p> <p>SURVEY @ 143' .5 DEG. PICKUP 3 PT. REAMER</p> <p>DRILL 152'-193'.</p> <p>CIRCULATE, RAISE VIS TO 40,</p> <p>DRILLING CONGLOMERATE, CLEAN UP HOLE</p> <p>DRILL 193'-313'. 120' @ 43.6'/HR.</p> <p>WIRE LINE SURVEY @ 263' .5 DEG.</p> <p>DRILL 313'-434'. 121' @ 53.7'/HR.</p> <p>WIRE LINE SURVEY @ 384' .5 DEG.</p> <p>DRILL 434'-618'. 184' @ 49.0'/HR.</p> <p>WIRE LINE SURVEY @ 570' .5 DEG.</p> <p>DRILL 618'-836'. 218' @ 62.2'/HR.</p> <p>CIRCULATE, BUILD MUD VOLUME, HAD TROUBLE WITH PIT PUMP. LOST 100 BBLs. DUE TO SEEPAGE</p> <p>DRILL 836'-867'.</p> <p>WIRE LINE SURVEY @ 820' 1.0 DEG.</p> <p>TOTAL WATER HAULED-2300 BBLs.</p> <p>ROT HRS. 16.5/16.5</p> <p>RECEIVED 26 JTS. 10.5", 45.5#/FT CSG. FROM CHALK CREEK PIPE YARD.</p> <p>WEATHER: CLEARING, 25 TO 5 DEG.</p> <p>WATER WELL: AIR/MIST DRILLED TO 330'. SDFN</p>   |
| 11/06/94 | 1000. | 05:00 07:30<br>07:30 09:45<br><br>09:45 11:45<br>11:45 12:45<br>12:45 14:45<br>14:45 16:45   | <p>DRILL 867'-1,000'. 133' @ 53.2'/HR.</p> <p>CIRCULATE/FOR CSG, BUILD VOLUME, HOLE TAKING FLUID. EST 60 % RETURNS.</p> <p>TRIP TO 200'. SLM 1,000' NO CORR.</p> <p>CIRCULATE</p> <p>TRIP, LD. REAMERS, 10" D.C.'S.</p> <p>RUN CASING 23 JTS. 10.75" 45.5#/FT K-55 CSG. SHOE @ 999', FLOAT @ 956'. ALL CSG. TORQUED TO</p>   |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19-1H  
 AFE No. :018526  
 FIELD :CAVE CREEK UTAH

WELL No. :#1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 1 TO REPORT No. 4

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY   |
|----------|-------|-------------|--|
|          |       | 16:45 19:00 | 4600 FT/#.,CLEANED & DRIFTED.<br>RIG UP DOWELL, CIRCULATE, WITH RIG @ 7 BPM,<br>CMT WITH 525 SX. 65:35 POZ WITH 6% GEL,<br>2% CACL2,.25#/SX CELLOFLAKE, MIXED @ 12.7 PPG.<br>TAILED IN WITH 250 SX. CLASS "G" + .25 #/SX<br>CELLOFLAKE, DROP TOP PLUG & DISPLACE WITH<br>94 BBL. WATER, BUMPED PLUG WITH 700#. CHECKED<br>WEATHERFORD FLOAT EQUIP. FLOATS HOLDING.<br>NO CMT CIRCULATED TO SURFACE, WAIT 1 HR.<br>FLUID FELL BACK 25', DO 1" TOP JOB @ 125'<br>WITH 125 SX. CLASS "G" + 2% CACL2, CMT @<br>SURFACE. WATCH FLUID LEVEL, SLIGHT SEEPAGE IN<br>1 HR. RELEASED DOWELL. |
|          |       | 19:00 02:00 | WAIT ON CEMENT   |
|          |       | 02:00 05:00 | WELD ON 11"-3000# FMC, WELL HEAD   |
|          |       |             | WATER WELL: DRILLED TO 510', STARTED GOOD<br>WATER @ 400' @ TD, ESTIMATED WATER 100 GPM.<br>CIRCULATE WITH AIR TO CLEAN UP, PREP TO RUN<br>CSG. & GRAVEL PACK.   |
|          |       |             | WEATHER: OVER CAST, TEMP-35 DEG. DOWN TO 30<br>AT NIGHT. NO PRECP.   |
|          |       |             | WATER: 2975/5275   |
| 11/07/94 | 1297. | 05:00 06:00 | CMT JOB WITNESSED BY JIM THOMPSON WITH UTAH<br>OIL/GAS DIVISION.   |
|          |       | 06:00 12:00 | COOL WELL HEAD & TEST TO 1500# FOR 15 MIN.<br>NIPPLE UP DSA,SPOOL,MUD CROSS,DOUBLE GATE<br>AND HYDRILL.  |
|          |       | 12:00 18:00 | TEST B.O.P.,MANIFOLD,FLOOR VALVES, KELLY VALVE,<br>TO 300# & 3000# FOR 10 MIN EACH. TEST ANNULAR<br>TO 300# & 1500# 10 MIN. EACH. FILLED CHOKE<br>LINE WITH METHONAL.  |
|          |       | 18:00 19:30 | NIPPLE UP FLOW LINE, CMT FELL 25',FILL WITH<br>PEA GRAVEL,ALIN B.O.P.  |
|          |       | 19:30 22:00 | PICK UP BHDC,BIT, TRIP IN<br>TAG CMT @ 940'.   |
|          |       | 22:00 22:15 | TEST CASING TO 1500# O.K.  |
|          |       | 22:15 23:30 | DRILL CEMENT/FLOAT EQUIP.  |
|          |       | 23:30 00:30 | DRILL 1000'-1,131'. 131'/HR  |
|          |       | 00:30 01:00 | WIRE LINE SURVEY @ 1,083' 1.DEG.   |
|          |       | 01:00 03:30 | DRILL 1,131'-1,286'. 155' @ 62'/HR.  |
|          |       | 03:30 03:45 | WIRE LINE SURVEY @ 1,238' 2.0 DEG.   |
|          |       | 03:45 04:00 | DRILL 1,286'-1,297'.   |
|          |       | 04:00 05:00 | TRIP FOR B.H.A.  |
|          |       |             | WATER WELL:<br>DRILLED TO 530', CIRCULATE,RUN 6 5/8" CSG.<br>TO 520'. GRAVEL PACK. SDFN.CLEAN UP TODAY,<br>INSTALL PUMP.   |
|          |       |             | WATER HAULED: 1500/6776<br>WEATHER: OVERCAST 40 DEG DOWN TO 35 AT NIGHT,<br>NO FRONTS MOVING IN.SNOWS ALL GONE.  |

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

6. Lease Designation and Serial Number

UT-PA00Z

7. Indian Allottee or Tribe Name

NA

8. Unit or Communitization Agreement

NA

9. Well Name and Number

UPRR 19-1H

10. API Well Number

43-043-30309

11. Field and Pool, or Wildcat

Cave Creek

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

**CONFIDENTIAL**

1. Type of Well

- Oil Well     Gas Well     Other (specify)

2. Name of Operator

Union Pacific Resources Company

3. Address of Operator

P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007

4. Telephone Number

(817) 877-6000

5. Location of Well

Footage : 1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM    County : Summit  
 QQ, Sec. T., R., M. : NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM    State : UTAH

**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     |
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| <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 type="checkbox"/> Casing Repair                                  | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                                | <input 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 checked="" type="checkbox"/> Other <u>Weekly Progress Report</u> |   |

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.)

Weekly Progress Report No. 2 , Week Ending November 14, 1994.

Well spudded November 4, 1994

Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".

Please contact the undersigned at (817) 877-7952 if additional information is required.

I hereby certify that the foregoing is true and correct

Name & Signature

W.F. Brazelton

*W.F. Brazelton*

Title Sr. Regulatory Analyst

Date 94-11-14

(Use Only)

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19-1H  
 AFE No. :018526  
 FIELD :CAVE CREEK UTAH

WELL No. :#1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 5 TO REPORT No. 11

| DATE     | DEPTH | TIME  | WORK DESCRIPTION DIARY                 |                               |
|----------|-------|---|--|-------------------------------|
| 11/08/94 | 2067. | 05:00 07:00                                 | TRIP FOR 3-PT. REAMERS.                |                               |
|          |       | 07:00 07:15                                 | WASH/REAM 45' TO BTM.                  |                               |
|          |       | 07:15 09:30                                 | DRILL 1,297'-1,454'. 157' @ 69.7'/HR.  |                               |
|          |       | 09:30 10:00                                 | WIRE LINE SURVEY @ 1,404' 2.0 DEG.     |                               |
|          |       | 10:00 12:30                                 | DRILL 1,454'-1,609'. 155' @ 62.0'/HR.  |                               |
|          |       | 12:30 13:00                                 | WIRE LINE SURVEY @ 1,559' 2.5 DEG.     |                               |
|          |       | 13:00 16:30                                 | DRILL 1,609'-1,766'. 157' @ 44.8'/HR.  |                               |
|          |       | 16:30 17:15                                 | WIRE LINE SURVEY @ 1,716' 1.5 DEG.     |                               |
|          |       | 17:15 21:30                                 | DRILL 1,766'-1,922'. 156' @ 36.7'/HR.  |                               |
|          |       | 21:30 22:00                                 | WIRE LINE SURVEY @ 1,877' 2.25 DEG.    |                               |
|          |       | 22:00 05:00                                 | DRILL 1,922'-2,067'. 145' @ 20.7'/HR.  |                               |
|          |       |   |  | ROTATING HRS: 19.5/42.25      |
|          |       |   |  | WATER HAULED: 700/7476        |
|          |       |   |  | WATER WELL:510/510 ( 85 BPH ) |
|          |       | RIG FUEL:0/14800                            |  |                               |
|          |       | WEATHER: OVERCAST,LIGHT SNOW AT NIGHT       |  |                               |
|          |       | TEMP 30.                                    |  |                               |
| 11/09/94 | 2620. | 05:00 08:00                                 | DRILL 2,067'-2,144'. 77' @ 25.6'/HR.   |                               |
|          |       | 08:00 08:30                                 | WIRE LINE SURVEY @ 2094' MISRUN        |                               |
|          |       | 08:30 09:30                                 | DRILL 2,144' 2,175'.                   |                               |
|          |       | 09:30 10:00                                 | WIRE LINE SURVEY @ 2,125' 2.75 DEG.    |                               |
|          |       | 10:00 13:30                                 | DRILL 2,175' -2,267'. 92' @ 26.2'/HR.  |                               |
|          |       | 13:30 14:00                                 | WIRE LINE SURVEY @ 2,217' 2.25 DEG.    |                               |
|          |       | 14:00 19:00                                 | DRILL 2,267'-2,425'. 158' @ 31.6'/HR.  |                               |
|          |       | 19:00 19:30                                 | WIRE LINE SURVEY @ 2,380' 2.75 DEG.    |                               |
|          |       | 19:30 02:00                                 | DRILL 2,425' -2,551'. 126' @ 19.3'/HR. |                               |
|          |       | 02:00 02:30                                 | WIRE LINE SURVEY @ 2,506' 1.25 DEG.    |                               |
|          |       | 02:30 05:00                                 | DRILL 2,551'-2,620'. 69' @ 27.6'/HR.   |                               |
|          |       |   |  | ROTATING HRS: 21.5/63.75      |
|          |       |   |  | WATER WELL: 640/1150          |
|          |       |   |  | HYCALOG DS-71 BIT ON LOCATION |
|          |       | NEW RIG PHONE # 307-679-6252                |  |                               |
|          |       | WEATHER: LIGHT SNOW A.M., OVERCAST DRY P.M. |  |                               |
|          |       | TEMP: 25 DEG.                               |  |                               |
| 11/10/94 | 3266. | 05:00 05:45                                 | DRILL 2,620'-2,644'.                   |                               |
|          |       | 05:45 06:15                                 | WIRE LINE SURVEY @ 2,599' 1.25 DEG.    |                               |
|          |       | 06:15 08:00                                 | TRIP FOR NEW BIT # 3.<br>NO HOLE DRAG  |                               |
|          |       | 08:00 08:15                                 | WORK BLIND RAMS                        |                               |
|          |       | 08:15 09:00                                 | TRIP IN                                |                               |
|          |       | 09:00 09:45                                 | WASH 90' TO BTM. SOFT FILL.            |                               |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19-1H  
 AFE No. :018526  
 FIELD :CAVE CREEK UTAH

WELL No. :#1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 5 TO REPORT No. 11

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY   |
|----------|-------|-------------|--|
|          |       | 09:45 13:30 | DRILL 2,644'-2,799'. 155' @ 41.3'/HR.  |
|          |       | 13:30 14:00 | WIRE LINE SURVEY @ 2,749' 1.5 DEG.   |
|          |       | 14:00 18:15 | DRILL 2,799'-2,934'. 135' @ 31.7'/HR.  |
|          |       | 18:15 18:45 | WIRE LINE SURVEY @ 2,904' 1.75 DEG.  |
|          |       | 18:45 00:00 | DRILL 2,934'-3,111'. 177' @ 33.7'/HR.  |
|          |       | 00:00 00:30 | WIRE LINE SURVEY @ 3,063' 1.75 DEG.  |
|          |       | 00:30 04:30 | DRILL 3,111'-3,266'. 155' @ 38.7'/HR.  |
|          |       | 04:30 05:00 | WIRE LINE SURVEY @ 3,218' .75 DEG.<br>WILL START MUD UP TODAY<br>ROTATING: 18.5/81.75<br>WATER WELL:0/1150<br>MUD LOGGERS ON LOCATION & RIGGED UP.<br>WEATHER: CLEAR, TEMP-30 DEG.<br>SNOW NEXT 48 HRS.                            |
| 11/11/94 | 4136. | 05:00 07:00 | DRILL 3,266'-3,393'. 127' @ 63.5'/HR.  |
|          |       | 07:00 07:15 | RIG SERVICE, CHECK B.O.P.  |
|          |       | 07:15 15:00 | DRILL 3,393'-3,674'. 281' @ 36.2'/HR.  |
|          |       | 15:00 15:30 | WIRE LINE SURVEY @ 3,624' 1.5 DEG.   |
|          |       | 15:30 21:00 | DRILL 3,674'-3,889'. 215' @ 39'/HR.  |
|          |       | 21:00 21:30 | WIRE LINE SURVEY @ 3,841' 2.25 DEG.  |
|          |       | 21:30 03:30 | DRILL 3,889'-4,104'. 131' @ 21.8'/HR.  |
|          |       | 03:30 04:00 | WIRE LINE SURVEY @ 4,056' 2.5 DEG.   |
|          |       | 04:00 05:00 | DRILL 4,104'-4,136'. 32'/HR.<br>ROTATING:22.25/104<br>WATER WELL:640/1790<br>WATER HAULED 3700/11181( BEFORE WATER WELL)<br>TOTAL WATER: 12,971<br>RIG FUEL:0/14800<br>WEATHER: CLEAR,HI-40,LOW 30.<br>SNOW PROJECTED NEXT 24 HRS. |
| 11/12/94 | 4671. | 05:00 09:00 | TOPS: STUMP @ 3982'. LITH REDBROWN SS & SH W/<br>CLEAR TO RED/ORANGE SS.<br>DRILL 4,136'-4,260'. 124' @ 31'/HR.  |
|          |       | 09:00 11:15 | TRIP FOR M.MOTOR. PDC BIT<br>SLM 4259.13',BOARD 4260.87', NO CORRECTION  |
|          |       | 11:15 11:30 | WORK BLINDS  |
|          |       | 11:30 12:30 | LAY DOWN BHDC, PICK DEL MAR 6.75" TWO STAGE  |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19-1H  
 AFE No. :018526  
 FIELD :CAVE CREEK UTAH

WELL No. :#1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 5 TO REPORT No. 11

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY  |
|----------|-------|-------------|---|
|          |       | 12:30 13:45 | TRIP IN   |
|          |       | 13:45 14:00 | WASH 17' TO BTM.  |
|          |       | 14:00 19:30 | DRILL 4,260'-4,484'. 224' @ 40.7'/HR. WOB-6-10  |
|          |       | 19:30 20:00 | WIRE LINE SURVEY @ 4,406' 4.0 DEG.  |
|          |       | 20:00 23:30 | DRILL 4,484'-4,577'. 93' @ 26.5'/HR. WOB-2-6  |
|          |       | 23:30 24:00 | WIRE LINE SURVEY @ 4,497' 5.0 DEG.  |
|          |       | 24:00 04:15 | DRILL 4,577'-4,670'. 93' @ 21.8'/HR. WOB-2-6  |
|          |       | 04:15 04:45 | WIRE LINE SURVEY @ 4,590' 5.75 DEG.   |
|          |       | 04:45 05:00 | DRILL 4,670'-4,671'.  |
|          |       |             | ROTATING: 17.5/121.5<br>WATER WELL: 300/2090<br>RIG FUEL: 7300/22100<br>WEATHER: CLEAR DAY, RAIN/SNOW PM. 2"<br>TEMP-32 DEG.      |
| 11/13/94 | 4681. | 05:00 07:00 | MUD LOGGER TOPS: PREUSS @ 4,390'.119' LOW<br>DRILL 4,671'-4,681'.   |
|          |       | 07:00 16:00 | CIRCULATE & CONDITION MUD, WAIT FOR M.W.D.  |
|          |       | 16:00 19:00 | TRIP FRO STEERING TOOLS   |
|          |       | 19:00 20:30 | LAY DOWN TWO STAGE,P.U. 7.75" SINGLE STAGE<br>MOTOR, NMDC,M.W.D. GEAR.  |
|          |       | 20:30 00:30 | WAIT ON M.W.D. EQUIP.   |
|          |       | 00:30 05:00 | TRIP IN, RUNNING CHECK SHOTS EVERY 300' START<br>ING AT 2,283'. AZIMUTH STARTING @ 185.3 WITH<br>GENERAL TREND GOING 200. TO 220  |
|          |       |             | ROTATING: 2/123.5<br>WATER WELL: 100/2190<br>RIG FUEL:0/22100<br>WEATHER: LIGHT SNOW LAST 24 HRS. TEMP-25-30                      |
| 11/14/94 | 5000. | 05:00 05:30 | SET SKIMMER TANKS, START RIG UP 11/14   |
|          |       | 05:30 15:00 | ORIENT TOOL FACE<br>DRILL 4,681'-4,871'.<br>S-4681'-4738'<br>R-4738'-4745'<br>S-4745'-4871'.<br>NO ANGLE DROP, STAYING @ 6.4 DEG. |
|          |       | 15:00 17:30 | TRIP FOR BHA.   |
|          |       | 17:30 19:00 | LAY DOWN 7.75" MM, PICK UP 6.75" ADJ. MOTOR<br>SET @ 1.5 DEG. ORIENT TOOLS.   |

**OPERATION SUMMARY REPORT**

|                                 |                       |
|---------------------------------|-----------------------|
| WELLNAME :UPRR CAVE CREEK 19-1H | WELL No. :#1H         |
| AFE No. :018526                 | API No. :43-043-30309 |
| FIELD :CAVE CREEK UTAH          | RIG :CARDINAL 16 E    |

SUMMARY OF OPERATIONS FROM REPORT No. 5 TO REPORT No. 11

| DATE | DEPTH | TIME        | WORK DESCRIPTION DIARY   |
|------|-------|-------------|--|
|      |       | 19:00 21:30 | TRIP IN  |
|      |       | 21:30 05:00 | DRILL 4,871'-5,000'<br>S-4871'-4891' R-4891'-4903'<br>S-4903'-4919' R-4919'-4933'<br>S-4933'-4943' R-4943'-4964'<br>S-4964'-4974 R-4974'-5000'                                 |
|      |       |             | ROTATING: 17/157.5<br>WELL: 100/2290<br>RIG FUEL:0/22100<br>WEATHER: SNOW AM, CLEAR PM TEMP-20 DEG.<br>STORM CLEARING OUT. 6" SNOW LAST 24 HRS.<br>GAMMA RAY TOOLS ON LOCATION |

3 Truad Center  
Suite 350  
Salt Lake City UT 84180-1203

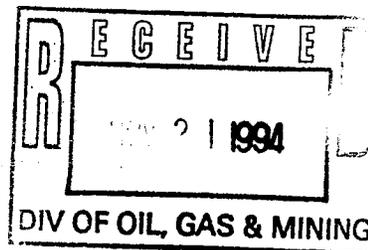
OPERATOR Union Pacific Resources OPERATOR ACCT. NO. 11 9465  
ADDRESS PO Box 7 MS 2603  
Fort Worth, TX 76101-0007

| ACTION CODE   | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME          | WELL LOCATION |    |    |    |        | SPUD DATE | EFFECTIVE DATE |
|---|--------------------|----------------|------------|--------------------|---------------|----|----|----|--------|-----------|----------------|
|   |                    |                |            |                    | QQ            | SC | TP | RG | COUNTY |           |                |
| A   | 99999              | 11695          | 4304330309 | UPRR 19-1H         | NW            | 19 | 5N | 8E | Summit | 11/4/94   |                |
| WELL 1 COMMENTS: Cave Creek Field      Watton Canyon Formation<br>("stacked lateral")      & Rich Formation |                    |                |            |                    |               |    |    |    |        |           |                |
| WA  | 99999              | 11696          | 4304330310 | Newton Sheep 20-1H | NW/NW         | 20 | 2N | 7E | Summit | 11/14/94  |                |
| WELL 2 COMMENTS: Elkhorn Field<br>Twin Creek Formation  |                    |                |            |                    |               |    |    |    |        |           |                |
| WELL 3 COMMENTS: Entitles added 11-22-94. Lee   |                    |                |            |                    |               |    |    |    |        |           |                |
| WELL 4 COMMENTS:  |                    |                |            |                    |               |    |    |    |        |           |                |
| WELL 5 COMMENTS:  |                    |                |            |                    |               |    |    |    |        |           |                |

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.



Carolyn Gluman  
Signature  
Accountant      11/5/94  
Title      Date  
Phone No. (817) 877-6467

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

6. Lease Designation and Serial Number

UT-PA00Z

7. Indian Allottee or Tribe Name

NA

8. Unit or Communitization Agreement

NA

**SUNDRY NOTICES AND REPORTS ON WELLS**

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) \_\_\_\_\_

9. Well Name and Number

UPRR 19-1H

2. Name of Operator

Union Pacific Resources Company

10. API Well Number

43-043-30309

3. Address of Operator

P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007

4. Telephone Number

(817) 877-6000

11. Field and Pool, or Wildcat

Cave Creek

5. Location of Well

Footage : 1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM County : Summit  
OO, Sec. T., R., M. : NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM 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 type="checkbox"/> Casing Repair                                  | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                                | <input 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 checked="" type="checkbox"/> Other <u>Weekly Progress Report</u> |   |

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

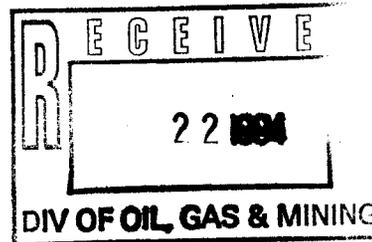
\* Must be accompanied by a cement verification report.

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.)

Weekly Progress Report No. 3, Week Ending Nov. 21, 1994

Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".

Please contact the undersigned at (817) 877-7952 if additional information is required.



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

Name & Signature

W.F. Brazelton

*W.F. Brazelton*

Title Sr. Regulatory Analyst

Date 94-11-21

(Use Only)

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 12 TO REPORT No. 18

| DATE     | DEPTH   | TIME        | WORK DESCRIPTION DIARY   |
|----------|---|-------------|--|
| 11/15/94 | 5227.   | 05:00 12:00 | DRILL 5,000'-5,150'.<br>R-5000'-5026' S-5026'-5041'<br>R-5041'-5051' S-5051'-5072'<br>R-5072'-5100' S-5100'-5119'<br>R-5119'-5134' S-5134'-5150'<br>ALL SLIDES 180 L HI SIDE<br>79' ROTATING, 71' ORIENTED |
|          |   | 12:00 15:00 | PUMP PILL,BLOW KELLY,TRIP FOR STERRING MOTOR<br>SLM 5147.65' BOARD 5050.52', NO CORR.  |
|          |   | 15:00 15:15 | WORK BOPS,CLOSE BLINDS.  |
|          |   | 15:15 15:45 | L.D. 6.75" 1.5 DEG. 3-STAGE MM. P.U. 7.75"<br>SINGLE STAGE STEERING MM. P.U. BIT # 6.<br>P.U. GR TOOLS.  |
|          |   | 15:45 17:45 | TRIP IN HOLE, CHECK MWD @ CSG. SHOE.   |
|          |   | 17:45 23:15 | CIRCULATE, BLOW IN SALT, CONDITION MUD<br>MUD LOGGER PORJECTED SALT TOP @ 5140'.   |
|          |   | 23:15 04:00 | DRILL 5,150'-5,224'. 74' @ 15.5'/HR.   |
|          |   | 04:00 04:45 | WORK ON MUD PUMP. XO HEAD  |
|          |   | 04:45 05:00 | DRILL 5,334'-5,227'.<br>ROTATING: 12./169.5<br>WELL:0/2290<br>FUEL:0/22100   |
|          |   | 11/16/94    | 5650.  |
|          | REAMING SALT EVERY 15'. NO DRAG OR TORQUE<br>TOPS: SALT @ 5427' BASE @ 5597' GIRAFFE @ 5626'<br>ROTATING: 24/193.5<br>WELL: 200/2490<br>FUEL:0/22100<br>LOCATED X O CSG. JT. FROM B.L. COOPER<br>WEATHER: WINDS TO 25-30 MPH. SNOWING<br>TEMP: 25 |             |  |
| 11/17/94 | 5945.   | 05:00 05:45 | SHORT TRIP TO 5350'.   |
|          |   | 05:45 17:30 | DRILL 5,650'-5,885'.235' @ 20'/HR.   |
|          |   | 17:30 23:45 | TRIP FOR NEW BIT # 7. SURFACE CHECK MWD.   |
|          |   | 23:45 05:00 | DRILL 5,885'-5,945'. 60' @ 11.4'/HR.<br>ROTATING:16.75/210.25<br>WELL:462/2952<br>FUEL:10000/32100<br>WEATHER: SNOWED 4-6". LIGHT SNOW<br>TEMP:18 ABOVE, FORCAST 24 HR.MORE SNOW                           |

## OPERATION SUMMARY REPORT

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

### SUMMARY OF OPERATIONS FROM REPORT No. 12 TO REPORT No. 18

| DATE        | DEPTH  | TIME        | WORK DESCRIPTION DIARY  |
|-------------|--|-------------|---|
| 11/18/94    | 6220.  | 05:00 22:00 | MUD LOG: NEW SALT BASE @ 5868'.335' LOW.  |
|             |  | 22:00 22:30 | CSG TALLEY:<br>58 JTS. 7.75" 46.1#/FT S-125- -2448.47'<br>104 JTS.7.62" 29.7#/FT S-95- -4550.34'<br>DRILL 5,945'-6,145'. 200' @ 11.7'/HR.         |
|             |  | 22:30 05:00 | CIRCULATE, BUILD VOLUME, LOST 30 BBLS.<br>WHEN SKAKER BLINDED OFF.  |
|             |  |             | DRILL 6,145'-6,220'. 75' @ 11.5'/HR.  |
| 11/19/94    | 6460.  |             | DELMAR MUD MOTOR S/N-77T096 HRS: 24/78.5<br>ROTATING:23.5/233.75<br>WELL:619/3571<br>FUEL:0/32100<br>MUDLOG:FM GIRAFFE CK, TOP @ 5,922'. 359' LOW |
|             |  | 05:00 00:15 | WEATHER: LIGHT SNOW, NE WINDS, TEMP 15 DEG.<br>DRILL 6,220'-6,460'.240' @ 12.4'/HR.   |
|             |  | 00:15 00:45 | CIRCULATE   |
|             |  | 00:45 02:00 | SHORT TRIP TO 5,400'.(ABOVE SALT)   |
|             |  | 02:00 04:00 | CIRCULATE FOR E. LOGS.  |
| 11/20/94    | 6520.  | 04:00 05:00 | TRIP TO LOG WITH ATLAS.   |
|             |  |             | DELMAR MM S/N-77T096 HRS:19.25/97.75<br>ROTATING:19.25/253<br>WELL:343/3914<br>FUEL:0/32100<br>ADT FLOAT EQUIP. ON LOCATION                       |
|             |  |             | MUD LOG: LEEDS CREEK @ 6,410'.  |
|             |  | 05:00 09:30 | WEATHER: LIGHT SNOW AM, CLEARED PM. TEMP. 12<br>TRIP OUT, TRIP IN   |
|             |  | 09:30 13:45 | DRILL 6,460'-6,520'. 60' @ 14.1'/HR.  |
|             |  | 13:45 14:45 | CIRCULATE FOR LOGS  |
|             |  | 14:45 18:30 | TRIP, SLM 6515.45' NO CORRECTION  |
|             |  | 18:30 00:00 | LOGGING, WITH ATLAS; LOGGER T.D. 6,512'.<br>LOG RUN # 1: DIL, GR/CDL/CAL 6,510'-4,510'.<br>CAL/GR TO CSG.   |
| 00:00 03:15 | LAY DOWN NMDC, MM, TIH.  |             |   |
| 03:15 04:45 | CIRCULATE, RIG UP C.E.R. LAY DOWN MACHINE                              |             |   |
| 04:45 05:00 | LD/ DRILL PIPE.<br>ROTATING:4.25/257.25<br>WELL:0/3914<br>FUEL:0/32100 |             |   |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 12 TO REPORT No. 18

| DATE     | DEPTH | TIME                                      | WORK DESCRIPTION DIARY  |
|----------|-------|---|---|
| 11/21/94 | 6520. | 05:00 09:30<br>09:30 19:00<br>19:00 05:00 | <p>CORROSION REPORT:<br/>           RING #D1105, HRS. EXPOSED-129.75<br/>           CORROSION RATE -1.5788# FT/YR.</p> <p>NOTIFIED UTAH OIL/GAS ABOUT CSG/CMT JOB.<br/>           JIM THOMPSON @ 0900 HRS. 11/19<br/>           LD/ DRILL STRING.</p> <p>RIG UP C.E.R. TONGS, STABBING BOARD, RUN<br/>           52 JTS. 7 3/4" 46.1#/FT S-125 LT&amp;C CSG.<br/>           2191.63'. TORQUED TO 10,000 FT/#.<br/>           TOPPED OUT WITH 99 JTS. 7 5/8" 29.7 #/FT.<br/>           S-95,4,330'. TORQUED TO TRIANGLE OR<br/>           8000-9000 FT/#.<br/>           GUIDE SHOE @ 6,515'<br/>           FLOAT COLLAR @ 6426'<br/>           D.V. TOOL @ 3565'.<br/>           RAN 18 TURBOLIZER'S 5,850'-5,400'.<br/>           RAN 2 POSITIVE CENT. 1-2' ABOVE SHOE AND<br/>           1 15' UP ON 2ND. JT.</p> <p>RIG UP HALLIBURTON CMT. HEAD &amp; HARD LINE TO<br/>           RIG, CIRCULATE W/RIG @ 9.9 BPM. 500#.</p> <p>ROTATING:0/257.25<br/>           WELL:0/3914<br/>           FUEL:0/32100</p> <p>WEATHER: LIGHT SNOW OFF &amp; ON LAST 24 HRS.<br/>           TEMP: 18 ABOVE.</p> |

**CONFIDENTIAL**

|   |
|---|
| 6. Lease Designation and Serial Number<br><b>UT-PA00Z</b> |
| 7. Indian Allottee or Tribe Name<br><b>NA</b>             |
| 8. Unit or Communitization Agreement<br><b>NA</b>         |
| 9. Well Name and Number<br><b>UPRR 19-1H</b>              |
| 10. API Well Number<br><b>43-043-30309</b>                |
| 11. Field and Pool, or Wildcat<br><b>Cave Creek</b>       |

**SUNDRY NOTICES AND REPORTS ON WELLS**  
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 type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)   |  |
| 2. Name of Operator<br><b>Union Pacific Resources Company</b>  |  |
| 3. Address of Operator<br><b>P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007</b>  | 4. Telephone Number<br><b>(817) 877-6000</b> |
| 5. Location of Well<br>Footage : <b>1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM</b> County : <b>Summit</b><br>QQ, Sec. T., R., M. : <b>NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM</b> State : <b>UTAH</b> |  |

**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 type="checkbox"/> Casing Repair                                  | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                                | <input 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 checked="" type="checkbox"/> Other <b>Weekly Progress Report</b> |   |

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.

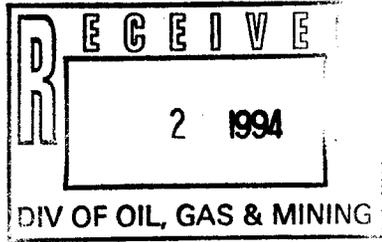
**13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)**

**Weekly Progress Report No. 4 , Week Ending Nov. 18, 1994**

**Well Spudded Nov. 4, 1994**

**Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".**

**Please contact the undersigned at (817) 877-7952 if additional information is required.**



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

Name & Signature W.F. Brazelton *W.F. Brazelton* Title Sr. Regulatory Analyst Date 94-11-28  
(Use Only)

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 19 TO REPORT No. 24

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY  |
|----------|-------|-------------|---|
| 11/22/94 | 6520. | 05:00 06:00 | CIRCULATE ON CSG.   |
|          |       | 06:00 08:30 | CMT W/HALLIBURTON: TEST LINES TO 4000#, PUMP 100 BLLS. SALT WATER, PUMP 2000 SX. CLASS "G" + 24% SALT, .4% HALAD-413, MIXED @ 16.2 PPG, YIELD-1.2/SX. 428 BBLs OF SLURRY, DROP PLUG AND DISPLACE WITH 120 BBLs WATER & 166 BBLs. MUD. BUMP PLUG WITH 1500#, SHUT DOWN WITH 2000#. BLEED OFF, CHECK FLOATS O.K. DROP BOMB & OPEN D.V. TOOL WITH 1200#. GOOD CIRCULATION. SWITCHED TO RIG PUMP. |
|          |       | 08:30 12:30 | CIRCULATE WITH RIG @ 5 BPM. NO CMT. CIRCULATED OUT.   |
|          |       | 12:30 13:30 | CMT 2ND. STAGE W/ 10 BBLs. WATER AHEAD, 400 SX LITE, MIXED @ 12.7 PPG, YIELD-1.83/SX. 130 BBLs OF SLURRY. TAILED IN WITH 250 SX. CLASS "G" + .3% HALAD-322, MIXED @ 15.8 PPG, YIELD-1.15/SX. 51 BBLs. SLURRY. DROP PLUG & DISPLACE WITH 166 BBLs. WATER. BUMP PLUG WITH 700#, CLOSED D.V. TOOL WITH 2700#. RELEASE PRESSURE, NO FLOW. GOOD RETURNS THROUGH OUT JOB.                           |
|          |       | 13:30 04:30 | NIPPLE DOWN B.O.P. SET SLIPS WITH 190K, 10 OVER RUFF CUT, LD 37' CUT OFF, FINAL CUT, NIPPLE UP FMC, 7"-5000#/11"-3000# TBG. HEAD, TEST TO 3000#. NIPPLE UP DSA, MUD CROSS, DOUBLE GATE, HYDRILL, SPOOL, GRANT DHS 1400 HEAD, AND GRANT ORBIT VALVE ON FLOW LINE. CHANGE OUT KELLY.  |
|          |       | 04:30 05:00 | TEST BOPS/DIVERTER<br><br>ROTATING:0/257.5<br>WELL:1200/5114<br>FUEL:0/32100<br>RIG UP SKIMMER SYSTEM.<br>4" D.P. ON LOCATION   |
|          |       | 05:00 08:00 | WEATHER: CLEARING TEMP, 3 ABOVE<br>TEST B.O.P. FLOOR, KELLY & INSIDE MANIFOLD VALVES TO 5000# & 250#. HYDRIL 2500#, 250#.   |
| 11/23/94 | 6540. | 08:00 12:00 | NIPPLE UP FLOW LINE, RIG UP RENTAL TONGS, STRAP   |
|          |       | 12:00 16:00 | PICK UP BIT, 4" 14#/FT S-135 PIPE. (NEW STRING MAKE BREAK MAKE.   |
|          |       | 16:00 18:00 | TAG CMT @ 3,530'. DLRG CMT TO 3,567'. DRLG UP D.V. TOOL. REAMED SEVERAL TIMES.  |
|          |       | 18:00 21:30 | PICK UP DRILL STRING.   |
|          |       | 21:30 22:00 | TEST CASING TO 1000#. O.K. RIG DOWN LAY DOWN MACHINE.   |
|          |       | 22:00 02:00 | TAG CMT. @ 6,383'. DRLG. SOFT CMT TO 6,423'. FIRM CMT. TO 6,433', TAGED PLUG DRLG OUT FLOAT & GOOD CMT TO SHOE @ 6,520'.  |
|          |       | 02:00 05:00 | DRILL LEEDS CK 6,520' 6,540'. 20' @ 6.6'/HR.  |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 19 TO REPORT No. 24

| DATE        | DEPTH  | TIME        | WORK DESCRIPTION DIARY   |
|-------------|--|-------------|--|
| 11/24/94    | 6604.  | 05:00 08:00 | NEED TO DRILL OUT 45' FOR MWD TO WORK.<br>.<br>ROTATING: 3/260.5<br>WELL:2028/7142 BBLs.<br>FUEL:0/32100<br>RIGGING UP SKIMMER SYSTEM, SHOULD BE OPERATION<br>AL BY 11/24.<br>DRLG,NEW HOLE FOR MWD TOOLS.6540-6560<br>6.6FPH. |
|             |  | 08:00 08:30 | CIRCULATE  |
|             |  | 08:30 09:00 | FINISH DRLG NEW HOLE FOR MWD TOOLS.6560-6565   |
|             |  | 09:00 11:00 | POOH TO PU DELMAR AND SPERRY TOOLS. SLM 6562<br>NO CORR.   |
|             |  | 11:00 14:00 | PUBIT,MM,MWD, MONEL DC. KELLY UP TEST TOOLS.   |
|             |  | 14:00 17:30 | PU 30 JTS 4" HWDP  |
|             |  | 17:30 21:30 | RIH W/ 11 STDS DP, LD 32 JTS DP. TRIP ON IN.   |
|             |  | 21:30 24:00 | KELLY UP,WIPE 54 FT HOLE W/ GAMMA.   |
|             |  | 24:00 05:00 | SLIDE 6565-6604 FT. 39 FT SLIDE HS 7.8 FPH<br>.<br>.<br>.  |
|             |  | 11/25/94    | 6880.  |
|             | ROT. 0/264 HRS.<br>SLIDE 24/29 HRS.<br>MM IN HOLE 39 HRS.<br>FUEL 32100 GALS.<br>WATER WELL 3125/7235 BBLs.<br>SLIDE HS 0-15 R 6880-6936 56 FT.11.2 FPH. |             |  |
| 11/26/94    | 6985.  | 05:00 10:00 | SLIDE HS 0-15 R 6880-6936 56 FT.11.2 FPH.<br>.   |
|             |  | 10:00 11:00 | CIRC.BOTTOM UP.  |
|             |  | 11:00 14:30 | TRIP POOH, LD 2.75 MM  |
|             |  | 14:30 17:00 | INSTALL ROTATING HD.   |
|             |  | 17:00 17:30 | PU 1.25 DEG MM, KELLY UP CK MM & MWD.  |
|             |  | 17:30 19:30 | PU SEC H27 PDC BIT,RIH TO SHOE.  |
|             |  | 19:30 20:30 | SLIP & CUT 120 FT DRLG LINE.   |
|             |  | 20:30 21:30 | INSTALL ROT.HD RUBBER.RIH HOLE TO 6806.  |
| 21:30 23:30 | WASH/REAM 130 FT. 6806-6936 FT.<br>.   |             |  |

## OPERATION SUMMARY REPORT

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

### SUMMARY OF OPERATIONS FROM REPORT No. 19 TO REPORT No. 24

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY   |
|----------|-------|-------------|--|
|          |       | 23:30 05:00 | DRILL SLIDE HS 0-15 R. 6936-6985 49 FT.8.90 FPH<br>.<br>.ROT HRS.0/264HRS.<br>SLIDE 10.5/39.5 HRS.<br>TOTAL HRS ON 2.75 MM 45 HRS.<br>TOTAL HRS ON 1.25 MM 7.50 HRS,<br>FUEL 14400/46500 GALS.<br>WW3201/7236 BBLs.<br>. |
| 11/27/94 | 7357. | 05:00 10:30 | SNOWED 3-4" LAST 24 HRS. WIND 15-25 MPH.<br>RD DRIFTING. HAD RD OPENED W/ SNOW PLOW.<br>SLIDE 6985-7055 HS 0-15 R 70 FT.12.72 FPH  |
|          |       | 10:30 15:00 | SLIDE 7055-7098 50 R 43 FT. 9 FPH  |
|          |       | 15:00 04:00 | ROTATE 7098-7348 250 FT. 19.23 FPH.  |
|          |       | 04:00 05:00 | SLIDE 7348-7357 9 FPH<br>.   |
|          |       |             | <div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">             (LOST 3000 BBLs LAST 24 HRS.<br/>             (LOST AT 7215 FT.           </div>                             |
|          |       |             | .<br>ROT HRS. 13/277 HRS.<br>SLIDE 11/50.5 HRS.<br>MM HRS 24/31.5 HRS.<br>FUEL 0/46500 GAL.<br>WW 3578/7613 BBLs<br>RESERVE PIT 2600 BBLs<br>TEMP 12 DEG, NO SNOW LAST 24 HRS.<br>RD OPEN.                               |

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

Use this form for proposals to drill new wells, deepen existing wells, or to re-enter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT— for such proposals

|  |
|--|
| 6. Lease Designation and Serial Number<br>UT-PA00Z |
| 7. Indian Allottee or Tribe Name<br>NA             |
| 8. Unit or Communitization Agreement<br>NA         |
| 9. Well Name and Number<br>UPRR 19-1H              |
| 10. API Well Number<br>43-043-30309                |
| 11. Field and Pool, or Wildcat<br>Cave Creek       |

1. Type of Well  
 Oil Well  
 Gas Well  
 Other (specify) \_\_\_\_\_

2. Name of Operator  
 Union Pacific Resources Company

3. Address of Operator  
 P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007

4. Telephone Number  
 (817) 877-6000

5. Location of Well  
 Footage : 1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM  
 County : Summit  
 State : UTAH  
 OC, Sec. T., R., M. : NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM

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<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>Weekly Progress 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 \_\_\_\_\_

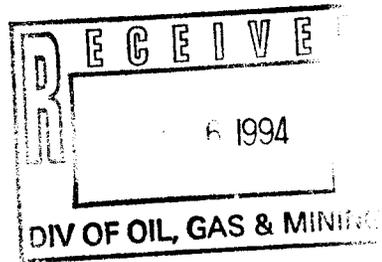
Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
 \* 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.)

Weekly Progress Report No. 5, Week Ending December 5, 1994  
 Well spudded November 4, 1994

Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".  
 Please contact the undersigned at (817) 877-7952 if additional information is required.



I hereby certify that the foregoing is true and correct

Name & Signature W.F. Brazelton *W.F. Brazelton* Title Sr. Regulatory Analyst Date 94-12-0  
 (Use Only)

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 25 TO REPORT No. 32

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY   |
|----------|-------|-------------|--|
| 11/28/94 | 7577. | 05:00 15:30 | SLIDE 7357-7420 20 R 63 FT 6 FPH   |
|          |       | 15:30 20:30 | ROTATE 7420-7475 ROT. 55 FT 11 FPH   |
|          |       | 20:30 21:30 | SLIDE 7475-7482 20 R 7 FT 7 FPH  |
|          |       | 21:30 05:00 | ROTATE 7482-7577 ROT. 95 FT 12.66 FPH  |
|          |       |             | LOST 140 BPH LAST 24 HRS.<br>LOST FULL RETURNS AT 7503 TO 7507 FT<br>LOST 500 BBLs W/ NO RETURNS,<br>HAD 50% RETURNS LAST 24 HRS.<br>.<br>ROT HRS.12.5/289.5 HRS<br>SLIDE 11.5/62.HR.<br>MM HRS 24/55.5 HRS<br>.<br>WW 4848/10636 BBLs<br>RESERVE PIT 500 /3100 BBLs. 8.6 WT.<br>.<br>TEMP +12 DEG,SNOWING BLOWING LAST 24 HRS.<br>HAD PLOW RD THIS AM.<br>. |
| 11/29/94 | 7733. | 05:00 10:00 | HAULING WATER LAST 8 HRS.<br>ROTATE 7577-7636 60 FT 12 FPH   |
|          |       | 10:00 12:00 | SLIDE 7636-7650 180 13 FT 6 FPH  |
|          |       | 12:00 17:00 | ROTATE 7650-7702 52 FT.10 FPH<br>...(LOST RETURNS AT 7656 FT.)   |
|          |       | 17:00 21:00 | POOH TO PU RESTICTOR SUB + CHANGE BITS.  |
|          |       | 21:00 21:30 | R.S. + WORK BOP RAMS.  |
|          |       | 21:30 23:30 | CHANGE OUT MM, CK MWD, PU RESTRICTOR SUB ON MWD. (MM BHA #7)   |
|          |       | 23:30 02:30 | RIH TO SHOE, KELLY UP HAD 600 PSI. TRIP TO BOTTOM. DIDN,T HAVE TO WASH OR REAM ANY.  |
|          |       | 02:30 03:30 | KELLY UP CIRC W/ 450 PSI. COULD NOT GET MWD TOOL TO WORK AT 450 PSI. HAD NO RETURNS.   |
|          |       | 03:30 05:00 | DRILL 7702-7733 FT. 31 FT. 20 FPH.<br>INCREASE GPM FROM 216 TO 250 WHILE DRLG.<br>PP INCREASED FROM 450 TO 900 PSI.<br>MWD TOOLS WORKING.0501 HRS START WIPING HOLE FROM 7669- 7733 FT.<br>.   |
|          |       |             | LOST 2610/CUMM.8610 BBLs.<br>DRILL 40% RETURNS. LOST TOTAL RETURNS AT 7656<br>.<br>ROT HRS 11.5/301 HRS.<br>SLIDE 2./62 HRS.<br>MM BHA #6 IN HOLE 78.5 HRS.  |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 25 TO REPORT No. 32

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY  |
|----------|-------|-------------|---|
| 11/30/94 | 8091. | 05:00 06:30 | MM BHA #7 IN HOLE 7.5 HRS<br>ROT #6 1.5/1.5 HRS.<br>WW 6000/13378 BBLs<br>WATER HAUL 1600 BBLs.<br>TEMP + 16 DEG, NO MOIST. LAST 24 HRS,<br>RD. OPEN NO SNOW PLOW.<br>RUN GAMMA WIPER 7627-7691 |
|          |       | 06:30 12:00 | ROT. 7733-7827 94 FT. 17 FPH.   |
|          |       | 12:00 13:00 | SLIDE 7827-7837 10 FT 10 FPH HS   |
|          |       | 13:00 17:00 | ROT, 7837-7922 85 FT 24 FPH.  |
|          |       | 17:00 18:00 | SLIDE 7922-7935 13 FT 13 FPH 30 R   |
|          |       | 18:00 21:00 | ROT 7935-8000 65 FT 21 FPH  |
|          |       | 21:00 24:00 | SLIDE 8000-8013 13 FT 4.5 FPH 0-15 R  |
|          |       | 24:00 04:00 | ROT 8013-8085 72 FT 18 FPH  |
|          |       | 04:00 05:00 | SLIDE 8085-8091 6 FT 6 FPH 30 R   |
|          |       |             |   |
| 12/01/94 | 8310. | 05:00 07:30 | TEMP + 31 DEG. NO SNOW LAST 24 HRS.<br>ROTATE 8091-8145 FT. 54 FT FT. 21 FPH  |
|          |       | 07:30 09:00 | CIRC. ATTEMPT TO SURVEY.PP TO STABLE TO GET<br>A GOOD TOOL READING.   |
|          |       | 09:00 12:00 | POOH TO JET SIZE.   |
|          |       | 12:00 15:00 | LD RESTICTOR SUB, CHANGE JETS IN BIT FROM<br>3-16S TO 3-9S. KELLY UP TEST TOOLS. HAD 1600<br>PSI.   |
|          |       | 15:00 17:30 | RIH TO CSG SHOE. KELLY UP ATTEMPT TO FILL<br>PIPE TO CK PP. COULD NOT GET STD PIPE PRESS.   |
|          |       | 17:30 19:00 | RIH TO BOTTOM. KELLY UP TOOK 45 MIN TO GET PP.<br>SURVEY. HAD GOOD TOOL READING W/ 350 PSI.   |
|          |       | 19:00 22:30 | ROTATE 8145-8206 FT. 61 FT. 17.4 FPH.   |
|          |       | 22:30 23:00 | SLIDE 8206-8212 FT 6FT. 12 FPH. 45 R  |
|          |       | 23:00 02:15 | ROTATE 8212-8270 FT. 58 FT. 19.3 FPH.   |
|          |       | 02:15 03:15 | SLIDE 8270-8280 FT. 10 FT 10 FPH 40 R.  |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 25 TO REPORT No. 32

| DATE        | DEPTH  | TIME        | WORK DESCRIPTION DIARY   |
|-------------|--|-------------|--|
| 12/02/94    | 8747.  | 03:15 05:00 | ROTATE 8280-8310 FT. 30 FT 17 FPH.<br>TAKES 15-20 MINS.TO GET PP AFTER CONN.<br>LOST 4200 BBLs . CUMM 20010 BBLs.<br>NO RETURNS LAST 24 HRS.<br>ROT. 10.5/328 CUMM.<br>SLIDE 2.0/70 CUMM.<br>MM#7 15.5/47 CUMM.<br>WW 8643/48995 BBLs.<br>TEMP +30 DEG.NO SNOW LAST 24 HRS. RD OPEN. |
|             |  | 05:00 08:30 | ROTATE 8310-8366 FT. 56 FT. 16 FPH   |
|             |  | 08:30 10:00 | SLIDE 8366-8379 FT. 13 FT 9 FPH 60 R   |
|             |  | 10:00 21:00 | ROTATE 8379-8588 FT 209 FT 19 FPH  |
|             |  | 21:00 21:30 | SLIDE 8588-8593 FT. 5 FT 10 FPH 145 R  |
|             |  | 21:30 03:00 | ROTATE 8593-8715 FT 122 FT 22 FPH.   |
|             |  | 03:00 04:00 | SLIDE 8715-8720 FT. 5 FT 5FPH 145 R  |
|             |  | 04:00 05:00 | ROTATE 8720-8747 FT. 27 FT. 27 FPH.<br>15-30 MINS TO GET PP. ON CONN.<br>LOST 7200 BBLs CUMM 27300 BBLs.<br>NO RETURNS LAST 24 HRS.<br>ROT. 21/349 HRS.<br>SLIDE 3/73 HRS.<br>MM #7 24/71 HRS.<br>WW10146/24157 BBLs<br>TEMP +30 DEG. HIGH TEMP 46 DEG, NO SNOW                      |
| 12/03/94    | 9087.  | 05:00 08:30 | ROT 8747-8811 FT. 56 FT. 16 FPH.   |
|             |  | 08:30 10:00 | SLIDE 8811-8818 FT.7FT 4.7 FPH 20 R  |
|             |  | 10:00 10:30 | SHOT FLUID LEVEL.DID NOT DETECT A FLUID LEVEL.   |
|             |  | 10:30 22:30 | ROT 8818-9001 FT. 183 FT 15 FPH.   |
|             |  | 22:30 24:00 | SLIDE 9001-9006 FT 5 FT 3.4 FPH. 30 R  |
|             |  | 24:00 02:00 | ROT 9006-9043 FT 37 FT. 18 FPH,  |
|             |  | 02:00 03:00 | SLIDE 9043-9048 FT 5 FT 5FPH. 30 R   |
| 03:00 05:00 | ROT 9048-9087 39 FT 19.5 FPH<br>LOST 7200 BBLs. 34500 BBLs. CUMM<br>NO RETURNS LAST 24 HRS.<br>ROT 20/369 HRS<br>SLIDE 3.5/76.5 HRS. |             |  |

## OPERATION SUMMARY REPORT

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 25 TO REPORT No. 32

| DATE     | DEPTH | TIME        | WORK DESCRIPTION DIARY   |
|----------|-------|-------------|--|
| 12/04/94 | 9264. | 05:00 07:30 | MM#7 24/95 HRS.<br>WW11673/27785 BBLs.<br>TEMP PM. 47 DEG AM +34 DEG NO MOIST.<br>ROT 9087-9128 FT 41 FT 16.4 FPH.   |
|          |       | 07:30 09:00 | SLIDE 9128-9130 2FT. 1.33 FPH. 150 R.<br>WOULD NOT SLIDE.  |
|          |       | 09:00 11:30 | MAKE 25 STD WIPER TRIP.  |
|          |       | 11:30 12:00 | SLIDE 9130-9136 FT 6 FT. 12 FPH. 150 R.  |
|          |       | 12:00 21:00 | ROT 9136-9264 128 FT 14.2 FPH. LOST ALL DIFFER.  |
|          |       | 21:00 01:00 | POOH TO CK BIT AND MM.   |
|          |       | 01:00 03:30 | CHANGE BITS, LD MM #7 PU #8. ALIGN TOOL.<br>KELLY UP CK. TOOLS.  |
|          |       | 03:30 05:00 | RIH.   |
| 12/05/94 | 9482. | 05:00 07:00 | LOST 4050 BBLs. 38550 BBLs. CUMM.<br>NO RETURNS LAST 24 HRS.<br>ROT. 11.5/380.5 HRS.<br>SLIDE 2/78.5 HRS.<br>MM#7 13.5/108.5 HRS<br>MM#8 0/0 HRS<br>WW 15273/36364 BBLs,<br>TEMP PM 46 DEG. AM +32 DEG.SNOWING LIGHTLY<br>RIH. |
|          |       | 07:00 07:30 | FILL PIPE TO GET PP.2400 STD PIPE PRESS.<br>PLUGGED JRT.   |
|          |       | 07:30 08:30 | ROT 9264-9271 7 FT. 7 FPH. 2400 STD PRESS.<br>PLUGGED JET.COULD NOT GET ANY DIFFER.  |
|          |       | 08:30 09:30 | PACK SWEVIL  |
|          |       | 09:30 12:30 | POOH TO CK. BHA  |
|          |       | 12:30 14:00 | JET WAS PLUGGED W/ RUBBER FROM MM.#8 CHANGE<br>MM,ALIGN TOOLS, KELLY UP CK TOOLS.MM# 8<br>APPEARRED TO HAVE DAMAGED BEARING PACK.  |
|          |       | 14:00 15:30 | REPACK SWEVIL  |
|          |       | 15:30 18:30 | RIH W/ MM #9, FILL PIPE  |
|          |       | 18:30 01:30 | ROT 9271-9413 FT. 142 FT 20 FPH.   |
|          |       | 01:30 02:00 | SLIDE 9413-9418 FT 5 FT 10 FPH 145 R   |
|          |       | 02:00 04:30 | ROT 9418-9477 FT. 59 FT 23 FPH.  |
|          |       | 04:30 05:00 | SLIDE 9477-9482 FT 5 FT 10 FPH. 20 R.<br>LOST 3750 BBLs. 42300 BBLs. CUMM  |

**OPERATION SUMMARY REPORT**

|                                  |                       |
|----------------------------------|-----------------------|
| WELLNAME :UPRR CAVE CREEK 19 1-H | WELL No. :1H          |
| AFE No. :018526                  | API No. :43-043-30309 |
| FIELD :CAVE CREEK                | RIG :CARDINAL 16 E    |

SUMMARY OF OPERATIONS FROM REPORT No. 25 TO REPORT No. 32

| DATE | DEPTH | TIME | WORK DESCRIPTION DIARY |
|------|-------|------|------------------------|
|------|-------|------|------------------------|

NO RETURNS LAST 24 HRS.  
ROT.10.5/391 CUMM.  
SLIDE 1/79.5 CUMM  
MM #8 1 HR. LD W/ INTERNAL DAMMAGED.  
MM# 9.5/9.5 CUMM ROT.1/1 CUMM. SLIDE  
WW /36364 BBLs.  
TEMP PM +45 AM +30 DEG, TRACE OF SNOW LAST 24

3 1994

|   |
|---|
| 6. Lease Designation and Serial Number<br><b>UT-PA00Z</b> |
| 7. Indian Allottee or Tribe Name<br><b>NA</b>             |
| 8. Unit or Communitization Agreement<br><b>NA</b>         |
| 9. Well Name and Number<br><b>UPRR 19-1H</b>              |
| 10. API Well Number<br><b>43-043-30309</b>                |
| 11. Field and Pool, or Wildcat<br><b>Cave Creek</b>       |
| County : <b>Summit</b><br>State : <b>UTAH</b>             |

**SUNDRY NOTICES AND REPORTS ON WELLS**

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 type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify) _____   |  |
| 2. Name of Operator<br><b>Union Pacific Resources Company</b>  |  |
| 3. Address of Operator<br><b>P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007</b>  |  |
| 4. Telephone Number<br><b>(817) 877-6000</b>   |  |
| 5. Location of Well<br>Footage : <b>1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM</b> County : <b>Summit</b><br>OO, Sec. T., R., M. : <b>NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM</b> State : <b>UTAH</b> |  |

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 checked="" type="checkbox"/> Other <u>Weekly Progress Report</u> |
| <input type="checkbox"/> Other _____             |   |
| <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.)

**Weekly Progress Report No. 6 , Week Ending December 12, 1994**

**Well spudded November 4, 1994**

Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".

Please contact the undersigned at (817) 877-7952 if additional information is required.

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

---

Name & Signature W.F. Brazelton Title Sr. Regulatory Analyst Date 94-12-12  
(Use Only)

## OPERATION SUMMARY REPORT

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

### SUMMARY OF OPERATIONS FROM REPORT No. 33 TO REPORT No. 38

| DATE        | DEPTH                              | TIME  | WORK DESCRIPTION DIARY                    |
|-------------|------------------------------------|---|---|
| 12/06/94    | 9910.                              | 05:00 10:30   | ROT 9483-9572 90 FT. 16 FPH.              |
|             |                                    | 10:30 11:00   | SLIDE 9572-9578 FT. 6 FT 12 FPH 25R       |
|             |                                    | 11:00 13:30   | ROT 9578-9621 43 FT 17 FPH.               |
|             |                                    | 13:30 14:30   | SLIDE 9621-9633 FT 12 FT 12 FPH HS        |
|             |                                    | 14:30 17:30   | ROT 9633-9712 FT 79 FT 26 FPH.            |
|             |                                    | 17:30 19:00   | SLIDE 9712-9722 FT 10 FT 6.7 FPH HS       |
|             |                                    | 19:00 23:30   | ROT 9722-9826 FT 104 FT 23 FPH            |
|             |                                    | 23:30 00:30   | SLIDE 9826-9830 FT 4 FT 4FPH. HS          |
|             |                                    | 00:30 05:00   | ROT 9830-9910 FT 80 FT. 17.8 FPH          |
|             |                                    |   |   |
| 12/07/94    | 10218                              | 05:00 08:00   | ROT 9910-9957 47 FT 15.7 FPH              |
|             |                                    | 08:00 11:00   | POOH TO CK MM.                            |
|             |                                    | 11:00 12:30   | CHANGE OUT MM, KELLY UP CK TOOLS.         |
|             |                                    | 12:30 15:00   | RIH                                       |
|             |                                    | 15:00 15:30   | FILL PIPE                                 |
|             |                                    | 15:30 16:00   | ROT 9957-9985 FT. 28 FT 56 FPH.           |
|             |                                    | 16:00 18:00   | SLIDE 9985-9995 10 FT 5 FPH 30 R          |
|             |                                    | 18:00 20:00   | ROT 9995-10,049 FT 54 FT 27 FPH           |
|             |                                    | 20:00 21:30   | SLIDE 10,049-10,060 FT 11 FT 7 FPH HS     |
|             |                                    | 21:30 23:00   | ROT 10,060-10,090 FT 30 FT 20 FPH         |
|             |                                    | 23:00 24:00   | SLIDE 10,090-10,103 FT 13 FT 13 FPH 15 R  |
|             |                                    | 24:00 02:30   | ROT 10,103-10,176 FT 73 FT 29 FPH         |
|             |                                    | 02:30 04:00   | SLIDE 10,176-10,191 FT 15 FT. 10 FPH 15 R |
| 04:00 05:00 | ROT 10,191-10218 FT. 27 FT 27 FPH. |   |   |
|             |                                    | .<br>LOST 5100 BBLs ,45600 CUMM BBLs.<br>NO RETURNS LAST 24 HRS.<br>ROT 7.5/418.5 CUMM<br>SLIDE/6/89.5 CUMM<br>WW17,610/41928 BBLs. |   |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 33 TO REPORT No. 38

| DATE        | DEPTH   | TIME        | WORK DESCRIPTION DIARY  |
|-------------|---|-------------|---|
| 12/08/94    | 10526   | 05:00 08:30 | TEMP PM 42 DEG AM +17 DEG<br>5-6 IN OF SNOW LAST 24 HRS.<br>DRILL ROTATE 10,218'-10,303' 85' @ 24.2'/HR   |
|             |   | 08:30 11:00 | SHORT TRIP 15 STANDS, TIGHT FIRST 60', THEN OK.   |
|             |   | 11:00 13:30 | DRILL SLIDE 10,303'-10,333'. TF-22R   |
|             |   | 13:30 15:30 | DRILL ROTATE 10,333'-10,372'.   |
|             |   | 15:30 17:00 | DRILL SLIDE 10,372'-10,396'. TF-22R   |
|             |   | 17:00 19:00 | DRILL ROTATE 10,396'-10,431'.   |
|             |   | 19:00 22:00 | DRILL SLIDE 10,431'-10,458'. TF OR  |
|             |   | 22:00 23:00 | DRILL ROTATE 10,458'-10,463'.   |
|             |   | 23:00 24:00 | TIGHT CONNECTION,   |
|             |   | 24:00 01:00 | DRILL ROTATE 10,463'-10,495'.   |
|             |   | 01:00 01:45 | TIGHT CONNECTION  |
|             |   | 01:45 02:30 | DRILL ROTATE 10,495'-10,526'.   |
|             |   | 02:30 05:00 | SHORT TRIP, WORK 2 SINGLES OUT, 10 STANDS.<br><br>FLUID LOST: 5600/51200<br>NO RETURNS LAST 24 HRS.<br>WELL:800/42728 BBLs.<br>RT-9.25/427.75<br>SLIDE-7/96.5 |
|             |   | 12/09/94    | 10535   |
| 07:00 08:00 | DRILL SLIDE 10,526'-10,535'. T.D.   |             |   |
| 08:00 12:00 | TRIP TO CSG. NORMAL DRAG OUT, TIGHT HOLE GOING IN @ BTM. OF CURVE. WORKED THROUGH WITH OUT KELLY. |             |   |
| 12:00 13:30 | CIRCULATE, PUMP HI VIS SWEEP, CIRCULATE   |             |   |
| 13:30 18:00 | TRIP SLM. 10,534'. NO CORRECTION.   |             |   |
| 18:00 19:00 | LAY DOWN TOOLS.   |             |   |
| 19:00 20:00 | WAITING ON SCHLUMBERGER   |             |   |
| 20:00 21:30 | RU/FMS TOOLS, TEST  |             |   |
| 21:30 23:30 | TRIP IN HOLE TO 6350'.  |             |   |
| 23:30 02:00 | RU/WIRE LINE, SIDE ENTRY SUB.   |             |   |
| 02:00 05:00 | LOGGING, OPEN HOLE, 6350'-8125'.<br>NORMAL HOLE DRAG SO FAR.                                      |             |   |

**OPERATION SUMMARY REPORT**

WELLNAME :UPRR CAVE CREEK 19 1-H  
 AFE No. :018526  
 FIELD :CAVE CREEK

WELL No. :1H  
 API No. :43-043-30309  
 RIG :CARDINAL 16 E

SUMMARY OF OPERATIONS FROM REPORT No. 33 TO REPORT No. 38

| DATE     | DEPTH  | TIME        | WORK DESCRIPTION DIARY   |
|----------|--|-------------|--|
| 12/10/94 | 10535  | 05:00 12:30 | FLUID LOST TO HOLE: 2300/53500<br>WELL:479/43207<br>ROT:0/427.5<br>SLD:1/97.5<br>RECIEVED 85 JTS. 4 1/2" 11.6#/FT CSG FROM<br>ELK HORN LOCATION & 25 JTS. FROM PINE CK YARD.<br>FMC TOP FLANGE ON LOCATION.<br>DELMAR/SPERRY SUN/SUNBURST ALL RELEASED |
|          |  | 12:30 14:00 | WEATHER: CLEAR, DAY TEMP-25 ABOVE, NIGHT 10 ABOVE<br>LOGGING, FMS 8125'-10,490'. OPEN CALIPER &<br>LOG OUT TO 6500'. REMOVE SIDE ENTRY SUB,<br>AND WIRE LINE.  |
|          |  | 14:00 14:30 | TRIP   |
|          |  | 14:30 15:30 | BREAK DOWN, LOAD OUT LOGGING TOOLS   |
|          |  | 15:30 18:00 | RIG UP AMERICAN PIPE TONGS, AND PU MACHINE   |
|          |  | 18:00 20:00 | RUN 100 JTS. 4 1/2" 11.6#/FT LTC, N-80,<br>PERFORATED LINER. 4,302'. TORQUED TO<br>2200 FT/LBS. PERFS 2' SPACING .5"   |
|          |  | 20:00 20:30 | PICK UP LINDSEY MODEL "DDS" ON/OFF HANGER &<br>MODEL "D" SETTING TOOL, TRIP IN WITH<br>10 STANDS WT. PIPE, 56 DRILL PIPE, TAGED @<br>10,535'.  |
|          |  | 20:30 00:30 | ENGAGED SPLINES ON TOOL, RELEADED HANGER,<br>TOL @ 6,233'.   |
|          |  | 00:30 01:30 | LD/ DRILL PIPE.  |
|          |  | 01:30 04:00 | TRIP IN WITH 44 STANDS   |
|          |  | 04:00 04:30 | LD DRILL PIPE.   |
|          |  | 04:30 05:00 | RD SERVICE TOOLS   |
|          |  | 05:00 05:00 | ND BOP   |
|          |  | 12/11/94    | 10535  |
|          | WEATHER CLEAR & DRY, TEMP, 30/10                               |             |  |
|          | ALL RENTAL EQUIP. RIG DOWN & RELEASED<br>FINAL DRILLING REPORT |             |  |

**CONFIDENTIAL**

6. Lease Designation and Serial Number

UT-PA00Z

7. Indian Allottee or Tribe Name

NA

8. Unit or Communitization Agreement

NA

**SUNDRY NOTICES AND REPORTS ON WELLS**

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)

9. Well Name and Number

UPRR 19-1H

2. Name of Operator

Union Pacific Resources Company

10. API Well Number

43-043-30309

3. Address of Operator

P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007

4. Telephone Number

(817) 877-6000

11. Field and Pool, or Wildcat

Cave Creek

5. Location of Well

Footage : 1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM  
OO, Sec. T., R., M. : NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM

County : Summit  
State : UTAH

**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 type="checkbox"/> Casing Repair                           | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans                         | <input 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 checked="" type="checkbox"/> Other <u>Progress Report</u> |   |

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.)

Well reached total depth (10,535' MD) December 9, 1994.

Well spudded November 4, 1994

Please consider all submittals pertaining to this well as "COMPANY CONFIDENTIAL".

Please contact the undersigned at (817) 877-7952 if additional information is required.

**RECEIVE**

1994

DEPARTMENT OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct

Name & Signature  
(Use Only)

W.F. Brazelton *W.F. Brazelton*

Title Sr. Regulatory Analyst Date 94-12-19



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)

December 27, 1994

W. F. Brazelton, Senior Regulatory Analyst  
Union Pacific Resources Company  
P.O. Box 7, MS 3006  
Fort Worth, Texas 76101-0007

Re: UPRR #19-1H Well, Fee Lease, Section 19, T. 5 N., R. 8 E., Summit County, Utah - Request for Temporary Flaring (90-day period)

Dear Mr. Brazelton:

Pursuant to your request dated December 15, 1994, and in accordance with Utah Admin. Code R. 649-3-20, Union Pacific Resources Company (UPRC) is authorized to vent/flare gas during production testing of the referenced well, not to exceed a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. This authorization represents the full administrative capability of the Division of Oil, Gas and Mining (the "Division"), pursuant to Utah Admin. Code R. 649-30-20, for venting/flaring gas during testing and well evaluation.

Should UPRC desire to vent/flare gas beyond this authorization, UPRC must submit a Request for Agency Action to the Board of Oil, Gas and Mining to be considered as a formal board docket item.

UPRC is required to notify the Division when testing operations are initiated. If additional information is required regarding this authorization, please contact Frank Matthews at the Division.

Sincerely,

R.J. Firth  
Associate Director

ldc

Attachment

cc: Jan Brown, Secretary of the Board  
J. W. Carter, Director  
F. R. Matthews, Petroleum Engineer  
G. L. Hunt, Environmental Manager  
S. L. Schneider, Audit Manager

WINFRM



DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number

UT-PA00Z

7. Indian Allottee or Tribe Name

NA

8. Unit or Communitization Agreement

NA

**SUNDRY NOTICES AND REPORTS ON WELLS**

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)

9. Well Name and Number

UPRR 19-1H

2. Name of Operator

Union Pacific Resources Company

10. API Well Number

43-043-30309

3. Address of Operator

P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007

4. Telephone Number

(817) 877-6000

11. Field and Pool, or Wildcat

Cave Creek

5. Location of Well

Footage : 1320' FNL, 1980' FEL, Sec. 19, T. 5N., R. 8E., SLBM

County : Summit

CO. Sec. T., R., M. : NW4/NE4 Sec. 19, T. 5N., R. 8E., SLBM

State : UTAH

**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 checked="" 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 type="checkbox"/> Casing Repair           | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans         | <input 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 _____             |   |

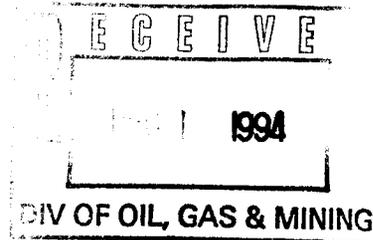
Date of Work Completion \_\_\_\_\_

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.)

Union Pacific Resources Company hereby requests a 90-day flaring period for the UPRR 19-1H located in Summit County, Utah. The additional period is required to complete testing and tie-in of the well.



I hereby certify that the foregoing is true and correct

Name & Signature

W. F. Brazelton

*W. F. Brazelton*

Title Sr. Regulatory Analyst

Date 94-12-15

(Use Only)

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

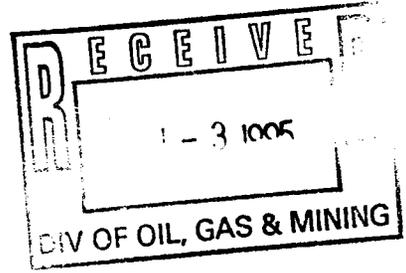
|  |   |   |
|--|---|---|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b>   |   | 5. Lease Designation and Serial Number:<br>UT-PA00Z |
|  |   | 6. If Indian, Alutian or Tribe Name:<br>N/A         |
| <small>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.<br/>Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.</small> |   | 7. Unit Agreement Name:<br>N/A                      |
|  |   | 8. Well Name and Number:<br>UPRC 19-11-1            |
| 1. Type of Well: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER:   | 2. Name of Operator:<br>Union Pacific Resources Company   | 6. API Well Number:<br>43-043-30309                 |
| 3. Address and Telephone Number:<br>P.O. Box 7 - MS/3006, Ft. Worth, TX 76101-0007   | 4. Location of Well<br>Footages: 1320' FNL 1980' FEL, Sec. 19, T5N, R8E<br>CO. Sec., T., R., M.: SLBM NW4/NE4 Sec. 19, T5N, R8E, SLBM | 10. Field and Pool, or Wildcat:<br>Cave Creek       |
|  |   | County: Summit<br>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 checked="" type="checkbox"/> Other <u>Dispose of Produced Water</u> | <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"/> Other _____ |
| <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 <u>as soon as possible.</u>  | Date of work completion _____<br><small>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.</small>                      |

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.)

Union Pacific Resources Company respectfully requests to dispose of approximately 150 barrels of produced water per day into the Drilling Mud Pit. During drilling operations, 53,400 BBLs of water were lost to formation. This request is expected to be needed not longer than 6 months for economic evaluation.



13. Name & Signature: Teresa Jackson /Teresa Jackson Title: Sr. Regulatory Analyst Date: 12/30/94

(This space for State use only)

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 1-3-95  
BY: [Signature]  
Attached conditions

**Utah Division of Oil, Gas and Mining**

**Attachment to Sundry Notice and Report on Wells**  
dated December 30, 1994.

**Subject:** Request of Union Pacific Resources Company for  
permission to store (dispose) produced water in reserve  
pit.  
UPRC 19-11-1 well, sec. 19, T5N, R8E, Summit, County.  
API = 43-043-30309

**Conditions of Approval:**

- The fluid discharged to the pit shall be produced from only the referenced well.
- A minimum one foot freeboard shall be maintained at all times in the pit.
- The pit shall be inspected regularly to detect early evidence of dike or liner failure.
- At the end of the six month period the pit shall be properly closed.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

RECEIVED  
JAN - 9 1995

|                                      |                       |
|--------------------------------------|-----------------------|
| 5. Lease Designation and Serial No.  | UT-PA00Z              |
| 6. If Indian, Allottee or Tribe Name | NA                    |
| 7. Unit Agreement Name               | NA                    |
| 8. Well Name and Number              | UPRC CAVE CREEK 19-1H |
| 9. API Well Number                   | 43-043-30309          |
| 10. Field and Pool, or Wildcat       | CAVE CREEK            |

**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 ( X ) GAS ( ) OTHER: \_\_\_\_\_

2. Name of Operator  
Union Pacific Resources Company

3. Address and Telephone Number  
P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007  
Telephone (817) 877-6000 (Main Number)

4. Location of Well

|                      |                      |                                 |                                 |        |      |
|----------------------|----------------------|---------------------------------|---------------------------------|--------|------|
| Footages             | 1320' FNL, 1980' FEL | Sec. 19, T. 5 N., R. 8 E., SLBM | County                          | SUMMIT |      |
| QQ, Sec., T., R., M. |                      | NW4/NE4                         | Sec. 19, T. 5 N., R. 8 E., SLBM | 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   | <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 Test   | <input type="checkbox"/> Fracture Treat  |
| <input type="checkbox"/> Multiple Completion   | <input type="checkbox"/> Other _____   |
| <input checked="" type="checkbox"/> Other: Proposed Completion/Testing Procedure _____ |  |
| Approximate date work will start _____   | Date of work completion _____  |
|  | Report results of Multiple Completions and Reclamations 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).

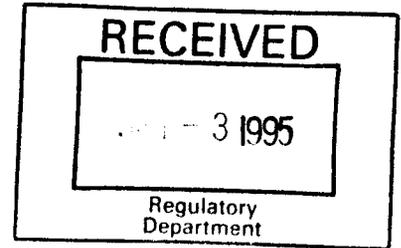
Union Pacific Resources Company proposes to use the attached procedure for completing and testing on the UPRR 19-1H.

PLEASE CONSIDER ALL SUBMITTALS PERTAINING TO THIS WELL AS "COMPANY CONFIDENTIAL"

If additional information is needed, please contact the undersigned at (817) 877-7952, FAX (817) 877-7942

13.  
Name/Signature: W. F. Brazelton W.F. Brazelton Title: Senior Regulatory Analyst Date: 95-01-06

(This space for State use only)



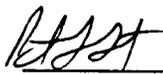
UPRC Cave Creek 19-1H  
NE/4 S19 T5N R8E  
Summit County, Utah  
Elevation = 7182' KB = 7202' TD = 10,535'  
AFE 18526

- 10-3/4" 45.5# K-55 casing set @ 999', float collar @ 956', cemented w/ 525 sxs 35/65 POZ mix and 250 sxs class G cement. Plug bumped, float held. Did top job with 125 sxs class G cement.
- 7-3/4" 46.1# S-125 LTC (2192') on bottom and 7-5/8" 29.7# S-95 (4330') on top landed @ 6515', FC @ 6426', DV tool @ 3565'. Cemented w/ 2000 sxs G cement. Plug bumped, float held.
- 4-1/2" 11.6# N-80 LTC preperforated liner (4302', 100 joints) with Lindsey model DDS on/off hanger, top @ 6,233', bottom @ 10,535'.
- Tubing: 209 jts 2-3/8" EUE J-55, Baker R nipple, wireline entry guide, landed @ 6219.47' KB.

Notes: 53,500 BW were lost while drilling this well.  
Drilling pit almost empty.

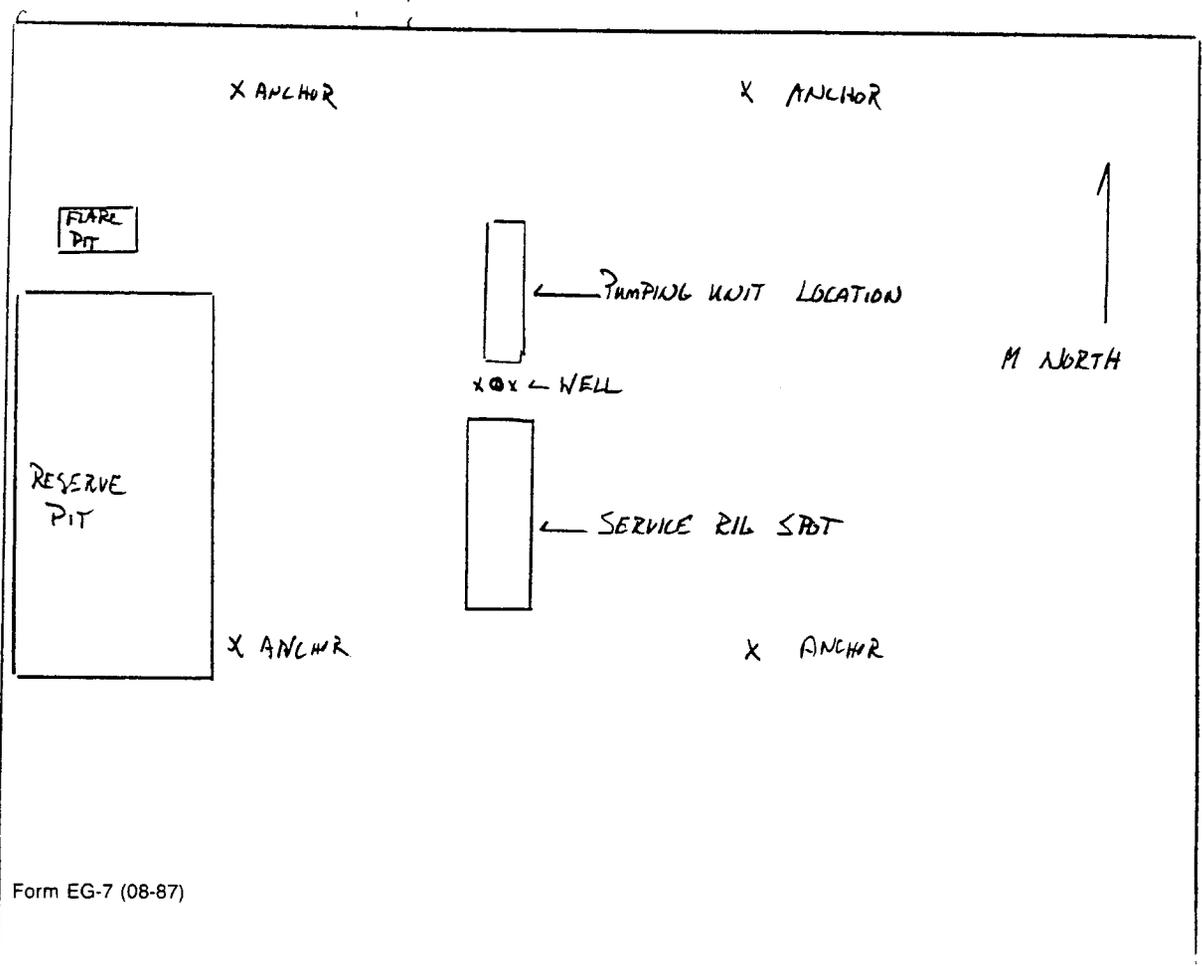
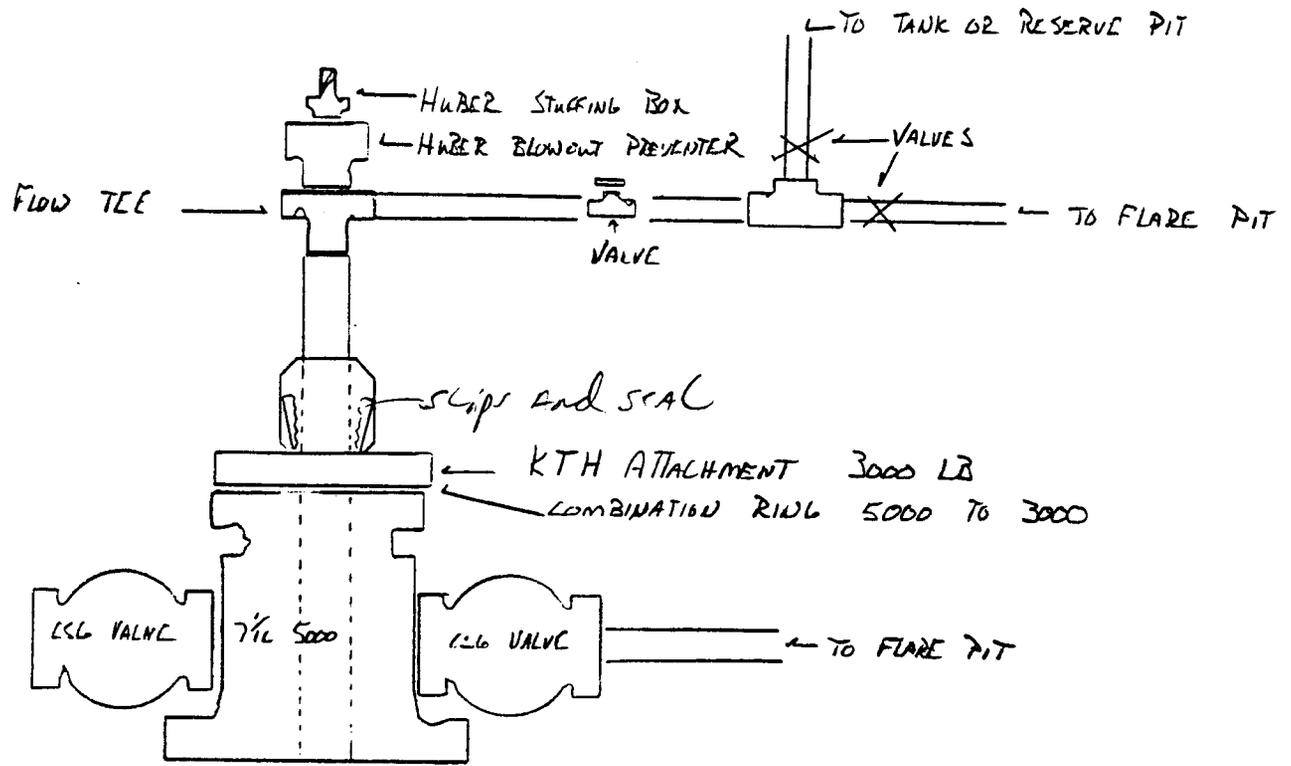
Completion Procedure #2: Watton Canyon member of the Twin Creek Limestone 12-30-94.

1. Move in and install a Lufkin C320-305-100 pumping unit (from the Amoco Cities #1 well).
2. MIRU service rig. Truck +/- 500' of 2-3/8" EUE 8rd J-55 tubing and 90 - 7/8" and 175 - 3/4" class D sucker rods to the location.
3. Kill the well with fresh water if necessary.
4. ND tree. NU BOP.
5. POH and stand back 2-3/8" tubing. Remove Baker R nipple. Install 2-3/8" seating nipple. RIH with 2-3/8" tubing to +/- 6550' (+/- 4 degree angle). Set the tubing anchor (pin set for 30,000# shear) in the 7-3/4" casing @ +/- 6200'. Land the tubing in tension in the KTH head with the pin end looking up. Install a TIW valve on the pin end.
6. ND BOP. Remove TIW valve. Screw on flow T and Huber BOP.
7. PU and RIH with 1-1/2" bore insert pump with 175 - 3/4", 89 7/8" rods, and a 1-1/2" polish rod. Seat the pump and finish nippling up the production tree.
8. Install and hookup flowlines (backside gas to the flare pit, and fluid up the tubing to the drilling pit).
9. Place the well on production @ +/- 8 SPM x 100" SL.
10. Do daily barrel tests to estimate fluid produced.

  
P. L. Stevens

cc: J. Neuner            B. Brazelton  
P. Straub               M. Talbott  
Central Files  
Hot File

SUBJECT CAVE CREEK 19-1A  
Will install with pumping unit



January 24, 1995

Division of Oil, Gas and Mining  
Department of Natural Resources  
3 Triad Center - Suite 350  
355 North Temple  
Salt Lake City, Utah 84190

**ATTN:** Mike Hebertson

**RE:** **Completion Report**  
**UPRR 19-1H**  
**Section 19, T. 5 N., R. 8 E., SLBM**  
**Summit County, Utah**

Dear Mike:

Enclosed please find an original and one copy, with attachments, of the above referenced completion report. A total of approximately 53,500 barrels of fluid were lost to the hole during the course of drilling the well. Past experience in the area has indicated that a similar volume of fluid must be recovered before the true potential of the well can be estimated. We are presently attempting to recover this fluid by pumping. At such time as we are better able to measure the potential of the well, we will notify the Commission with an amended completion report.

Please call me at (817) 877-7952 if you have any questions or need additional information.

Yours truly,

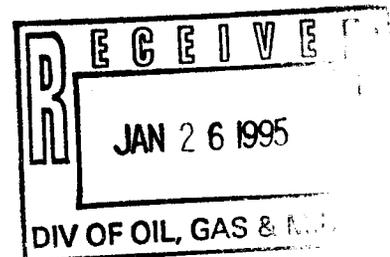
UNION PACIFIC RESOURCES COMPANY

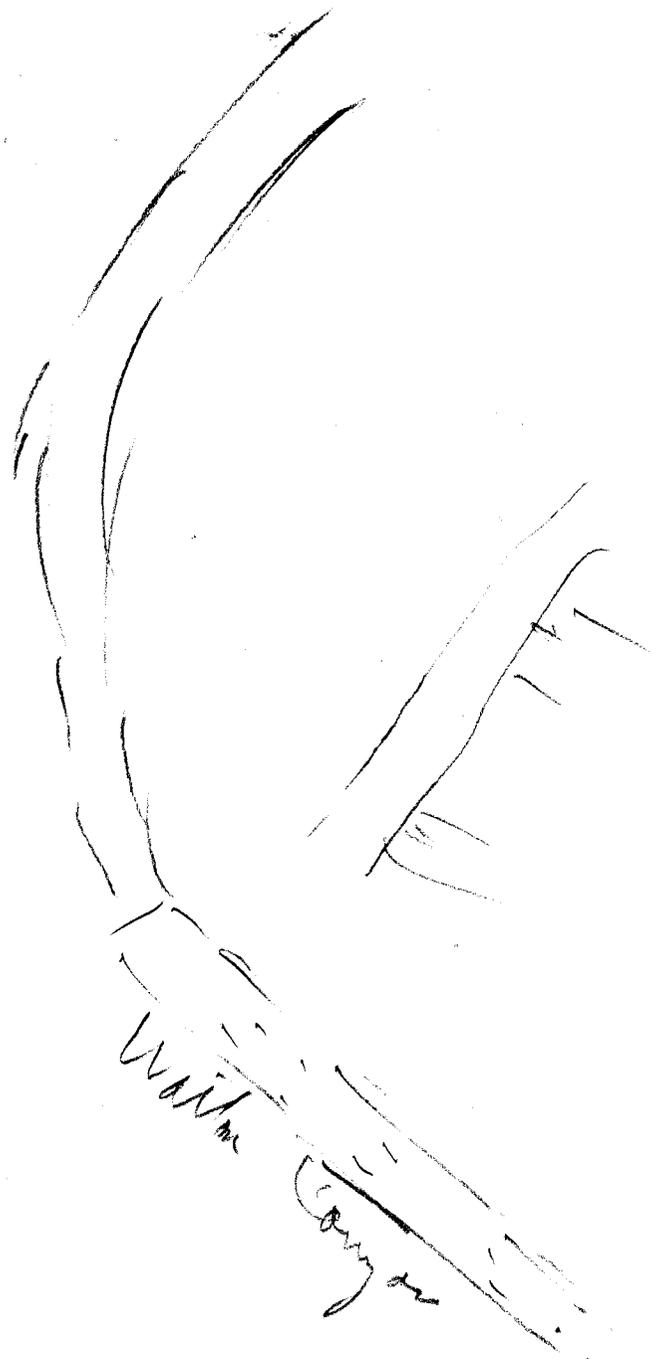


W. F. Brazelton  
Senior Regulatory Analyst

WFB/bb

enc: (2)



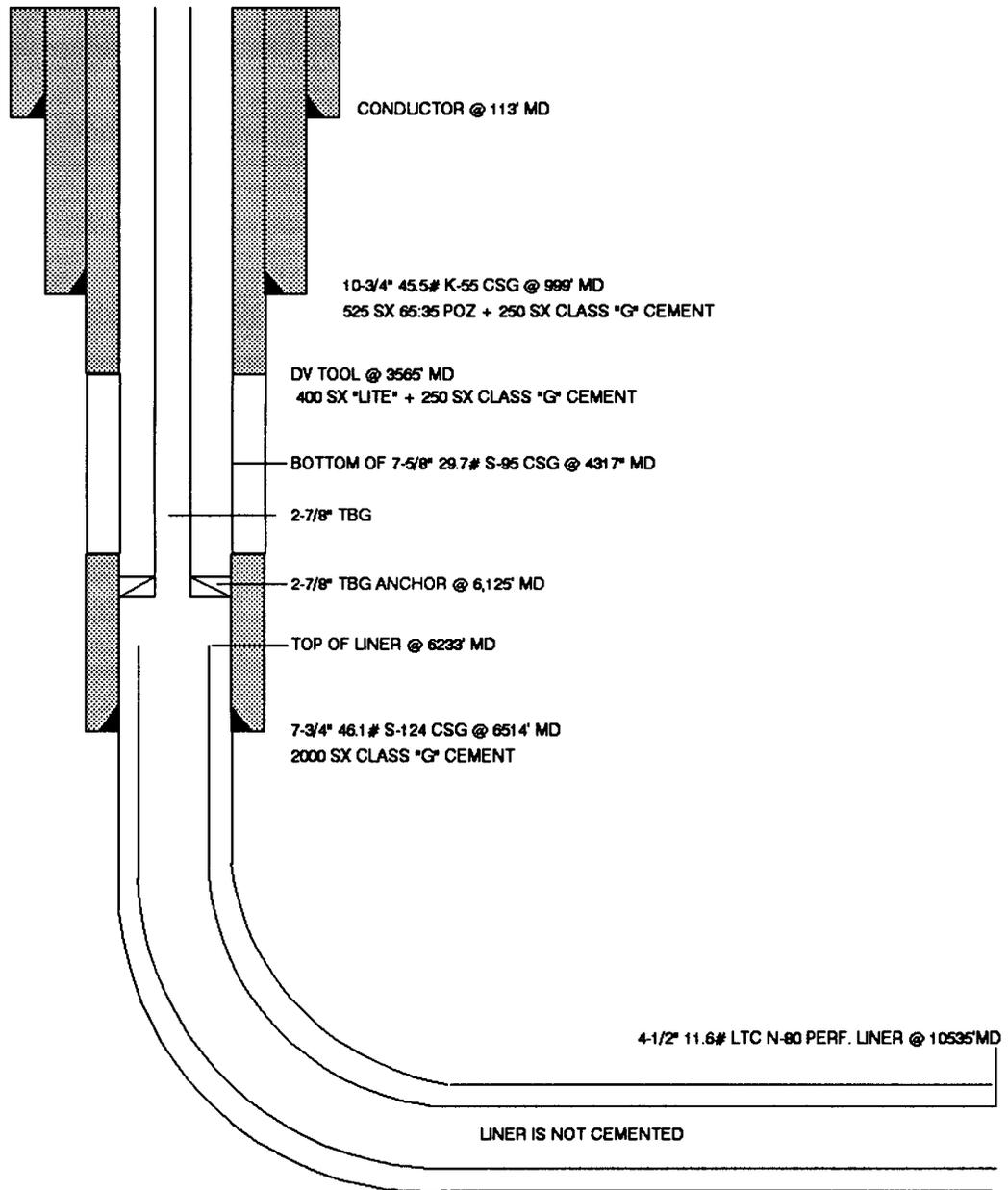


7th FLOOR  
NAL

WELL NAME: UPRR 19-1H  
Sec. 19, T. 5 N., R. 8 E.  
Summit County, Utah  
API No. 43-043-30309  
SPUD DATE: 94-11-04

DATE: 95-01-06  
BY: WFB

FIELD: Cave Creek



TOTAL DEPTH - 10,535' MD  
TOTAL DEPTH - 6,701' TVD

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

JAN 26 1995

CONFIDENTIAL

WELL COMPLETION OR RECOMPLETION REPORT GAS LOGGING

1 a. TYPE OF WELL (X) OIL WELL ( ) GAS WELL ( ) DRY ( ) OTHER

b. TYPE OF COMPLETION (X) NEW WEL ( ) WORK OVE ( ) DEEPEN ( ) PLUG BACK ( ) DIFF. RESV ( ) OTHER

2. NAME OF OPERATOR  
UNION PACIFIC RESOURCES COMPANY

3. ADDRESS OF OPERATOR  
P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At Surface 1320' FNL, 1980' FEL Sec. 19, T. 5 N., R. 7 E., SLBM

At Proposed Producing Zone 1512' FNL, 2110' FEL Sec. 19, T. 5 N., R. 7 E., SLBLM

At Total Depth: 4629' FNL, 4301' FEL Sec. 19-5N-7E

14. API NUMBER 43-043-30309 DATE ASSIGNED 94-10-21

15. DATE SPUD 94-11-04 16. DATE TD REACHED 94-12-08 17. DATE COMPL. (Ready to prod.) 95-01-08 or (Plug & Abd.) 18. ELEVATIONS (DF, RKB, RT, GL, etc.) 7182' GL, 7205' KB 19. ELEV. CASINGHEAD 6115' MSL

20. TOTAL DEPTH (MD & TVD) 10535' MD/6701' TVD 21. PLUG BACK TD, MD & TVD NA 22. IF MULTIPLE COMPL., HOW MANY? NA 23. INTERVAL DRILLED BY Rotary? X Cable Tools?

24. PRODUCING INTERVAL(S), OF THIS COMPLETION -- TOP, BOTTOM, NAME (MD & TVD) Twin Creek "Target Zone": 7126' MD/65902' TVD (Top); 105535' MD/6701' TVD (Bottom) (Twin) 25. WAS DIRECTIONAL SURVEY MADE? Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN DLL 900'-6515'; CNL/CDC/GR 5300'-6515' 27. WAS WELL CORED? ( ) Yes (X) No (Submit Analysis) DRILL STEM TEST? ( ) Yes (X) No (See Reverse Side)

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

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD                   | AMOUNT PULLED |
|-------------|-----------------|----------------|-----------|------------------------------------|---------------|
| Conductor   |                 | 113'           | 14-3/4"   |                                    |               |
| 10-3/4"     | 45.5            | 999'           | 14-3/4"   | 525 SX 65:35 POZ+ 250 SX Class "G" | NA            |
| 7-5/8"      | 29.7            | 4317'          | 9-7/8"    | 400 SX Lite + 250 SX Class "G"     | NA            |
| 7-3/4"      | 46.1            | 6514'          | 9-7/8"    | 2000 SX Class "G"                  | NA            |

29. LINER RECORD 30. TUBING RECORD

| SIZE   | TOP (MD) | BOTTOM (MD) | SACKS CEMENT | SCREEN (MD) | SIZE   | DEPTH SET (MD) | PACKER SET (MD) |
|--------|----------|-------------|--------------|-------------|--------|----------------|-----------------|
| 4-1/2" | 6233'    | 10535'      | NA           | NA          | 2-7/8" | 6200'          | NA              |

31. PERFORATION RECORD (Interval, size, and number) 4-1/2" Pre-perforated Liner (Not Cemented)

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

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| NA                  |                                  |

33. PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) | WELL STATUS (Producing or shut-in) |                        |          |            |                           |                 |
|-----------------------|---|------------------------------------|------------------------|----------|------------|---------------------------|-----------------|
| 95-01-08              | 20-150-RHBC-20' 1-1/2" Dia. Pump on Lufkin C320-3305-100 Jack         | Producing                          |                        |          |            |                           |                 |
| DATE OF TEST          | HOURS TESTED  | COKE SIZE                          | PROD'N FOR TEST PERIOD | OIL--BBL | GAS--MCF   | WATER--BBL                | GAS - OIL RATIO |
| 95-01-08              | 24  | NA                                 |                        | 0        | 0          | 110                       | 0               |
| FLOW. TBG PRESSURE    | CSG PRESSURE  | CALCULATED 24-HOUR RATE            | OIL--BBL               | GAS--MCF | WATER--BBL | OIL GRAVITY - API (CORR.) |                 |
| 0                     | 9   |                                    | 0                      | 0        | 110        | NA                        |                 |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) NA TEST WITNESSED BY Paul Smith/UPRC

35. LIST OF ATTACHMENTS Borehole Schematic Diagram

36. I hereby certify that this report is true and complete to the best of my knowledge  
Signed: W. F. Brazelton Title: Senior Regulatory Analyst Date 95-01-25

## INSTRUCTIONS

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.

ITEM 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completions), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s), and name(s) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this for each interval to be separately produced (see instruction for Items 22 and 24 above).

| 37. SUMMARY OF PORUS ZONES: |     | 38. GEOLOGIC MARKERS |                            |       |
|-----------------------------|-----|----------------------|----------------------------|-------|
| Formation                   | Top | Bottom               | Description, contents, etc |       |
|                             |     |                      | Measured Depth             |       |
|                             |     |                      | Top                        |       |
|                             |     |                      | True Vertical Depth        |       |
|                             |     |                      | Stump<br>3871'             | 3689' |
|                             |     |                      | Pruess<br>4199'            | 4197' |
|                             |     |                      | Pruess (Salt)<br>5416'     | 5410' |
|                             |     |                      | Giraffe Creek<br>5912'     | 5905' |
|                             |     |                      | Leeds Creek<br>6401'       | 6394' |
|                             |     |                      | Watton Canyon<br>6792'     | 6756' |

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1 a. TYPE OF WELL (X) OIL WELL ( ) GAS WELL ( ) DRY ( ) OTHER

b. TYPE OF COMPLETION (X) NEW WEL ( ) WORK OVE ( ) DEEPEN ( ) PLUG BACK ( ) DIFF. RESV ( ) OTHER

2. NAME OF OPERATOR  
UNION PACIFIC RESOURCES COMPANY

3. ADDRESS OF OPERATOR  
P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At Surface 1320' FNL, 1980' FEL Sec. 19, T. 5 N., R. 8 E., SLM  
At Proposed Producing Zone 1512' FNL, 2110' FEL Sec. 19, T. 5 N., R. 8 E., SLM

5. LEASE DESIGNATION AND SERIAL No.  
UT-PA000Z

6. IF INDIAN, ALLOTTEE OR TRIBAL NAME  
NA

7. UNIT AGREEMENT NAME  
NA

8. FARM OR LEASE NAME  
UPRR

9. WELL NAME  
19-1H

10. FIELD AND POOL, OR WILDCAT  
Cave Creek

11. QQ, SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
NE4 Sec. 19, T. 5 N., R. 8 E., SLM

|   |                                  |  |  |  |                   |
|---|----------------------------------|--|--|--|-------------------|
| At Total Depth:<br>4629' FNL, 4301' FEL Sec. 19-5N87E   |                                  | 14. API NUMBER<br>43-043-30309               | DATE ASSIGNED<br>94-10-21  | 12. COUNTY<br>Summit                                 | 13. STATE<br>Utah |
| 15. DATE SPUD<br>94-11-04   | 16. DATE TD REACHED<br>94-12-08  | 17. DATE COMPL. (Ready to prod.)<br>95-01-08 | 18. ELEVATIONS (DF, RKB, RT, GL, etc.)<br>7182' GL, 7205' KB   | 19. ELEV. CASINGHEAD<br>6115' MSL                    |                   |
| 20. TOTAL DEPTH (MD & TVD)<br>10535' MD/6701' TVD   | 21. PLUG BACK TD, MD & TVD<br>NA | 22. IF MULTIPLE COMPL., HOW MANY?<br>NA      |  | 23. INTERVAL DRILLED BY<br>Rotary? X<br>Cable Tools? |                   |
| 24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD & TVD)<br>Twin Creek "Target Zone": 7126' MD/6837' TVD (Top); 10535' MD/6701' TVD (Bottom) <i>TWKCR</i> |                                  |  |  | 25. WAS DIRECTIONAL SURVEY MADE?<br>Yes              |                   |
| 26. TYPE ELECTRIC AND OTHER LOGS RUN<br>DLL 900'-6515'; CNL/CDC/GR 5300'-6515'<br><i>MUD LOG<br/>MWD-MD 1-9-95<br/>MWD-TV</i>   |                                  |  | 27. WAS WELL CORED? ( ) Yes (X) No (Submit Analysis)<br>DRILL STEM TEST? ( ) Yes (X) No (See Reverse Side) |  |                   |

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

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD                   | AMOUNT PULLED |
|-------------|-----------------|----------------|-----------|------------------------------------|---------------|
| Conductor   |                 | 113'           | 14-3/4"   |                                    |               |
| 10-3/4"     | 45.5            | 999'           | 14-3/4"   | 525 SX 65:35 POZ+ 250 SX Class "G" | NA            |
| 7-5/8"      | 29.7            | 4317'          | 9-7/8"    | 400 SX Lite + 250 SX Class "G"     | NA            |
| 7-3/4"      | 46.1            | 6514'          | 9-7/8"    | 2000 SX Class "G"                  | NA            |

| 29. LINER RECORD |          |             |              |             | 30. TUBING RECORD |                |                 |
|------------------|----------|-------------|--------------|-------------|-------------------|----------------|-----------------|
| SIZE             | TOP (MD) | BOTTOM (MD) | SACKS CEMENT | SCREEN (MD) | SIZE              | DEPTH SET (MD) | PACKER SET (MD) |
| 4-1/2"           | 6233'    | 10535'      | NA           | NA          | 2-7/8"            | 6200'          | NA              |

31. PERFORATION RECORD (Interval, size, and number)  
4-1/2" Pre-perforated Liner (Not Cemented)

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

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| NA                  |                                  |

33. PRODUCTION

|                                   |   |   |                        |               |                   |                                 |                      |
|-----------------------------------|---|---|------------------------|---------------|-------------------|---------------------------------|----------------------|
| DATE FIRST PRODUCTION<br>95-01-08 | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)<br>20-150-RHBC-20' 1-1/2" Dia. Pump on Lufkin C320-3305-100 Jack | WELL STATUS (Producing or shut-in)<br>Producing |                        |               |                   |                                 |                      |
| DATE OF TEST<br>95-01-08          | HOURS TESTED<br>24  | COKE SIZE<br>NA                                 | PROD'N FOR TEST PERIOD | OIL-BBL.<br>0 | GAS-MCF<br>0      | WATER-BBL.<br>110               | GAS - OIL RATIO<br>0 |
| FLOW. TBG PRESSURE<br>0           | CSG PRESSURE<br>9   | CALCULATED 24-HOUR RATE                         | OIL-BBL.<br>0          | GAS-MCF<br>0  | WATER-BBL.<br>110 | OIL GRAVITY - API (CORR.)<br>NA |                      |

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

TEST WITNESSED BY  
Paul Smith/UPRC

35. LIST OF ATTACHMENTS  
Borehole Schematic Diagram

36 I hereby certify that this report is true and complete to the best of my knowledge

Signed: W. F. Brazelton *W. F. Brazelton* Title: Senior Regulatory Analyst Date 95-01-25

January 30, 1995

Division of Oil, Gas and Mining  
Department of Natural Resources  
3 Triad Center - Suite 350  
355 North Temple  
Salt Lake City, Utah 84190

ATTN: Mike Hebertson

RE: **Amended Completion Report  
UPRR 19-1H  
Section 19, T. 5 N., R. 8 E., SLM  
Summit County, Utah**

Dear Mike:

Enclosed please find the original and one copy, with attachments, of an amended completion report for the above referenced well. Please destroy the version which you presently have and replace with the enclosed. Please be advised that the typist will have been banished to the most distant reaches of the "Out Back" in Australia by the time you receive this.

Please call me at (817) 877-7952 if you have any questions or need additional information. I will send you my new telephone number in Australia as soon as I get there (if there are any telephones).

Yours truly,

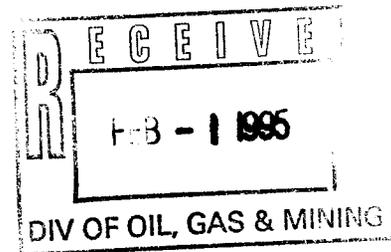
UNION PACIFIC RESOURCES COMPANY



W. F. Brazelton  
Senior Regulatory Analyst

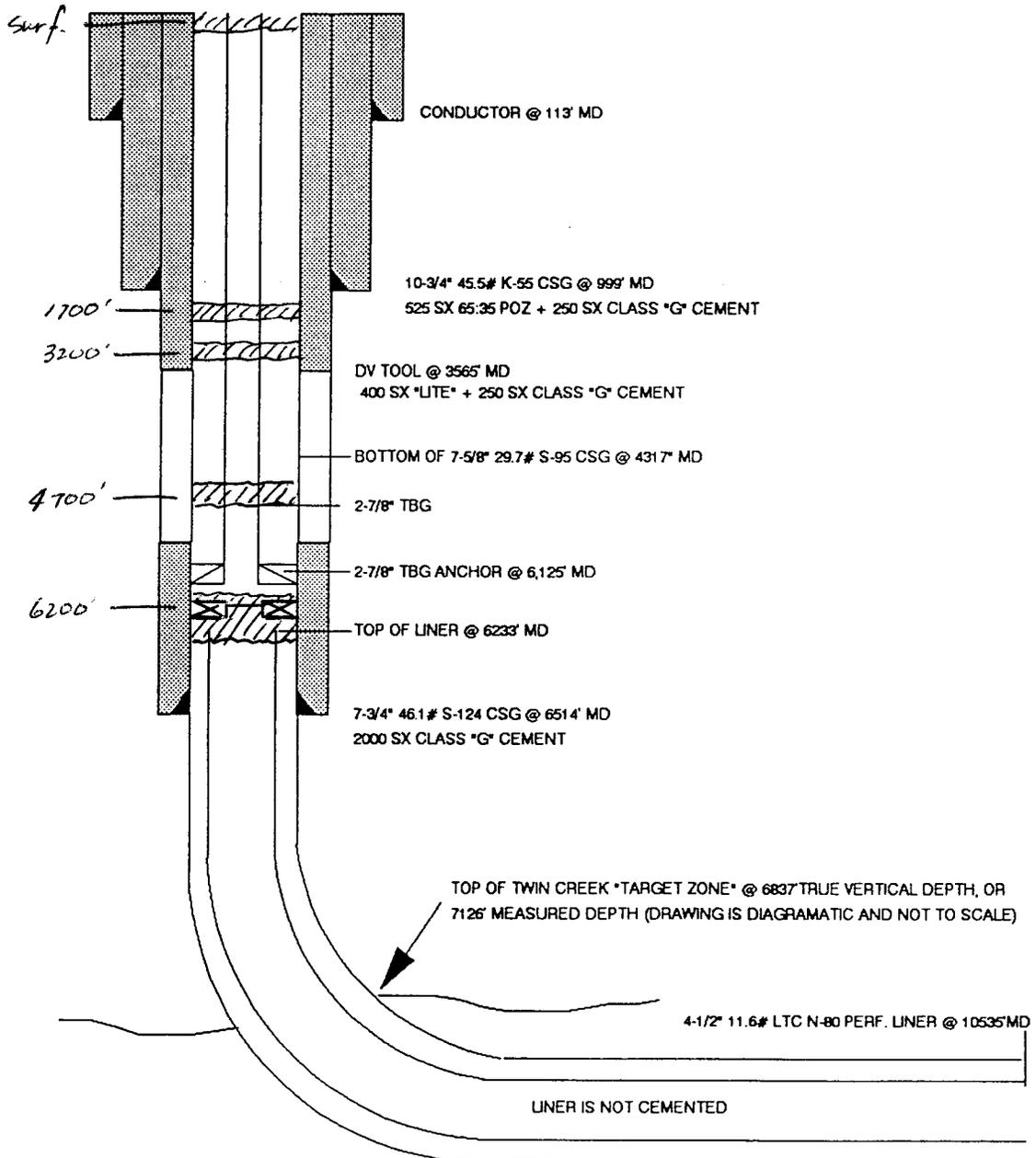
WFB/bb

enc: (2)



WELL NAME: UPRR 19-1H  
Sec. 19, T. 5 N., R. 8 E.  
Summit County, Utah  
API No. 43-043-30309  
SPUD DATE: 94-11-04

DATE: 95-01-30  
BY: WFB  
FIELD: Cave Creek



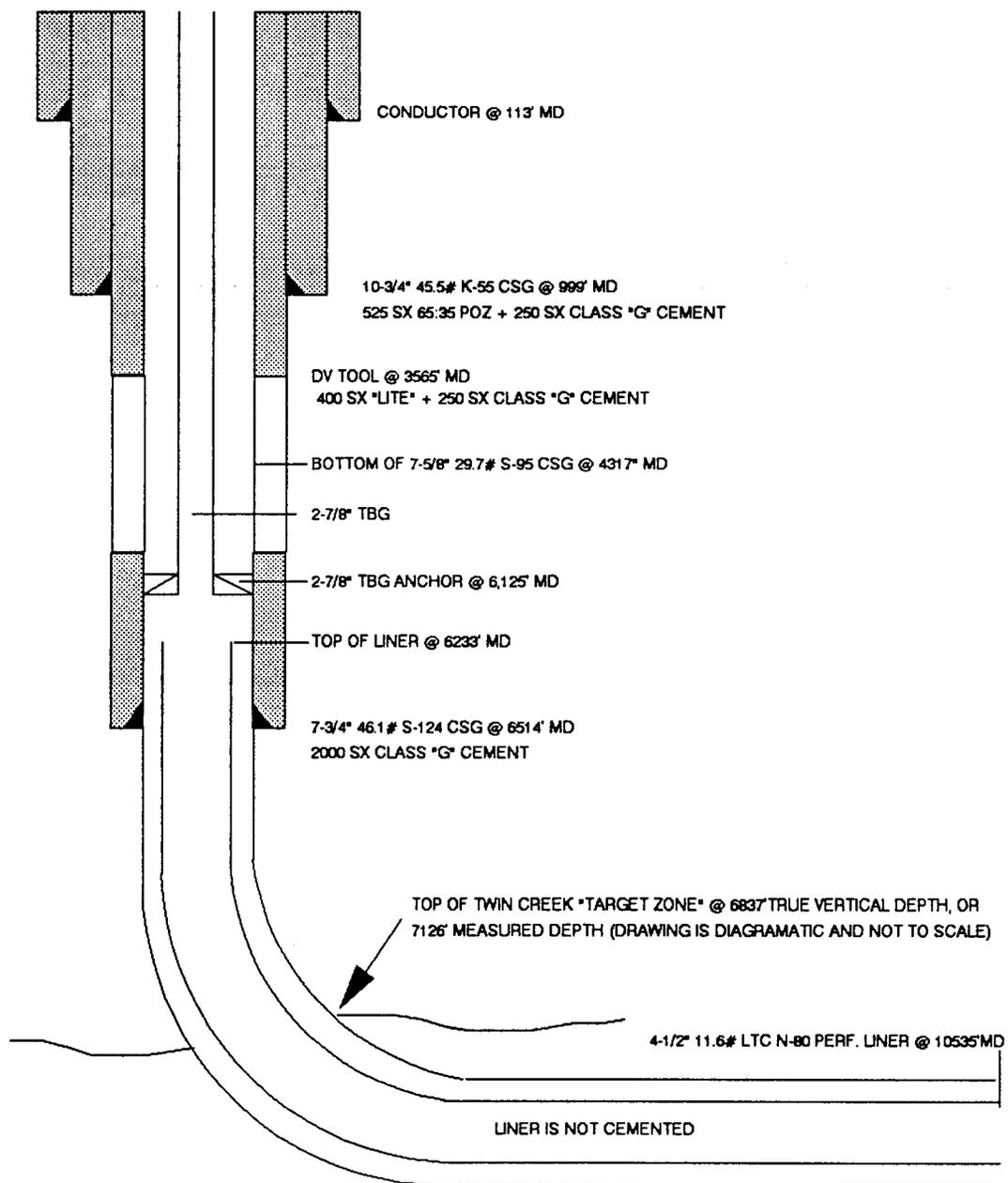
TOTAL MEASURED DEPTH - 10,535'  
TRUE VERTICAL DEPTH - 6,701'

UNION PACIFIC RESOURCES COMPANY

WELL NAME: UPRR 19-1H  
Sec. 19, T. 5 N., R. 8 E.  
Summit County, Utah  
API No. 43-043-30309  
SPUD DATE: 94-11-04

DATE: 95-01-30  
BY: WFB

FIELD: Cave Creek



TOTAL MEASURED DEPTH - 10,535'  
TRUE VERTICAL DEPTH - 6,701'

UNION PACIFIC RESOURCES COMPANY

FEB - 1 1995

CONFIDENTIAL

WELL COMPLETION OR RECOMPLETION REPORT

1. a. TYPE OF WELL (X) OIL WELL ( ) GAS WELL ( ) DRY ( ) OTHER  
b. TYPE OF COMPLETION (X) NEW WEL ( ) WORK OVE ( ) DEEPEN ( ) PLUG BACK ( ) DIFF. RESV ( ) OTHER

2. NAME OF OPERATOR  
UNION PACIFIC RESOURCES COMPANY

3. ADDRESS OF OPERATOR  
P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At Surface 1320' FNL, 1980' FEL Sec. 19, T. 5 N., R. 8 E., SLM  
At Proposed Producing Zone 1512' FNL, 2110' FEL Sec. 19, T. 5 N., R. 8 E., SLM

5. LEASE DESIGNATION AND SERIAL No.  
UT-PA000Z  
6. IF INDIAN, ALLOTTEE OR TRIBAL NAME  
NA  
7. UNIT AGREEMENT NAME  
NA  
8. FARM OR LEASE NAME  
UPRR  
9. WELL NAME  
19-1H  
10. FIELD AND POOL, OR WILDCAT  
Cave Creek  
11. QQ, SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
NE4 Sec. 19, T. 5 N., R. 8 E., SLM

At Total Depth:  
4629' FNL, 4301' FEL Sec. 19-5N8/E  
14. API NUMBER 43-043-30309 DATE ASSIGNED 94-10-21  
12. COUNTY Summit 13. STATE Utah

15. DATE SPUD 94-11-04 16. DATE TD REACHED 94-12-08  
17. DATE COMPL. (Ready to prod.) 95-01-08 or (Plug & Abd.)  
18. ELEVATIONS (DF, RKB, RT, GL, etc.) 7182' GL, 7205' KB  
19. ELEV. CASINGHEAD 6115' MSL

20. TOTAL DEPTH (MD & TVD) 10535' MD/6701' TVD  
21. PLUG BACK TD, MD & TVD NA  
22. IF MULTIPLE COMPL., HOW MANY? NA  
23. INTERVAL DRILLED BY Rotary? X Cable Tools?

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD & TVD)  
Twin Creek "Target Zone": 7126' MD/6837' TVD (Top); 10535' MD/6701' TVD (Bottom) *TUNER*  
25. WAS DIRECTIONAL SURVEY MADE? Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DLL 900'-6515'; CNL/CDC/GR 5300'-6515'  
*MUD LOG  
MWD-MD 1-9-95  
MWD-TV*  
27. WAS WELL CORED? ( ) Yes (X) No (Submit Analysis)  
DRILL STEM TEST? ( ) Yes (X) No (See Reverse Side)

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

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD                   | AMOUNT PULLED |
|-------------|-----------------|----------------|-----------|------------------------------------|---------------|
| Conductor   |                 | 113'           | 14-3/4"   |                                    |               |
| 10-3/4"     | 45.5            | 999'           | 14-3/4"   | 525 SX 65:35 POZ+ 250 SX Class "G" | NA            |
| 7-5/8"      | 29.7            | 4317'          | 9-7/8"    | 400 SX Lite + 250 SX Class "G"     | NA            |
| 7-3/4"      | 46.1            | 6514'          | 9-7/8"    | 2000 SX Class "G"                  | NA            |

29. LINER RECORD

| SIZE   | TOP (MD) | BOTTOM (MD) | SACKS CEMENT | SCREEN (MD) |
|--------|----------|-------------|--------------|-------------|
| 4-1/2" | 6233'    | 10535'      | NA           | NA          |

30. TUBING RECORD

| SIZE   | DEPTH SET (MD) | PACKER SET (MD) |
|--------|----------------|-----------------|
| 2-7/8" | 6200'          | NA              |

31. PERFORATION RECORD (Interval, size, and number)  
4-1/2" Pre-perforated Liner (Not Cemented)

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

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|----------------------------------|
| NA                  |                                  |

33. PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | WELL STATUS (Producing or shut-in) |
|-----------------------|--|------------------------------------|
| 95-01-08              | 20-150-RHBC-20' 1-1/2" Dia. Pump on Lufkin C320-3305-100 Jack        | Producing                          |

| DATE OF TEST | HOURS TESTED | COKE SIZE | PROD'N FOR TEST PERIOD | OIL-BBL | GAS-MCF | WATER-BBL | GAS - OIL RATIO |
|--------------|--------------|-----------|------------------------|---------|---------|-----------|-----------------|
| 95-01-08     | 24           | NA        |                        | 0       | 0       | 110       | 0               |

| FLOW. TBG PRESSURE | CSG PRESSURE | CALCULATED 24-HOUR RATE | OIL-BBL | GAS-MCF | WATER-BBL | OIL GRAVITY - API (CORR.) |
|--------------------|--------------|-------------------------|---------|---------|-----------|---------------------------|
| 0                  | 9            |                         | 0       | 0       | 110       | NA                        |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  
NA  
TEST WITNESSED BY  
Paul Smith/UPRC

35. LIST OF ATTACHMENTS  
Borehole Schematic Diagram

36. I hereby certify that this report is true and complete to the best of my knowledge  
Signed: W. F. Brazelton *W. F. Brazelton* Title: Senior Regulatory Analyst Date 95-01-25

## INSTRUCTIONS

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.

ITEM 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completions), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s), and name(s) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this for each interval to be separately produced (see instruction for Items 22 and 24 above).

### 37. SUMMARY OF PORUS ZONES:

Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressure, and recoveries.

### GEOLOGIC MARKERS

38.

| Formation | Top | Bottom | Description, contents, etc | Name          | Top            |                     |
|-----------|-----|--------|----------------------------|---------------|----------------|---------------------|
|           |     |        |                            |               | Measured Depth | True Vertical Depth |
|           |     |        |                            | STUMP         | 3871'          | 3869'               |
|           |     |        |                            | PRUESS        | 4197'          | 4197'               |
|           |     |        |                            | PRUESS (SALT) | 5416'          | 5410'               |
|           |     |        |                            | GIRAFFE CREEK | 5912'          | 5905'               |
|           |     |        |                            | LEEDS CREEK   | 6401'          | 6394'               |
|           |     |        |                            | WATTON CANYON | 6792'          | 6756'               |

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

|                                      |                       |
|--------------------------------------|-----------------------|
| 5. Lease Designation and Serial No.  | UT-PA00Z              |
| 6. If Indian, Allottee or Tribe Name | NA                    |
| 7. Unit Agreement Name               | NA                    |
| 8. Well Name and Number              | UPRC CAVE CREEK 19-1H |
| 9. API Well Number                   | 43-043-30309          |
| 10. Field and Pool, or Wildcat       | CAVE CREEK            |

**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 ( X )      GAS ( )      OTHER:

2. Name of Operator  
 Union Pacific Resources Company

3. Address and Telephone Number  
 P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007  
 Telephone (817) 877-6000 (Main Number)

4. Location of Well

|                      |                      |   |        |        |
|----------------------|----------------------|---|--------|--------|
| Footages             | 1320' FNL, 1980' FEL | Sec. 19, T. 5 N., R. 8 E., SLBM         | County | SUMMIT |
| QQ, Sec., T., R., M. |                      | NW4/NE4 Sec. 19, T. 5 N., R. 8 E., SLBM | State  | UTAH   |

**11 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 checked="" 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 Test                                      | <input type="checkbox"/> Vent or Flare        |
| <input type="checkbox"/> Multiple Completion                                | <input type="checkbox"/> Water Shutoff        |
| <input type="checkbox"/> Other: Proposed Completion/Testing Procedure _____ |   |

Approximate date work will start: Immediately

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

|  |   |
|--|---|
| <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"/> Shoot of Acidize       |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare          |
| <input type="checkbox"/> Fracture Treat          | <input type="checkbox"/> Water Shut-Off Shutoff |
| <input type="checkbox"/> Other _____             |   |

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Reclamations 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).**

Union Pacific Resources Company proposes to use the attached procedure for completing and testing on the UPRR 19-1H.

*2/6/95*  
*[Signature]*

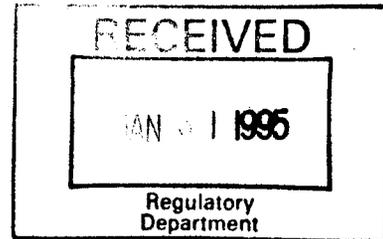
5 - 3 1995  
DIV OF OIL, GAS & MINING

PLEASE CONSIDER ALL SUBMITTALS PERTAINING TO THIS WELL AS "COMPANY CONFIDENTIAL"  
If additional information is needed, please contact the undersigned at (817) 877-7952, FAX (817) 877-7942

13.

Name/Signature: W. F. Brazelton *[Signature]* Title: Senior Regulatory Analyst Date: 95-02-02

(This space for State use only)



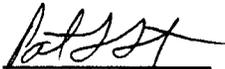
UPRC Cave Creek 19-1H  
NE/4 S19 T5N R8E  
Summit County, Utah  
Elevation = 7182' KB = 7202' TD = 10,535'  
AFE 18526

10-3/4" 45.5# K-55 casing set @ 999', float collar @ 956', cemented w/ 525  
sxs 35/65 POZ mix and 250 sxs class G cement. Plug bumped, float  
held. Did top job with 125 sxs class G cement.  
7-3/4" 46.1# S-125 LTC (2192') on bottom and 7-5/8" 29.7# S-95 (4330')  
on top landed @ 6515', FC @ 6426', DV tool @ 3565'. Cemented w/ 2000  
sxs G cement. Plug bumped, float held.  
4-1/2" 11.6# N-80 LTC preperforated liner (4302', 100 joints) with Lindsey  
model DDS on/off hanger, top @ 6,233', bottom @ 10,535'.  
Tubing: 210 jts 2-3/8" EUE J-55, seating nipple, tubing anchor, landed @  
6500.54' KB.  
Rods & Pump: 2125' 7/8" class D rods w/ slim hole couplings over 4325' 3/4"  
class D rods over 20' RHBC pump.

Notes: 53,500 BW were lost while drilling this well.  
Fluid level on 1-25-95 1500' over the pump.

Completion Procedure #3: Watton Canyon member of the Twin Creek Limestone  
1-30-95.

1. MIRU service rig with circulating pump and tank.
2. Kill the well with fresh water if necessary.
3. POH with rods and pump.
4. ND tree. NU BOP.
5. POH with 2-3/8" tubing. Remove tubing anchor.
6. MU the Centrilift submersible pump assembly (motor, seal, gas separator,  
pump and flat cable) under the direction of the Centrilift field hand.  
RIH banding the power cable to the 2-3/8" tubing under the direction of  
the Centrilift spooler and bander. Tubing makeup: the 2-3/8" 4.7# J-55  
tubing has a recommended tubing makeup torque of 1290 ft-lbs (minimum 970  
ft-lbs, maximum 1610 ft-lbs).
7. Set the submersible pump @ +/- 6150'. Hang the tubing off. Remove the  
BOP. Install the production tree.
8. Install and hookup the VSD controller, the transformer, and the diesel  
generator.
9. Start the submersible pump @ 55.5 hz setting (200 BFPD). Report the  
production daily. Shoot daily fluid levels. Rate adjustments will be  
made on the daily fluid levels.

  
P. L. Stevens

cc: J. Neuner                      B. Brazelton  
P. Straub                         M. Talbott  
Central Files  
Hot File



January 18, 1996

Division of Oil, Gas and Mining  
Utah Department of Natural Resources  
3 Triad Center - Suite 350  
355 West North Temple Street  
Salt Lake City, Utah 84190

ATTN: Mr. Mike Hebertson

RE: **Sundry Notices of Temporary Abandonment and Reserve Pit Closure  
UPRC Cave Creek 19-1H  
Section 19, T. 5 N., R. 8 E., SLM  
Summit County, Utah**

Dear Mr. Hebertson:

Enclosed please find one original copy each of Sundry Notices reporting temporary abandonment and closure of the reserve pit for the above referenced well.

Please call me at (817) 877-7952, FAX (817) 87707942, if you have any questions or need additional information.

Yours truly,

UNION PACIFIC RESOURCES COMPANY



W. F. Brazelton  
Senior Regulatory Analyst



\* Need Sunday Submitted by 6-1-98 (5 days after Fri's approval) RJK 6-1-98.

(Nbdate: \_\_\_\_\_)

Union Pacific Resources

From the Desk of:

Date: 5-29-98

David S. Petrie  
Regulatory Department  
801 Cherry Street, MS 3006 (76102)  
P. O. Box 7, MS 3006  
Fort Worth, Texas (76101-0007)

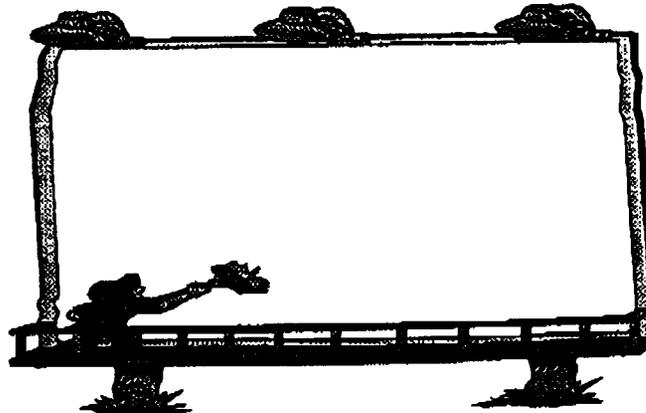
Phone: (817) - 877-7664  
Fax: (817) - 877-7942

Fax to: Frank Bova

Notes: 2 + Cover

David Petrie will be out on Monday 6/1/98.  
If any questions on Monday, contact:  
Rob Dunleavy (817) 877-1896

(DeskOf.wpd)



**UNION PACIFIC RESOURCES  
UPRR CAVE CREEK 19-1H  
API# 43-043-30309  
NE ¼ SEC 19 T15N R8E  
SUMMIT COUNTY, UTAH  
P&A PROCEDURE - 05/26/98**

**PERTINENT DATA**

GL: 7,182'

KB: 7,205'

Surface Casing: 10 ¾" 45# K-55 @ 999'. Cemented to surface with 525 sx 65:35 Poz:Class G lead. Tail in with 250 sx of Class g, top out with 125 sx. Class G.

Intermediate: 7 5/8" 29.7# @ 4,321'; 7 ¾" 46.1# @ 6,515' with DV Tool @ 3,566'. Cemented 1<sup>st</sup> stage w/2,000 sacks Class G, yield 1.2 cf/sx, 2<sup>nd</sup> stage 400 sx of Lite 1.83 cf/sx. Good returns throughout complete job.

Liner: 4 ½" 11.6# L-80 set @ 10,535', liner top @ 6,233', no tie back, just dropped off in hole.

TD: { 10,535' MD  
6,101' TVD

*Liner set in vertical section  
wall bore turns below that (below  
7 ¾" casing seat).  
Top of Twin Creeks 6837' TVD  
7126' MD.*

*Horizontal well*

**PROCEDURE**

1. Test anchors
2. MIRU workover rig w/ sub, flat tank, pump, cat walk, and pipe racks. Set 1-400 bbl working tank.

**NOTE:** Notify State of Utah Division of Oil, Gas and Mining at (801) 538-5334, 24 hours prior to commencing plugging operations.

3. NDWH. NU 7-1/16" 5m# Annular.
4. RUWL w/ lubricator. RIH w/ gauge ring/junk basket to 6,200'. POOH. RIH set CICR @ 6,200'. POOH. RDWL.
5. Load hole and test casing to 2,000 psi.
6. PU TIH w/ CICR stinger on 2 7/8" 6.5# L-80 8rd WS.

*Dan Jarvis  
538 5338  
Bob Krueger  
538-5274*

- ①
7. RU Dowell, sting into CICR @ 6,200'. Test annulus to 2,000 psi. Est. inj. Rate. Sqz 6 1/2" hole with perforated liner with 100 sx (20.5 bbl) Class G (cement) + 0.1%D65 (dispersant) + 0.1% B-71 (retarder) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Sting out of CICR and leave 10 sx of cement (2 bbl) on top of CICR.
  8. TOOH LD to 4,700'. ② ~ 147' of coverage
  9. RU Dowell, pump 30 sx Class G (cement) + 0.1%D65 (dispersant) + 0.1% B-71 (retarder) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Balanced plug.
  10. TOOH LD to 3,200'. ③ ~ 134' of coverage
  11. RU Dowell, pump 30 sx Class G (cement) + 0.1%D65 (dispersant) + 0.1% B-71 (retarder) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Balanced plug.
  12. TOOH LD to 1,700'. ④ ~ 134' of coverage
  13. RU Dowell, pump 30 sx Class G (cement) + 2% S001 (calcium chloride - on the side) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Balanced plug.
  14. TOOH LD to surface. ⑤ ~ 112' of coverage
  15. RU Dowell, pump 25 sx Class G (cement) + 2% S001 (calcium chloride - on the side) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water.
  16. Run 100' of 1" pipe between the 7 5/8" Intermediate and the 10 1/4" surface annulus and pump 15 sxs Class G (cement) + 2% S001 (calcium chloride - on the side) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water.
  17. RDMOSU
  18. Dig out Cellar Ring.
  19. Cut off all csg strings and WH equipment.
  20. 4" x 10' dry hole marker w/ at least 6' of marker above GL. Marker must have the following information on it: Operator, well name, well location, date plugged. Marker should have a 1/2" needle valve tapped into it so that it can be checked for pressure at a future date.
  21. Clean and reclaim location.

UPPR is

**From:** John Baza  
**To:** DJARVIS, BKRUEGER  
**Date:** 5/29/98 2:39pm  
**Subject:** UPR plugging operation

I got called by David Petrie of UPR today about a plugging project which they want to do in Summit County. The well is the UPRR 19-1H, API # 43-043-30309, located in Sec. 19, T. 5N, R. 8E. As usual, they wanted verbal approval to plug so they can commence work on Monday, 6/1/98.

I conditionally agreed to a proposed plugging program, but I told him that Bob and Dan would need to look at this on Monday morning and get back to them if there were any questions. I will leave the file and my notes on Bob's desk for his review. Mr. Petrie will not be around on Monday, so any questions should be directed to Rob Dunleavy at UPR at (817)877-7896. Petrie has informed Dunleavy to call Bob on Monday for a final go-ahead on the plugging program.

Another twist to this came about on Friday afternoon when Petrie called me again and asked if they could dispose of 17,000 bbl of tank bottoms in the well before plugging it. After visiting with Mike Hebertson and talking to Gil over the telephone, I did not feel very good about this, so I left a voice message for Petrie that we could not allow it without a thorough review of the proposal and a detailed chemical analysis of the material to be disposed. So one of us may get a call from UPR on Monday wanting to press this matter with us, but I am convinced that we should not allow them to dispose of the fluid. If I hear any more about this over the weekend, I'll give one of you a call.

**CC:** GHUNT

**From:** John Baza  
**To:** DJARVIS, BKRUEGER  
**Date:** 5/29/98 2:49pm  
**Subject:** UPR plugging project

Petrie called back and said they want to dispose of 1700 bbl of tank bottoms, not 17,000. I said that I still did not think that we could allow it, but if you guys wanted to review it on Monday and reconsider their proposal that Mr. Dunleavy could get in touch with us at that time.

**CC:** GHUNT

**From:** Bob Krueger  
**To:** NRDOMAIN.NROGM(DJH/IS), JBAZA  
**Date:** 6/1/98 1:02pm  
**Subject:** UPR plugging project -Reply

I spoke with Rob Dunleavy several times today. Initially he fax'ed me an analysis of the "tank bottoms" and indicated that it was produced brine with iron scale. The analysis was essentially clean of organics and toxic metals (but it was from another tank, not the one in question). He also indicated that they had had approval to do this in the past in another well (UPPR 3-5). I initially thought that they wanted to use the water as a fluid between cement plugs, which may have been feasible.

I pulled the file on UPPR 3-5 and it had a UIC Permit. Also, the wellbore only has a 350 bbl capacity so using the water as a plugging fluid would not be feasible. I told Rob that without a UIC permit, injection was out of the question. At this point he said he had a "more current" analyses showing that there was oil in with water! He said he would look at using the centrifuge process that he had a bid for.

I think if people want to do things like this in the future, they need to submit chain of custody paperwork with analytical data for tests we recommend to ensure it is from the actual source in question and addresses our requirements (pH, etc.).

**CC:** NRDOMAIN.NROGM(GHUNT),

*Also told Rob they needed to submit a sundry w/i 5 days of today approval of the P&A Procedure (attached).*

**Post-It Fax Note 7672**

To **BOB KRUEGER**  
 Company **UTAH DOG&M**  
 Location **SALT LAKE CITY**  
 Fax # \_\_\_\_\_ Telephone # \_\_\_\_\_  
 Comments \_\_\_\_\_



No. of Pages **4**

Today's Date **6/1**

Time **10:30 AM**

From **ROB DUNLEAVY**

Company **UPR**

Location **FT. WORTH**

Fax # \_\_\_\_\_

Dept. Charge \_\_\_\_\_

Telephone # \_\_\_\_\_

Original Disposition:

Destroy

Return

Call for pickup

**ANALYSES OF TANK BOTTOMS**

05/21/1995 21:26 8013362172

PINEVIEW

PAGE 01



AMERICAN  
 WEST  
 ANALYTICAL  
 LABORATORIES

Client: Union Pacific Resources  
 Date Sampled: February 21, 1997

Contact: Marty Talbott  
 Date Received: February 25, 1997

Field Sample ID: \_\_\_\_\_

Lab Sample ID:  
**L28611-1**

IRON SLUDGE TANK BOTTOM

**Analytical Results**

Units = mg/L

West 3600 South  
 Salt Lake City, Utah  
 84115

(801) 263-8686  
 fax (888) 263-8686  
 fax (801) 263-8687

**TCLP METALS**

|          | Method Used: | Reporting Limit: | Amount Detected: |
|----------|--------------|------------------|------------------|
|          | 1311         |                  |                  |
| Arsenic  | 7060         | 0.5              | <0.5             |
| Barium   | 6010         | 0.05             | 0.20             |
| Cadmium  | 6010         | 0.03             | <0.03            |
| Chromium | 6010         | 0.05             | <0.05            |
| Lead     | 6010         | 0.1              | <0.1             |
| Mercury  | 7470         | 0.05             | <0.05            |
| Selenium | 7740         | 0.1              | <0.1             |
| Silver   | 6010         | 0.1              | <0.1             |

|                  |      |         |              |
|------------------|------|---------|--------------|
| Post-It Fax Note | 7671 | Date    | # of Pages 4 |
| To               | Rob  | From    | Marty        |
| Co./Dept.        |      | Co.     |              |
| Phone #          |      | Phone # |              |
| Fax #            |      | Fax #   |              |

Released By: Dean Baker  
 Laboratory Supervisor

Report Date: March 03, 1997

1 of 1



AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

West 3600 South  
Lake City, Utah  
84115

(801) 263-8686  
ree (888) 263-8686  
fax (801) 263-8687

## ORGANIC ANALYSIS REPORT

Client: Union Pacific Resources  
Lab Sample ID: 28611  
Set Description: One Sludge Sample

Contact: Marty Talbott  
Received By: Elona Hayward

Analysis Requested:  
Volatile Organics

Method Ref. Number:  
EPA SW-846 #8260  
Purge & Trap GC/MS

Date Analyzed:  
February 25, 1997

Lab Sample ID:  
28611-Method Blank

### Analytical Results

### VOLATILE ORGANIC COMPOUNDS

Units =  $\mu\text{g/L}$  (ppb)

| Compound:                   | Reporting Limit: | Amount Detected: |
|-----------------------------|------------------|------------------|
| Acetone                     | 10.              | < 10.            |
| Acrolein                    | 10.              | < 10.            |
| Acrylonitrile               | 10.              | < 10.            |
| Benzene                     | 2.0              | < 2.0            |
| Bromobenzene                | 2.0              | < 2.0            |
| Bromochloromethane          | 2.0              | < 2.0            |
| Bromodichloromethane        | 2.0              | < 2.0            |
| Bromoform                   | 2.0              | < 2.0            |
| Bromomethane                | 5.0              | < 5.0            |
| 2-Butanone                  | 10.              | < 10.            |
| n-Butylbenzene              | 2.0              | < 2.0            |
| sec-Butylbenzene            | 2.0              | < 2.0            |
| tert-Butylbenzene           | 2.0              | < 2.0            |
| Carbon disulfide            | 2.0              | < 2.0            |
| Carbon tetrachloride        | 2.0              | < 2.0            |
| Chlorobenzene               | 2.0              | < 2.0            |
| Chloroethane                | 5.0              | < 5.0            |
| 2-Chloroethyl vinyl ether   | 10.              | < 10.            |
| Chloroform                  | 2.0              | < 2.0            |
| bis-2-Chloroisopropyl ether | 5.0              | < 5.0            |
| Chloromethane               | 5.0              | < 5.0            |
| 2-Chlorotoluene             | 2.0              | < 2.0            |
| 4-Chlorotoluene             | 2.0              | < 2.0            |
| Dibromochloromethane        | 2.0              | < 2.0            |
| 1,2-Dibromo-3-chloropropane | 2.0              | < 2.0            |

Report Date 3/3/97

1 of 3



Lab Sample ID:  
28611-Method Blank

### Analytical Results

### VOLATILE ORGANIC COMPOUNDS

Units = µg/L (ppb)

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

West 3600 South  
Lake City, Utah  
84115

(801) 263-8686  
fax (888) 263-8686  
fax (801) 263-8687

| Compound:                 | Reporting Limit: | Amount Detected: |
|---------------------------|------------------|------------------|
| 1,2-Dibromoethane         | 2.0              | < 2.0            |
| Dibromomethane            | 2.0              | < 2.0            |
| 1,2-Dichlorobenzene       | 2.0              | < 2.0            |
| 1,3-Dichlorobenzene       | 2.0              | < 2.0            |
| 1,4-Dichlorobenzene       | 2.0              | < 2.0            |
| Dichlorodifluoromethane   | 2.0              | < 2.0            |
| 1,1-Dichloroethane        | 2.0              | < 2.0            |
| 1,2-Dichloroethane        | 2.0              | < 2.0            |
| 1,1-Dichloroethene        | 2.0              | < 2.0            |
| cis-1,2-Dichloroethene    | 2.0              | < 2.0            |
| trans-1,2-Dichloroethene  | 2.0              | < 2.0            |
| 1,2-Dichloropropane       | 2.0              | < 2.0            |
| 1,3-Dichloropropane       | 2.0              | < 2.0            |
| 2,2-Dichloropropane       | 2.0              | < 2.0            |
| 1,1-Dichloropropene       | 2.0              | < 2.0            |
| total Dichloropropene     | 2.0              | < 2.0            |
| 1,4-Dioxane               | 2.0              | < 2.0            |
| Ethyl acetate             | 5.0              | < 5.0            |
| Ethyl ether               | 5.0              | < 5.0            |
| Ethylbenzene              | 2.0              | < 2.0            |
| Hexachlorobutadiene       | 2.0              | < 2.0            |
| 2-Hexanone                | 5.0              | < 5.0            |
| Isopropylbenzene          | 2.0              | < 2.0            |
| p-Isopropyltoluene        | 2.0              | < 2.0            |
| Methylene chloride        | 2.0              | < 2.0            |
| 4-Methyl-2-pentanone      | 5.0              | < 5.0            |
| Naphthalene               | 2.0              | < 2.0            |
| n-Propylbenzene           | 2.0              | < 2.0            |
| Styrene                   | 2.0              | < 2.0            |
| 1,1,1,2-Tetrachloroethane | 2.0              | < 2.0            |
| 1,1,2,2-Tetrachloroethane | 2.0              | < 2.0            |
| Tetrachloroethene         | 2.0              | < 2.0            |
| Toluene                   | 2.0              | < 2.0            |
| 1,2,3-Trichlorobenzene    | 2.0              | < 2.0            |

Report Date 3/3/97

2 of 3



Lab Sample ID:  
28611-Method Blank

**Analytical Results**

**VOLATILE ORGANIC COMPOUNDS**

Units = µg/L (ppb)

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

West 3600 South  
Lake City, Utah  
84115

(801) 263-8686  
Fax (888) 263-8686  
Fax (801) 263-8687

| Compound:                      | Reporting Limit: | Amount Detected: |
|--------------------------------|------------------|------------------|
| 1,2,4-Trichlorobenzene         | 2.0              | < 2.0            |
| 1,1,1-Trichloroethane          | 2.0              | < 2.0            |
| 1,1,2-Trichloroethane          | 2.0              | < 2.0            |
| Trichloroethene                | 2.0              | < 2.0            |
| Trichlorofluoromethane         | 2.0              | < 2.0            |
| 1,2,3-Trichloropropane         | 2.0              | < 2.0            |
| 1,1,2-Trichlorotrifluoroethane | 2.0              | < 2.0            |
| 1,2,3-Trimethylbenzene         | 2.0              | < 2.0            |
| 1,2,4-Trimethylbenzene         | 2.0              | < 2.0            |
| 1,3,5-Trimethylbenzene         | 2.0              | < 2.0            |
| Vinyl acetate                  | 5.0              | < 5.0            |
| Vinyl chloride                 | 5.0              | < 5.0            |
| ortho-Xylene                   | 2.0              | < 2.0            |
| meta and para-Xylene           | 2.0              | < 2.0            |

<Value = None detected above the specified reporting limit, or a value that reflects a reasonable limit due to interferences.

Released by: Alan B. Bala  
Laboratory Supervisor

Report Date 3/3/97

3 of 3

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

|   |
|---|
| 5. Lease Designation and Serial No.<br>UT-PAOOZ |
| 6. If Indian, Allottee or Tribe Name<br>NA      |
| 7. Unit Agreement Name<br>NA                    |
| 8. Well Name and Number<br>UPR Cave Creek 19-1H |
| 9. API Well Number<br>43-043-30309              |
| 10. Field and Pool, or Wildcat<br>Cave Creek    |

**SUNDRY NOTICES AND REPORTS ON WELLS**

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 ( X ) GAS ( ) OTHER: ( ) INJ. ( )

2. Name of Operator  
Union Pacific Resources Company

3. Address and Telephone Number  
P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007  
Telephone (817) 877-7664

4. Location of Well

|                      |                                       |        |        |
|----------------------|---------------------------------------|--------|--------|
| Footages             | 1320' FNL, 1980" FEL Sec19,T.5N.,R8E. | County | Summit |
| QQ, Sec., T., R., M. | (NW/4NE/4) Sec. 19, T. 5 N., R. 8 E.  | State  | Utah   |

11 CK 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 checked="" 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 Test           | <input type="checkbox"/> Fracture Treat   |
| <input type="checkbox"/> Multiple Completion     | <input type="checkbox"/> Other _____  |
| <input type="checkbox"/> Other:                  |   |
| <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 of 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 Shutoff   |
| <input type="checkbox"/> Water Shutoff           |   |
| Approximate date work will start: Upon Approval  | Date of work completion _____<br>Report results of Multiple Completions and Reclamations 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).

Union Pacific Resources Company proposes to plug and abandon the above referenced well per the attached procedure.

We will appreciate your earliest attention to, and approval of, this request.

PLEASE CONSIDER ALL SUBMITTALS PERTAINING TO THIS WELL AS "COMPANY CONFIDENTIAL"  
If additional information is needed, please contact the undersigned at (817) 877-7664, FAX (817) 877-7942

13.

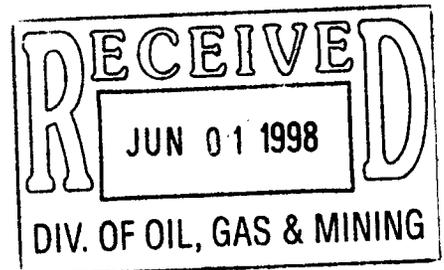
Name/Signature: David S. Petrie Title: Regulatory Advisor Date: 98-05-29

(This space for State use only)

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

DATE: 6-3-98  
BY: [Signature]

See Attached  
General Conditions



**UNION PACIFIC RESOURCES  
UPRR CAVE CREEK 19-1H  
API# 43-043-30309  
NE ¼ SEC 19 T15N R8E  
SUMMIT COUNTY, UTAH  
P&A PROCEDURE - 05/26/98**

**PERTINENT DATA**

GL: 7,182'

KB: 7,205'

Surface Casing: 10 ¾" 45# K-55 @ 999'. Cemented to surface with 525 sx 65:35 Poz:Class G lead. Tail in with 250 sx of Class g, top out with 125 sx. Class G.

Intermediate: 7 5/8" 29.7# @ 4,321'; 7 ¾" 46.1# @ 6,515' with DV Tool @ 3,566'. Cemented 1<sup>st</sup> stage w/2,000 sacks Class G, yield 1.2 cf/sx, 2<sup>nd</sup> stage 400 sx of Lite 1.83 cf/sx. Good returns throughout complete job.

Liner: 4 ½" 11.6# L-80 set @ 10,535', liner top @ 6,233', no tie back, just dropped off in hole.

TD: 10,535'

**PROCEDURE**

1. Test anchors
2. MIRU workover rig w/ sub, flat tank, pump, cat walk, and pipe racks. Set 1-400 bbl working tank.

**NOTE:** Notify State of Utah Division of Oil, Gas and Mining at (801) 538-5334, 24 hours prior to commencing plugging operations.

3. NDWH. NU 7-1/16" 5m# Annular.
4. RUWL w/ lubricator. RIH w/ gauge ring/junk basket to 6,200'. POOH. RIH set CICR @ 6,200'. POOH. RDWL.
5. Load hole and test casing to 2,000 psi.
6. PU TIH w/ CICR stinger on 2 7/8" 6.5# L-80 8rd WS.

7. RU Dowell, sting into CICR @ 6,200'. Test annulus to 2,000 psi. Est. inj. Rate. Sqz 6 1/2" hole with perforated liner with 100 sx (20.5 bbl) Class G (cement) + 0.1%D65 (dispersant) + 0.1% B-71 (retarder) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Sting out of CICR and leave 10 sx of cement (2 bbl) on top of CICR.
8. TOOH LD to 4,700'.
9. RU Dowell, pump 30 sx Class G (cement) + 0.1%D65 (dispersant) + 0.1% B-71 (retarder) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Balanced plug.
10. TOOH LD to 3,200'.
11. RU Dowell, pump 30 sx Class G (cement) + 0.1%D65 (dispersant) + 0.1% B-71 (retarder) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Balanced plug.
12. TOOH LD to 1,700'.
13. RU Dowell, pump 30 sx Class G (cement) + 2% S001 (calcium chloride - on the side) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water. Balanced plug.
14. TOOH LD to surface.
15. RU Dowell, pump 25 sx Class G (cement) + 2% S001 (calcium chloride - on the side) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water.
16. Run 100' of 1" pipe between the 7 5/8" Intermediate and the 10 3/4" surface annulus and pump 15 sxs Class G (cement) + 2% S001 (calcium chloride - on the side) mixed @ 15.8 ppg, 1.15 cf/sx yield and 4.97 gal/sx mix water.
17. RDMOSU
18. Dig out Cellar Ring.
19. Cut off all csg strings and WH equipment.
20. 4" x 10' dry hole marker w/ at least 6' of marker above GL. Marker must have the following information on it: Operator, well name, well location, date plugged. Marker should have a 1/2" needle valve tapped into it so that it can be checked for pressure at a future date.
21. Clean and reclaim location.

**State of Utah**  
**Department of Natural Resources**  
**Division of Oil, Gas and Mining**

Conditional Approval of Notice of Intent to Abandonment Well

API Well Number: 43-013-30309  
Well Name and Number: Cave Creek #19-1H  
Name of Operator: UPRR  
Sundry Receipt Date: June 1, 1998  
Date/Initials: 6-3-98/RJK

The Division based on the following general and specific conditions approves the submitted Sundry Notice for Well Abandonment:

**GENERAL CONDITIONS**

- A. Operator shall conduct all plugging and abandonment work in accordance with Utah Administrative Code R649-3-24.
- B. Operator shall notify the Division at least 24 hours prior to initiating field activities.
- C. Within 30 days following completion of the abandonment, Operator shall submit a subsequent report to the Division detailing the following:
  - 1. An account of plugging and casing removal procedures, specifications and quantities of all materials and equipment used, and the depths of all plugs installed;
  - 2. Records of any tests conducted or measurements collected; and,
  - 3. Amounts, type, and condition of casing removed and location and type of casing left in the well.

**SPECIFIC CONDITIONS**

**STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING**

5. Lease Designation and Serial No.  
UT-PAOOZ

6. If Indian, Allottee or Tribe Name  
NA

7. Unit Agreement Name  
NA

8. Well Name and Number  
UPR Cave Creek 19 -1H

9. API Well Number  
43-043-30309

10. Field and Pool, or Wildcat  
Cave Creek

**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 ( X )    GAS (   )    OTHER: (   )    INJ. (   )

2. Name of Operator  
Union Pacific Resources Company

3. Address and Telephone Number  
P. O. Box 7    MS 3006    Fort Worth, Texas 76101-0007  
Telephone (817) 877-6739

4. Location of Well  
Footages                      3120' FNL, 1980' FEL                      County                      Summit  
QQ, Sec., T., R., M.                      (NWNE) Sec. 19, T5N-R8E                      State                      Utah

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

**NOTICE OF INTENT**  
(Submit in Duplicate)

(   ) Abandonment                      (   ) New Construction  
(   ) Casing Repair                      (   ) Pull or Alter Casing  
(   ) Change of Plans                      (   ) Recompletion  
(   ) Conversion to Injection                      ( X ) Shoot or Acidize  
(   ) Fracture Test                      (   ) Vent or Flare  
(   ) Multiple Completion                      (   ) Water Shutoff  
(   ) Other:

Approximate date work will start: Upon Approval

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

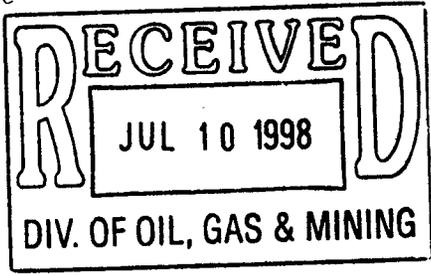
( X ) Abandonment \*                      (   ) New Construction  
(   ) Casing Repair                      (   ) Pull or Alter Casing  
(   ) Change of Plans                      (   ) Shoot or Acidize  
(   ) Conversion to Injection                      (   ) Vent or Flare  
(   ) Fracture Treat                      (   ) Water Shut-Off Shutoff  
(   ) Other \_\_\_\_\_

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Reclamations to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
\* Must be accompanied by a cement verification report.

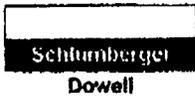
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work).

Union Pacific Resources Company has plugged the subject well as outlined in the attached procedures. Cementing reports are attached. *6.3.98 PA data*



13.  
Name/Signature: Dorothy Moravek. *D Moravek* Title: Regulatory Analyst Date: 7/9/98

(This space for State use only)

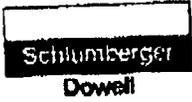


# Cementing Service Report

|  |  |  |  |                               |  |                        |  |                      |  |                       |  |
|--|--|--|--|-------------------------------|--|------------------------|--|----------------------|--|-----------------------|--|
| Well   |  |  |  | Customer                      |  |                        |  | Job Number           |  |                       |  |
| 19-1H <sup>TES</sup><br>3vc Creek Deep 846A 1RH Cave Creek   |  |  |  | Union Pacific Resources, Inc. |  |                        |  | 20066088             |  |                       |  |
| Location (legal)   |  |  |  | Dewell Location               |  |                        |  | Job Start            |  |                       |  |
| Rock Springs, WY   |  |  |  | Rock Springs, WY              |  |                        |  | 6/22/98              |  |                       |  |
| Field  |  | Formation Name/Type  |  | Deviation                     |  | Bit Size               |  | Well MD              |  | Well TVD              |  |
| Cave Creek   |  |  |  | 0                             |  | 0 in                   |  | 0 ft                 |  | 0 ft                  |  |
| County   |  | State/Province   |  | BHP                           |  | BHST                   |  | BNCT                 |  | Pore Press. Gradient  |  |
| Summit   |  | Utah   |  | 0 psi                         |  | 0 °F                   |  | 0 °F                 |  | 0 psi/ft              |  |
| Rig Name   |  | Drilled For  |  | Service Via                   |  | Casing/Liner           |  |                      |  |                       |  |
|  |  |  |  |                               |  | Depth, ft              |  | Size, in             |  | Weight, lb/ft         |  |
| Offshore Zone  |  | Well Class   |  | Well Type                     |  | 0                      |  | 0                    |  | 0                     |  |
| Drilling Fluid Type  |  | Max. Density   |  | Plastic Viscosity             |  | Tubing/Drill Pipe      |  |                      |  |                       |  |
|  |  | 0 lb/gal   |  | 0 cp                          |  | Depth,                 |  | Size, in             |  | Weight, lb/ft         |  |
| Service Line   |  | Job Type   |  |                               |  | 0                      |  | 0                    |  | 0                     |  |
| Cementing  |  | Plug & Abandon   |  |                               |  | 0                      |  | 0                    |  | 0                     |  |
| Max. Allowed Tubing Pressure                                 |  | Max. Allowed Ann. Pressure   |  | Wellhead Connection           |  | Perforations/Open Hole |  |                      |  |                       |  |
| 0 psi  |  | 0 psi  |  |                               |  | Top, ft                |  | Bottom, ft           |  | spf                   |  |
|  |  |  |  |                               |  | 0                      |  | 0                    |  | 0                     |  |
| Service Instructions   |  |  |  |                               |  | No. of Shots           |  | Total Interval       |  |                       |  |
| Perform top out down one inch pipe per customers instruction |  |  |  |                               |  | 0                      |  | 0                    |  | 0 ft                  |  |
| Load Neat cement with S1 on side                             |  |  |  |                               |  | Diameter               |  |                      |  |                       |  |
| Pump this job after the Cave Creek 46A 1 RH                  |  |  |  |                               |  | 0                      |  | 0                    |  | 0 in                  |  |
|  |  |  |  |                               |  | Treat Down             |  | Displacement         |  | Packer Type           |  |
|  |  |  |  |                               |  | Casing                 |  | 35 bbl               |  | Packer Depth          |  |
|  |  |  |  |                               |  | Tubing Vol.            |  | Casing Vol.          |  | Annular Vol.          |  |
|  |  |  |  |                               |  | 0 bbl                  |  | 0 bbl                |  | 0 bbl                 |  |
|  |  |  |  |                               |  | Open Hole Vol          |  |                      |  | 35 bbl                |  |
| Casing/Tubing Secured <input type="checkbox"/>               |  | 1 Hole Volume Circulated prior to Cementing <input type="checkbox"/> |  | Casing Tools                  |  |                        |  | Squeeze Job          |  |                       |  |
| Lift Pressure: psi   |  |  |  | Shoe Type:                    |  |                        |  | Squeeze Type         |  |                       |  |
| Pipe Rotated <input type="checkbox"/>                        |  | Pipe Recirculated <input type="checkbox"/>                           |  | Shoe Depth: 0 ft              |  |                        |  | Tool Type:           |  |                       |  |
| No. Centralizers: 0  |  | Top Plugs: 0   |  | Bottom Plugs: 0               |  | Stage Tool Type        |  |                      |  | Tool Depth: 0 ft      |  |
| Cement Head Type:  |  | Stage Tool Depth: 0 ft   |  |                               |  | Tail Pipe Size: 0 in   |  |                      |  |                       |  |
| Job Scheduled For:   |  | Arrived on Location:   |  | Leave Location:               |  | Coiler Type:           |  |                      |  | Tail Pipe Depth: 0 ft |  |
| 6/19/98  |  | 6/22/98 10:45  |  | 6/22/98 16:00                 |  | Coiler Depth: ft       |  |                      |  | Sqz Total Vol: 0 bbl  |  |
| Time   |  | CumVol   |  | Density                       |  | ToolFlowrate           |  | Message              |  |                       |  |
| 24 hr clock  |  | bbl  |  | ppg                           |  | bpm                    |  |                      |  |                       |  |
| 8:45   |  | 0  |  | 0                             |  | 0                      |  | START EDT            |  |                       |  |
| 8:45   |  | 0  |  | 0                             |  | 0                      |  | START ACQUISITION    |  |                       |  |
| 8:45   |  | 0  |  | 0                             |  | 0                      |  |                      |  |                       |  |
| 8:45   |  | 0  |  | 2.396                         |  | .2145                  |  |                      |  |                       |  |
| 8:45   |  | 0  |  | 0                             |  | 0                      |  | PAUSE EDT            |  |                       |  |
| 8:45   |  | 0  |  | 0                             |  | 0                      |  | PAUSE ACQUISITION    |  |                       |  |
| 8:49   |  | 0  |  | 0                             |  | 0                      |  | Reset Volume         |  |                       |  |
| 8:49   |  | 0  |  | 0                             |  | 0                      |  | [CumVol]=3575E-5 bbl |  |                       |  |
| 8:49   |  | 0  |  | 0                             |  | 0                      |  | RESTART AFTER PAUSE  |  |                       |  |
| 8:49   |  | 0  |  | 6.634                         |  | 0                      |  | RESTART AFTER PAUSE  |  |                       |  |
| 8:49   |  | 0  |  | 0                             |  | 0                      |  | Start Job            |  |                       |  |
| 8:49   |  | 0  |  | 8.218                         |  | .3524                  |  |                      |  |                       |  |
| 8:49   |  | .2137  |  | 8.487                         |  | .3685                  |  |                      |  |                       |  |
| 8:50   |  | .3318  |  | 8.469                         |  | .3514                  |  |                      |  |                       |  |
| 8:50   |  | 0  |  | 0                             |  | 0                      |  | Reset Volume         |  |                       |  |
| 8:50   |  | .4443  |  | 10.1                          |  | .3357                  |  | [CumVol]=.4443 bbl   |  |                       |  |
| 8:50   |  | 0  |  | 7.601                         |  | 0                      |  |                      |  |                       |  |
| 8:51   |  | 0  |  | 7.769                         |  | 0                      |  |                      |  |                       |  |
| 8:51   |  | 0  |  | 7.754                         |  | 0                      |  |                      |  |                       |  |
| 8:51   |  | 0  |  | 7.782                         |  | 0                      |  |                      |  |                       |  |
| 8:52   |  | 0  |  | 7.716                         |  | 0                      |  |                      |  |                       |  |

| Well                           |         |         |            | Field      |   | Service Date |   | Customer                     |  | Job Number         |
|--------------------------------|---------|---------|------------|------------|---|--------------|---|------------------------------|--|--------------------|
| C196 CREEK 19-H                |         |         |            | Cave Creek |   |              |   | Union Pacific Resources, Inc |  | 20068088           |
| Deep 246A WPTW Cave Creek Deep |         |         |            |            |   |              |   |                              |  | Message            |
| Time                           | Cum/Vol | Density | Total Rate |            |   |              |   |                              |  |                    |
| 24 hr clock                    | blt     | ppg     | bpm        |            |   |              |   |                              |  |                    |
| 8:52                           | 0       | 6.841   | 2758       | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:52                           | 1508    | 8.926   | 2387       | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:53                           | 1981    | 9.121   | 1119       | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:53                           | 2233    | 13.27   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:53                           | 2441    | 14.11   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:54                           | 2673    | 14.33   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:54                           | 2851    | 14.23   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:54                           | 3048    | 16.67   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:55                           | 3361    | 15.76   | 1262       | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:55                           | 3611    | 15.75   | 0451       | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:55                           | 3683    | 14.4    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:56                           | 3604    | 15.6    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:56                           | 3646    | 15.67   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:56                           | 3647    | 16.45   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:57                           | 3647    | 15.98   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:57                           | 3647    | 15.98   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:57                           | 3647    | 14.65   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:58                           | 3647    | 14.19   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:58                           | 3647    | 14.4    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:58                           | 3647    | 14.3    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:59                           | 3647    | 14.38   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:59                           | 3647    | 14.43   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 8:59                           | 3647    | 14.61   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:00                           | 3647    | 14.5    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:00                           | 3915    | 14.52   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:00                           | 442     | 13.43   | 1515       | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:00                           | 0       | 0       | 0          | 0          | 0 | 0            | 0 |                              |  | Start Pumping Wash |
| 9:01                           | 1.02    | 4.781   | 1.815      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:01                           | 1.63    | 13.32   | 1.819      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:01                           | 0       | 0       | 0          | 0          | 0 | 0            | 0 |                              |  | End Job            |
| 9:01                           | 2.233   | 9.077   | 1.798      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:02                           | 2.837   | 10.18   | 1.794      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:02                           | 3.435   | 9.129   | 1.744      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:02                           | 4.012   | 7.765   | 1.727      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:03                           | 4.59    | 8.803   | 1.729      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:03                           | 5.168   | 8.14    | 1.729      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:03                           | 5.745   | 7.982   | 1.727      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:04                           | 6.323   | 8.182   | 1.729      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:04                           | 6.901   | 7.923   | 1.729      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:04                           | 7.478   | 3.874   | 1.729      | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:05                           | 7.622   | 3.249   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:05                           | 7.622   | 7.999   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:05                           | 7.622   | 8.003   | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:06                           | 7.622   | 8.01    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:06                           | 7.622   | 8.36    | 0          | 0          | 0 | 0            | 0 |                              |  |                    |
| 9:07                           | 0       | 0       | 0          | 0          | 0 | 0            | 0 |                              |  | STOP EDT           |

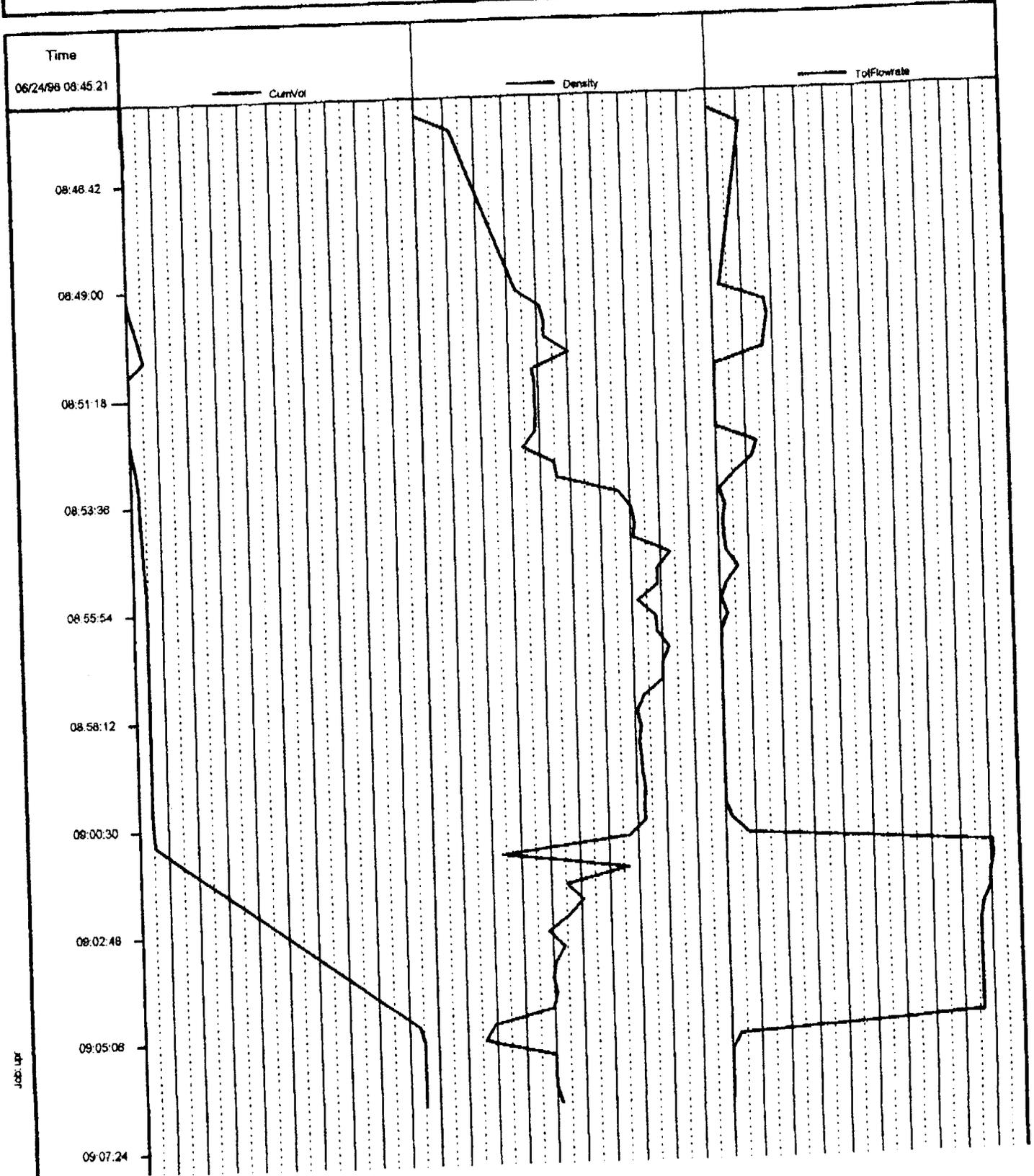
|                                       |                        |                            |                        |                                      |   |                               |
|---------------------------------------|------------------------|----------------------------|------------------------|--------------------------------------|---|-------------------------------|
| Well<br><b>CAVE CREEK 19-1H</b>       |                        | Field<br><b>Cave Creek</b> |                        | Service Date                         | Customer<br><b>Union Pacific Resources, Inc</b>   | Job Number<br><b>20066088</b> |
| <del>FD-302 (Rev. 1-17-93)</del>      |                        | <del>Cave Creek Deep</del> |                        | Message                              |   |                               |
| Time<br>24-hr<br>clock                | Conn'd<br>bbl          | Density<br>PPG             | Test Flowrate<br>bpm   |                                      |   |                               |
| <b>Post Job Summary</b>               |                        |                            |                        |                                      |   |                               |
| Average Pump Rates, bpm               |                        |                            |                        | Volume of Fluid Injected, bbl        |   |                               |
| Slurry                                | N2                     | Mud                        | Maximum Rate           | Total Slurry                         | Mud   | Spacer N2                     |
| 1                                     | 0                      | 0                          | 1                      | 35                                   | 0   | 0 0                           |
| Treating Pressure Summary, psi        |                        |                            |                        | Breakdown Fluid                      |   |                               |
| Maximum                               | Final                  | Average                    | Bump Plug to Breakdown | Type                                 | Volume  | Density                       |
| 0                                     | 0                      | 0                          | 0                      |                                      | 0 bbl   | 0 lb/gal                      |
| Avg. N2 Percent                       | Designed Slurry Volume | Displacement               |                        | Cement Circulated to Surface? Volume |   |                               |
| 0 %                                   | 0 bbl                  | 40 bbl                     |                        | 0 bbl                                |   |                               |
| Customer or Authorized Representative |                        |                            | Dowell Supervisor      |                                      | Circulation Lost  |                               |
| Bobby Cooper-                         |                        |                            | Timothy Stroth         |                                      | <input type="checkbox"/> Circulation Lost <input checked="" type="checkbox"/> Job Completed |                               |



### Cementing Job Report

PRISM® V2.2

|                |                  |                 |                    |
|----------------|------------------|-----------------|--------------------|
| <b>Well</b>    | Cave Creek 19-1H | <b>Client</b>   | UPR                |
| <b>Field</b>   | Cave Creek       | <b>SIR No.</b>  | 20066086           |
| <b>Country</b> | Cement           | <b>Job Date</b> | 6/24/98 8:45:21 AM |



Job: upr

# Cementing Service Report

**Schlumberger**  
Dowell

Customer

Job Number

Union Pacific Resources, Inc

20066088

|  |   |                               |                        |              |                       |
|--|---|-------------------------------|------------------------|--------------|-----------------------|
| Well   | Location (legal)                          |                               | Dowell Location        |              | Job Start             |
| Cave Creek 19 - 1H   | Cave Creek 19 - 1H                        |                               | Rock Springs, WY       |              | 6/22/98               |
| Field  | Formation Name/Type                       | Deviation                     | Bit Size               | Well MD      | Well TVD              |
| Cave Creek   |   | 0                             | 0 in                   | 0 ft         | 0 ft                  |
| County   | State/Province                            | BHP                           | BHST                   | BHCT         | Pore Press. Gradient  |
| Summit   | Utah                                      | 0 psi                         | 0 °F                   | 0 °F         | 0 psi/ft              |
| Rig Name   | Drilled For                               | Service Via                   |                        |              |                       |
|  |   | Casing/Liner                  |                        |              |                       |
| Offshore Zone  | Well Class                                | Well Type                     | Depth, ft              | Size, in     | Weight, lb/ft         |
|  | Old                                       | Rigless                       | 0                      | 0            | 0                     |
| Drilling Fluid Type  | Max. Density                              | Plastic Viscosity             | Tubing/Drill Pipe      |              |                       |
|  | 0 lb/gal                                  | 0 cp                          | Depth                  | Size, in     | Weight, lb/ft         |
| Service Line   | Job Type                                  |                               | 0                      | 0            | 0                     |
| Cementing  | Plug & Abandon                            |                               | 0                      | 0            | 0                     |
| Max. Allowed Tubing Pressure                                 | Max. Allowed Ann. Pressure                | WellHead Connection           | Perforations/Open Hole |              |                       |
| 0 psi  | 0 psi                                     |                               | Top, ft                | Bottom, ft   | spr                   |
| Service Instructions   |   |                               | 0                      | 0            | 0                     |
| Perform top out down one inch pipe per customers instruction |   |                               | 0                      | 0            | 0                     |
| Load neat cement with S1 on side                             |   |                               | 0                      | 0            | 0                     |
| Pump this job after the Cave Creek 46A 1 RH                  |   |                               |                        |              |                       |
|  |   |                               | Treat Down             | Displacement | Packer Type           |
|  |   |                               | Casing                 | 35 bbl       |                       |
|  |   |                               | Tubing Vol.            | Casing Vol   | Annular Vol.          |
|  |   |                               | 0 bbl                  | 0 bbl        | 0 bbl                 |
|  |   |                               |                        |              | Open Hole Vol         |
|  |   |                               |                        |              | 35 bbl                |
| Casing/Tubing Secured  | Hole Volume Circulated prior to Cementing |                               | Casing Tools           |              |                       |
| Lift Pressure: 0 psi   |   |                               | Shoe Type:             |              | Squeeze Job           |
| Pipe Rotated   | Pipe Reciprocated                         |                               | Shoe Depth: 0 ft       |              | Squeeze Type          |
| No. Centralizers: 0  | Top Plugs: 0                              | Bottom Plugs: 0               | Stage Tool Type:       |              | Tool Depth: 0 ft      |
| Cement Head Type:  |   |                               | Stage Tool Depth: 0 ft |              | Tail Pipe Size: 0 in  |
| Job Scheduled For: 6/19/98                                   | Arrived on Location: 6/22/98 10:45        | Leave Location: 6/22/98 16:00 | Collar Type:           |              | Tail Pipe Depth: 0 ft |
|  |   |                               | Collar Depth: ft       |              | Sqz Total Vol: 0 bbl  |

| Time        | CumVol | Density | Pressure UI | TotFlowrate | Message |   |   |                     |
|-------------|--------|---------|-------------|-------------|---------|---|---|---------------------|
| 24 hr check | bbl    | ppg     | psi         | bpm         |         |   |   |                     |
| 11:29       | 0      | 0       | 0           | 0           | 0       | 0 | 0 | START EDT           |
| 11:29       | 0      | 0       | 0           | 0           | 0       | 0 | 0 | START ACQUISITION   |
| 11:29       | 2271   | 8.077   | 5.949       | 1.44        | 0       | 0 | 0 |                     |
| 11:29       | 0      | 0       | 0           | 0           | 0       | 0 | 0 | Start Job           |
| 11:31       | 2.372  | 8.181   | -45.8       | 0           | 0       | 0 | 0 |                     |
| 11:33       | 2.9    | 8.101   | -47.31      | 196         | 0       | 0 | 0 |                     |
| 11:35       | 3.347  | 8.14    | -40.85      | 0           | 0       | 0 | 0 |                     |
| 11:37       | 0      | 0       | 0           | 0           | 0       | 0 | 0 | Start Cement Slurry |
| 11:37       | 3.347  | 8.219   | -36.79      | 0           | 0       | 0 | 0 |                     |
| 11:39       | 3.347  | 9.686   | -32.02      | 0           | 0       | 0 | 0 |                     |
| 11:41       | 3.79   | 15.61   | 39.38       | 1.504       | 0       | 0 | 0 |                     |
| 11:43       | 6.831  | 16.05   | 157.8       | 1.513       | 0       | 0 | 0 |                     |
| 11:45       | 9.261  | 16.24   | -22.84      | 0           | 0       | 0 | 0 |                     |
| 11:47       | 8.261  | 16.24   | -25.38      | 0           | 0       | 0 | 0 |                     |
| 11:49       | 8.261  | 15.82   | -30.63      | 0           | 0       | 0 | 0 |                     |
| 11:51       | 9.585  | 15.99   | -31.55      | 0           | 0       | 0 | 0 |                     |
| 11:53       | 9.585  | 16.06   | -22.87      | 0           | 0       | 0 | 0 |                     |
| 11:55       | 9.585  | 16.05   | -23.42      | 0           | 0       | 0 | 0 |                     |
| 11:57       | 9.685  | 16.03   | -12.45      | 4189        | 0       | 0 | 0 |                     |
| 11:59       | 10.07  | 15.89   | -21.75      | 0           | 0       | 0 | 0 |                     |
| 12:01       | 10.07  | 15.87   | -21.35      | 0           | 0       | 0 | 0 |                     |
| 12:03       | 10.07  | 15.87   | -30.18      | 0           | 0       | 0 | 0 |                     |

| Well           | Field               |         |             |             | Service Date | Customer                     | Job Number          |
|----------------|---------------------|---------|-------------|-------------|--------------|------------------------------|---------------------|
|                | Cave Creek #19 - 1H |         |             |             | Cave Creek   | Union Pacific Resources, Inc | 20066068            |
| Time           | CumVol              | Density | Pressure U1 | TotFlowrate | Message      |                              |                     |
| 24 hr<br>Block | BDI                 | PPG     | PSI         | BPM         |              |                              |                     |
| 12:05          | 10.07               | 15.85   | -28.63      | 0           | 0            | 0                            |                     |
| 12:07          | 10.31               | 15.22   | -25.12      | 0           | 0            | 0                            |                     |
| 12:09          | 10.31               | 15.3    | -27.37      | 0           | 0            | 0                            |                     |
| 12:11          | 10.31               | 15.3    | -27.43      | 0           | 0            | 0                            |                     |
| 12:13          | 10.31               | 15.29   | -27.44      | 0           | 0            | 0                            |                     |
| 12:15          | 10.31               | 15.28   | -27.43      | 0           | 0            | 0                            |                     |
| 12:17          | 10.31               | 14.53   | -27.44      | 0           | 0            | 0                            |                     |
| 12:19          | 10.31               | 13.61   | -30.45      | 0           | 0            | 0                            |                     |
| 12:21          | 10.31               | 13.29   | -27.44      | 0           | 0            | 0                            |                     |
| 12:23          | 0                   | 0       | 0           | 0           | 0            | 0                            | Stop Pumping        |
| 12:23          | 13.65               | 5.014   | -40.37      | 2.724       | 0            | 0                            |                     |
| 12:25          | 19.11               | 5.624   | -77.36      | 2.724       | 0            | 0                            |                     |
| 12:27          | 0                   | 0       | 0           | 0           | 0            | 0                            | PAUSE EDT           |
| 12:27          | 0                   | 0       | 0           | 0           | 0            | 0                            | PAUSE ACQUISITION   |
| 13:36          | 0                   | 0       | 0           | 0           | 0            | 0                            | RESTART AFTER PAUSE |
| 13:36          | 0                   | 0       | 0           | 0           | 0            | 0                            | RESTART AFTER PAUSE |
| 13:36          | 23.57               | 15.88   | -22.67      | 2851        | 0            | 0                            |                     |
| 13:38          | 23.57               | 16.06   | -27.44      | 0           | 0            | 0                            |                     |
| 13:40          | 23.57               | 16.06   | -22.94      | 0           | 0            | 0                            |                     |
| 13:42          | 23.57               | 11.99   | -73.46      | 0           | 0            | 0                            |                     |
| 13:44          | 23.57               | 11.85   | -32.03      | 0           | 0            | 0                            |                     |
| 13:46          | 0                   | 0       | 0           | 0           | 0            | 0                            | PAUSE EDT           |
| 13:46          | 0                   | 0       | 0           | 0           | 0            | 0                            | PAUSE ACQUISITION   |
| 13:46          | 0                   | 0       | 0           | 0           | 0            | 0                            | RESTART AFTER PAUSE |
| 13:46          | 0                   | 0       | 0           | 0           | 0            | 0                            | RESTART AFTER PAUSE |
| 13:46          | 23.57               | 11.93   | -27.44      | 0           | 0            | 0                            |                     |
| 13:48          | 23.57               | 11.92   | -27.31      | 0           | 0            | 0                            |                     |
| 13:50          | 23.57               | 11.92   | -27.43      | 0           | 0            | 0                            |                     |
| 13:52          | 23.57               | 11.91   | -27.22      | 0           | 0            | 0                            |                     |
| 13:54          | 23.57               | 11.91   | -27.4       | 0           | 0            | 0                            |                     |
| 13:56          | 23.57               | 11.9    | -27.08      | 0           | 0            | 0                            |                     |
| 13:58          | 23.57               | 11.9    | -27.44      | 0           | 0            | 0                            |                     |
| 14:00          | 23.57               | 11.89   | -27.44      | 0           | 0            | 0                            |                     |
| 14:02          | 23.57               | 11.89   | -26.4       | 0           | 0            | 0                            |                     |
| 14:04          | 23.57               | 11.88   | -25.12      | 0           | 0            | 0                            |                     |
| 14:06          | 23.57               | 11.88   | -26.74      | 0           | 0            | 0                            |                     |
| 14:08          | 23.57               | 11.88   | -24.12      | 0           | 0            | 0                            |                     |
| 14:10          | 23.57               | 11.87   | -24.99      | 0           | 0            | 0                            |                     |
| 14:12          | 23.57               | 11.87   | -27.37      | 0           | 0            | 0                            |                     |
| 14:14          | 23.57               | 11.86   | -26.93      | 0           | 0            | 0                            |                     |
| 14:16          | 23.57               | 11.86   | -28.22      | 0           | 0            | 0                            |                     |
| 14:18          | 23.57               | 11.86   | -26.87      | 0           | 0            | 0                            |                     |
| 14:20          | 23.57               | 11.85   | -27.29      | 0           | 0            | 0                            |                     |
| 14:22          | 23.57               | 11.85   | -26.79      | 0           | 0            | 0                            |                     |
| 14:24          | 23.57               | 11.84   | -27.4       | 0           | 0            | 0                            |                     |
| 14:26          | 23.57               | 11.84   | -24.89      | 0           | 0            | 0                            |                     |
| 14:28          | 23.57               | 11.84   | -27.22      | 0           | 0            | 0                            |                     |
| 14:30          | 23.57               | 11.83   | -25.18      | 0           | 0            | 0                            |                     |
| 14:32          | 23.57               | 11.83   | -26.69      | 0           | 0            | 0                            |                     |
| 14:34          | 23.57               | 11.83   | -26.31      | 0           | 0            | 0                            |                     |
| 14:36          | 23.57               | 11.82   | -27.32      | 0           | 0            | 0                            |                     |
| 14:38          | 23.57               | 11.81   | -26.9       | 0           | 0            | 0                            |                     |
| 14:40          | 23.57               | 11.8    | -25.8       | 0           | 0            | 0                            |                     |
| 14:42          | 23.57               | 11.79   | -25.39      | 0           | 0            | 0                            |                     |

| Well                | Field      | Service Date | Customer                     | Job Number  |          |
|---------------------|------------|--------------|------------------------------|-------------|----------|
| Cave Creek #19 - 1H | Cave Creek |              | Union Pacific Resources, Inc | 20066088    |          |
| Time                | CumVol     | Density      | Pressure U1                  | TopFlowrate | Message  |
| 24 hr clock         | bbl        | ppg          | psi                          | bpm         |          |
| 14:44               | 23.57      | 11.72        | -25.33                       | 0           |          |
| 14:46               | 23.57      | 11.88        | -25.86                       | 0           |          |
| 14:43               | 23.57      | 14.87        | -22.34                       | 0           |          |
| 14:50               | 23.57      | 14.77        | -26.64                       | 0           |          |
| 14:52               | 23.57      | 16.2         | -23.24                       | 0           |          |
| 14:54               | 23.57      | 15.78        | -27.15                       | 0           |          |
| 14:56               | 23.57      | 15.7         | -25.07                       | 0           |          |
| 14:58               | 23.57      | 15.4         | -23.62                       | 0           |          |
| 15:00               | 23.57      | 15.45        | -25.37                       | 0           |          |
| 15:02               | 23.57      | 15.44        | -24.99                       | 0           |          |
| 15:04               | 23.57      | 15.43        | -24.59                       | 0           |          |
| 15:06               | 23.57      | 15.42        | -23.95                       | 0           |          |
| 15:08               | 23.57      | 15.41        | -25.36                       | 0           |          |
| 15:10               | 23.57      | 15.24        | -20.72                       | 0           |          |
| 15:11               | 0          | 0            | 0                            | 0           | STOP EDT |

| Post Job Summary                      |       |         |   |              |
|---------------------------------------|-------|---------|---|--------------|
| Average Pump Rates, bpm               |       |         | Volume of Fluid Injected, bbl                     |              |
| Slurry                                | N2    | Mud     | Maximum Rate                                      | Total Slurry |
| 1                                     | 0     | 0       | 1   | 35           |
| Treating Pressure Summary, psi        |       |         | Breakdown Fluid                                   |              |
| Maximum                               | Final | Average | Bump Plug to                                      | Breakdown    |
| 0                                     | 0     | 0       | 0   | 0            |
| Avg. N2 Percent                       |       |         | Displacement                                      |              |
| 0 %                                   |       |         | 40 bbl  |              |
| Designed Slurry Volume                |       |         | Cement Circulated to Surface?                     |              |
| 0 bbl                                 |       |         | Volume 0 bbl                                      |              |
| Dowell Supervisor                     |       |         | Washed Thru Perfs To 0 ft                         |              |
| Customer or Authorized Representative |       |         | Circulation Lost                                  |              |
| Bobby Cooper-                         |       |         | Timothy Stroth                                    |              |
|                                       |       |         | <input checked="" type="checkbox"/> Job Completed |              |

UPRR CREEK 19-1H

6/3/98

Well ID Number: 00003 AFE Number: A7140 Event#: 3 Report #: 1 DSS: Depth: 10,535  
 Contractor: KEY ROCKIES Rig Name: RIG 370 Footage: 0  
 AFE TD/DHC/CWC: / / OART: SECURE WELL SDFN

|                |        |        |           |           |           |
|----------------|--------|--------|-----------|-----------|-----------|
| Weight:        | Visc.: | Gels:  | PV/YP:    | WL:       | Cake:     |
| HTHPWL:        | PH:    | PF/MF: | CI:       | Sand:     | Solids:   |
| Elec Stab:     | K+:    | LCM:   | MBT:      | OWR:      | Ca:       |
| Low Gravity %: |        |        | BKGD Gas: | Trip Gas: | Conn Gas: |

Daily / Cum Mud Lost to Hole: / 0 bbls. Daily / Cum Mud Cost: \$0 / \$0  
 Daily / Cum Water Lost to Hole: / 0 bbls.

PUMP #1: Liner Size: 0.000 Stroke Length: 0.00 SPM: 0 GPM: 0 Std Pipe: 0 psi  
 PUMP #2: Liner Size: 0.000 Stroke Length: 0.00 SPM: 0 GPM: 0  
 Jet Vel: 0.0 AV (DP): 0.0 AV (DC): 0.0 PSI Drop: 0.0 Bit HP: 0.0 psi ( 0% ) Bit HHP: 0.0

| Run | Bit# | Size | Mfg. | Model | Bit In | Bit Out | I | O | D | L | B | G | O | R | J1 | J2 | J3 | WOB | RPM | Fig. | Hrs. | ROP |  |
|-----|------|------|------|-------|--------|---------|---|---|---|---|---|---|---|---|----|----|----|-----|-----|------|------|-----|--|
|     |      |      |      |       |        |         |   |   |   |   |   |   |   |   |    |    |    |     |     |      |      |     |  |

Pick Up Wt.: Slack Off Wt.: Rot Wt.: Torque:

| MD                | Angle | TVD | Dir. | V. Sect. | +N-S | +E-W | D. L. | Qty | Description | O.D. | Length      |
|-------------------|-------|-----|------|----------|------|------|-------|-----|-------------|------|-------------|
|                   |       |     |      |          |      |      |       |     |             |      |             |
| Total BHA Length: |       |     |      |          |      |      |       |     |             |      | <u>0.00</u> |

Size: Wt.: Grade: Connection: Depth: FIT:  
 Last BOP Test Date: Accidents: N Pollution:

11.50 OT OT MIRU HALCO SLICK LINE UNIT. ND CAPPING FLANGE. NU LUBE. PU 6.42" GR. RIH TO 5891' STACKED OUT. FLUID LEVEL 5800'. APPEARED TO BE VERY VISCOUS. POOH. PUMP 66 BBL OF FRESH WATER DOWN CSG. RIH W/ 6.42" GR. TO 5894'. STACKED OUT. FLUID LEVEL 4300'. POOH. PU HALCO CICR, RIH TO 6200' KB. SET CICR, POOH. ND LUBE. RELEASE HALCO. MIRU KEY ROCKIES RIG # 370. SECURE WELL, SDFN.

NOTE: CHECKED PRESSURES ON WELL 6/2/98 SICP 590 PSI, BLOW DOWN TO ATMOSPHERE. DROPPING 30 PSI IN 45 MIN. SICP 6/3/98 BLIGHT BLOW.

| Code | Description          | Costs |
|------|----------------------|-------|
| 3005 | COMPLETION RIG       | 2,723 |
| 3006 | CONTRACT SUPERVISION | 600   |
| 3505 | WATER                | 710   |
| 4503 | SURFACE TOOLS & SVCS | 385   |
| 7504 | CONTINGENCY @ 5%     | 221   |

Daily Total Cost: \$4,639  
 Cumulative Cost to Date: \$4,639

11.50 = Total Hours Today Foreman: B.L. COOPER

DAILY COMPLETION AND WORKOVER REPORT

00003

UPRR CAVE CREEK 19-1H

EVENT#: 3

COMP#: 01

DATE: 6/4/98

Rig Name : RIG 370 API No : 43-043-30309  
 Business Unit : LAND GRANT Team : OVERTHRUST  
 Field Name : CAVE CREEK Lease : Drig Rep : B.L.COOPER

Start Date : 6/3/98 Days on Location : 2 MD : 10,535 TVD : PBTD : 10,535  
 Job Descrip : P&A SUBJECT WELL KB :  
 Mud Type : Weight : PV/YP : / WL :

AFE No : A7140 Auth Cost : UPRC W.I.% :

| Casing Name | OD Size | Wt. | Grade | Conn | Wellbore Item | OD Size | Wt. | Grade | Conn | Depth | Length |
|-------------|---------|-----|-------|------|---------------|---------|-----|-------|------|-------|--------|
|             |         |     |       |      |               |         |     |       |      |       |        |

Zone# Rpt Date Start Depth End Depth Density Phasing Hole Size

Zone Nbr. : Rpt Date : Job Date : % Complete : % Contractor :  
 Job Description :  
 ACID TREATMENT : Type : Volume : ISIP : 5 min : psi Min. psi  
 Max psi : Min psi : Avg psi : Max Rate : Min Rate : Avg Rate :  
 FRACTURE TREATMENT : Vol. : # Prop. : Frac Grad :  
 Max psi : Min psi : Avg Psi : Max Rate : Min Rate : Avg Rate :  
 ISIP : 5 min : psi Min. psi Max Sd : Gas Type : Volume : Units :

Fluid Type Gel Load Dirty Amt Clean Amt Sand Tbg Psi Conc. Csg Psi

13.50 ARRIVE LOCATION, HOLD SAFETY MEETING. FINISH RU, PU HALCO CICR STINGER, & WS, 2 7/8" 6.5# L-80 194 JTS. TO 6187' KB. SPACE OUT WITH 16' OF PUPS. STING INTO RETAINER. LOAD BACK SIDE. PRESSURE TEST RETAINER TO 1500 PSI. HOLD ON BS, LOAD TBG. PUMP 100 SX. OF "G" (20.5 BBL) W/ 0.1% D-65 & 0.1% B-71. 15.8 PPG, 1.15 CF/SX. DISPLACE AND STING OUT, LEAVING 10 SX. (2 BBL) ON TOP OF RETAINER.  
 PLUG #2 @ 4713' - 4566', 30 SX.  
 PLUG #3 @ 3224' - 3078' 30 SX.  
 PLUG #4 @ 1701' - 1555' 30 SX.  
 PLUG #5 @ 141' - 30' 25 SX. (5 BBL) "G" W/ 2% S-1. 15.8 PPG, 1.15 CF/SX. LAST PLUG IN PLACE @ 19:40. RD DS, SECURE WELL, SDFN.

| Code | Description                 | Cost       |
|------|-----------------------------|------------|
| 3005 | COMPLETION RIG              | \$3,605.00 |
| 3006 | CONTRACT SUPERVISION        | \$600.00   |
| 4503 | SURFACE TOOLS & SVCS        | \$410.00   |
| 3505 | WATER                       | \$510.00   |
| 7504 | CONTINGENCY @ 5%            | \$982.00   |
| 6006 | SQUEEZE/PLUGS               | \$8,393.00 |
| 7006 | HALCO EZSV CICR AND SETTING | \$5,665.00 |
| 5010 | ANCHOR HANDLING             | \$450.00   |

Total Daily Cost : \$20,615

Cumulative Cost to Date : \$25,254

Time : 17:00 Temp : 40 Winds : 3 / 15 Waves : /

Fluid Lost to Formation (bbls) : Daily : Cumulative : 0.0

**DAILY COMPLETION AND WORKOVER REPORT**

00003

**UPRR CAVE CREEK 19-1H**

**EVENT#: 3**

**COMP#: 01**

**DATE: 6/5/98**

Rig Name : RIG 370 API No : 43-043-30309  
 Business Unit : LAND GRANT Team : OVERTHRUST  
 Field Name : CAVE CREEK Lease : \_\_\_\_\_ Drig Rep : B.L. COOPER

Start Date : 6/3/98 Days on Location : 3 MD : 10.535 TVD : \_\_\_\_\_ PBD : 10.535  
 Job Descrip : P&A SUBJECT WELL KB : \_\_\_\_\_  
 Mud Type : \_\_\_\_\_ Weight : \_\_\_\_\_ PV/YP : / WL : \_\_\_\_\_

AFE No : A7140 Auth Cost : \_\_\_\_\_ UPRC W.I.% : \_\_\_\_\_

| Casing Name | OD Size | Wt. | Grade | Conn | Wellbore Item | OD Size | Wt. | Grade | Conn | Depth | Length |
|-------------|---------|-----|-------|------|---------------|---------|-----|-------|------|-------|--------|
|             |         |     |       |      |               |         |     |       |      |       |        |

Zone# Rpt Date Start Depth End Depth Density Phasing Hole Size

Zone Nbr : \_\_\_\_\_ Rpt Date : \_\_\_\_\_ Job Date : \_\_\_\_\_ % Complete : \_\_\_\_\_ % Contractor : \_\_\_\_\_  
 Job Description : \_\_\_\_\_  
 ACID TREATMENT : Type : \_\_\_\_\_ Volume : \_\_\_\_\_ ISIP : \_\_\_\_\_ 5 min : \_\_\_\_\_ psi Min. : \_\_\_\_\_ psi  
 Max psi : \_\_\_\_\_ Min psi : \_\_\_\_\_ Avg psi : \_\_\_\_\_ Max Rate : \_\_\_\_\_ Min Rate : \_\_\_\_\_ Avg Rate : \_\_\_\_\_  
 FRACTURE TREATMENT : Vol. : \_\_\_\_\_ # Prop : \_\_\_\_\_ Frac Grad : \_\_\_\_\_  
 Max psi : \_\_\_\_\_ Min psi : \_\_\_\_\_ Avg Psi : \_\_\_\_\_ Max Rate : \_\_\_\_\_ Min Rate : \_\_\_\_\_ Avg Rate : \_\_\_\_\_  
 ISIP : \_\_\_\_\_ 5 min : \_\_\_\_\_ psi Min. : \_\_\_\_\_ psi Max Sd : \_\_\_\_\_ Gas Type : \_\_\_\_\_ Volume : \_\_\_\_\_ Units : \_\_\_\_\_

Fluid Type Gel Load Dirty Amt Clean Amt Sand Tbg Psi Conc. Csq Psi

|                           |   |      |                             |            |
|---------------------------|---|------|-----------------------------|------------|
| 8.00                      | ND BOPE, ND TBG. HEAD, CEMENT 15' DOWN INSIDE CASING. CLEAN OUT FRAC TANKS, CLEAN OUT MUD TANK. RD, PREPARE TO MOVE TO THE 846 A#1 R. MONDAY. | 3005 | COMPLETION RIG              | \$2,114.00 |
|                           | REPORTS SUSPENDED UNTIL CSG. HEADS CUT OFF FOR TOP OUTS.  | 3006 | CONTRACT SUPERVISION        | \$600.00   |
|                           |   | 4503 | SURFACE TOOLS & SVCS        | \$410.00   |
|                           |   | 3505 | WATER                       |            |
|                           |   | 7504 | CONTINGENCY @ 5%            | \$156.00   |
|                           |   | 6006 | SQUEEZE/PLUGS               |            |
|                           |   | 7006 | HALCO EZSV CICR AND SETTING |            |
|                           |   | 5010 | ANCHOR HANDLING             |            |
| Total Daily Cost :        |   |      |                             | \$3,280    |
| Cumulative Cost to Date : |   |      |                             | \$28,534   |

Time : 17:00 Temp : 40 Winds : 3 / 15 Waves : /

Fluid Lost to Formation (bbls) : \_\_\_\_\_ Daily : \_\_\_\_\_ Cumulative : 0.0

*Dorothy Mordek*

DAILY COMPLETION AND WORKOVER REPORT

00003

UPRR CAVE CREEK 19-1H

EVENT#: 3 COMP#: 01 DATE: 6/22/98

Rig Name : RIG 370  
Business Unit : LAND GRANT  
Field Name : CAVE CREEK

API No : 43-043-30309  
Team : OVERTHRUST  
Lease :

Orig Rep : B.L. COOPER

Start Date : 6/3/98 Days on Location : 4 MD : 10.535 TVD : PBD : 10.535

Job Descrip : P&A SUBJECT WELL Mud Type : Weight : PVYP : / KB : WL :

AFE No : A7140 Auth Cost : UPRC W.I.% :

| Casing Name | OD Size | Wt. | Grade | Conn | Wellbore Item | OD Size | Wt. | Grade | Conn | Depth | Length |
|-------------|---------|-----|-------|------|---------------|---------|-----|-------|------|-------|--------|
|             |         |     |       |      |               |         |     |       |      |       |        |

Zone# Rpt Date Start Depth End Depth Density Phasing Hole Size

Simulation Data

Zone Nbr : Rpt Date : Job Date : % Complete : % Contractor :

Job Description :

ACID TREATMENT : Type : Volume : ISIP : 5 min : psi Min. psi

Max psi : Min psi : Avg psi : Max Rate : Min Rate : Avg Rate :

FRACTURE TREATMENT : Vol. : # Prop. : Frac Grad : 5 min : psi Min. psi

Max psi : Min psi : Avg Psi : Max Rate : Min Rate : Avg Rate :

ISIP : 5 min : psi Min. psi Max Sd : Gas Type : Volume : Units :

Fluid Type Gel Load Dirty Amt Clean Amt Sand Tbg Psi Conc. Csg Psi

Operations Summary

6 00 ARRIVE LOCATION. RU DS, SHORT TRUCKING, AND DENNIES WATER SERVICE. PU 60' OF 1" LINE PIPE, TAG CEMENT @ 10' INSIDE 7 5/8" CSG. PULL OUT, RUN INTO 7 5/8" 10 3/4" ANNULAS. COULD NOT GET PAST 80', LOAD HOLE W/ 7 BBL OF WATER, MIX AND PUMP 75 SX OF "G" W/ 2% CaCl2. FILLED HOLE W/ 7 BBL OF CEMENT. FELL BACK. WAIT 5 MIN, FILL HOLE, FELL BACK. FILL HOLE, WAIT 5 MIN, FELL BACK. FILL HOLE, FELL BACK. WOC 1 HR. PUMP 5 BBL OF CEMENT, FELL BACK, WASH UP AND WOC 1 HR. PUMP 5 BBL OF CEMENT, FELL BACK, SD AND WOC OVERNIGHT. PUMPED A TOTAL OF 190 SX OF CEMENT, 39 BBL WT = 15.8 PPG. YEILD = 1.15. WILL TRY TO TOP OUT AGAIN IN THE AM

| Code | Description                 | Cost       |
|------|-----------------------------|------------|
| 3005 | COMPLETION RIG              |            |
| 3006 | CONTRACT SUPERVISION        | \$600.00   |
| 4503 | SURFACE TOOLS & SVCS        |            |
| 3505 | WATER                       | \$375.00   |
| 7504 | CONTINGENCY @ 5%            | \$339.00   |
| 8008 | SQUEEZE/PLUGS               | \$5,235.00 |
| 7008 | HALCO EZSV CICR AND SETTING |            |
| 5010 | ANCHOR HANDLING             |            |
| 5099 | SERVICES-BOOM TRUCK         | \$570.00   |

Total Daily Cost : \$7,119

Cumulative Cost to Date : \$35,653

Time : 17:00 Temp : 40 Winds : 3 / 15 Waves : /

Fluid Lost to Formation (bbls) : Daily : Cumulative : 00

**DAILY COMPLETION AND WORKOVER REPORT**

00003

**UPRR CAVE CREEK 19-1H**

**EVENT#: 3**

**COMP#: 01**

**DATE: 6/24/98**

Rig Name: **RIG 370** API No: **43-043-30309**  
 Business Unit: **LAND GRANT** Team: **OVERTHRUST**  
 Field Name: **CAVE CREEK** Lease: Drig Rep: **B.L. COOPER**

Start Date: **6/3/98** Days on Location: **5** MD: **10.535** TVD: PSTD: **10.535**  
 Job Descrip: **P&A SUBJECT WELL** KB:  
 Mud Type: Weight: PV/YP: / WL:

AFE No: **A7140** Auth Cost: UPRC W.I. %:

| Casing Name | OD Size | Wt. | Grade | Conn | Wellbore Item | OD Size | Wt. | Grade | Conn | Depth | Length |
|-------------|---------|-----|-------|------|---------------|---------|-----|-------|------|-------|--------|
|             |         |     |       |      |               |         |     |       |      |       |        |

Zone# Rpt Date Start Depth End Depth Density Phasing Hole Size

Zone Nbr: Rpt Date: Job Date: % Complete: % Contractor:  
 Job Description:  
 ACID TREATMENT: Type: Volume: ISIP: 5 min: psi Min: psi  
 Max psi: Min psi: Avg psi: Max Rate: Min Rate: Avg Rate:  
 FRACTURE TREATMENT: Vol.: # Prop: Frac Grad:  
 Max psi: Min psi: Avg Psi: Max Rate: Min Rate: Avg Rate:  
 ISIP: 5 min: psi Min: psi Max Sd: Gas Type: Volume: Units:

Fluid Type Gel Load Dirty Amt Clean Amt Sand Tbg Psi Conc. Csg Psi

1.50 ARRIVE LOCATION, HOLD SAFETY MEETING. RU DS, AND DENNY'S WATER SERVICE, MIX AND PUMP 2 SX OF "G" W/ 3% CACL2, RD, AND WASH UP. MOVE TO A.L.&L. 4-30. COMPLETE 4-30, AND CHECK CEMENT LEVEL, FELL 4' P & A COMPLETE, TURN TO ELKHORH FOR DRY HOLE MARKER.  
 \*\*\*\*\* FINAL REPORT \*\*\*\*\*

|      |                             |          |
|------|-----------------------------|----------|
| 3005 | COMPLETION RIG              |          |
| 3006 | CONTRACT SUPERVISION        | \$600.00 |
| 4503 | SURFACE TOOLS & SVCS        |          |
| 3505 | WATER                       | \$135.00 |
| 7504 | CONTINGENCY @ 5%            | \$69.00  |
| 6006 | SQUEEZE/PLUGS               | \$641.00 |
| 7006 | HALCO EZSV CICR AND SETTING |          |
| 5010 | ANCHOR HANDLING             |          |

Total Daily Cost: **\$1,445**

Cumulative Cost to Date: **\$37,098**

Time: **17:00** Temp: **40** Winds: **3 / 15** Waves: **/**

Fluid Lost to Formation (bbls): Daily: Cumulative: **0.0**

**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 No.<br>UT-PAOOZ  |
| 6. If Indian, Allottee or Tribe Name<br>NA       |
| 7. Unit Agreement Name<br>NA                     |
| 8. Well Name and Number<br>UPR Cave Creek 19 -1H |
| 9. API Well Number<br>43-043-30309               |
| 10. Field and Pool, or Wildcat<br>Cave Creek     |

1. Type of Well: OIL ( X ) GAS ( ) OTHER: ( ) INJ. ( )

2. Name of Operator  
Union Pacific Resources Company

3. Address and Telephone Number  
P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007  
Telephone (817) 321-6739

4. Location of Well

|                      |                         |        |        |
|----------------------|-------------------------|--------|--------|
| Footages             | 3120' FNL, 1980' FEL    | County | Summit |
| QQ, Sec., T., R., M. | (NWNE) Sec. 19, T5N-R8E | State  | Utah   |

**11 CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

**NOTICE OF INTENT**  
(Submit in Duplicate)

|                             |                          |
|-----------------------------|--------------------------|
| ( ) Abandonment             | ( ) New Construction     |
| ( ) Casing Repair           | ( ) Pull or Alter Casing |
| ( ) Change of Plans         | ( ) Recompletion         |
| ( ) Conversion to Injection | ( X ) Shoot or Acidize   |
| ( ) Fracture Test           | ( ) Vent or Flare        |
| ( ) Multiple Completion     | ( ) Water Shutoff        |
| ( ) Other:                  |                          |

Approximate date work will start:

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

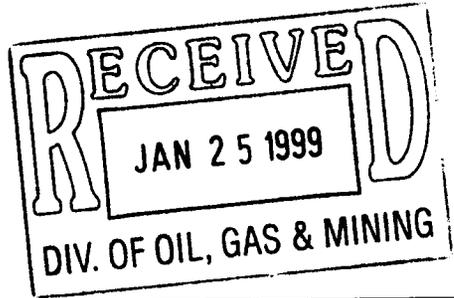
|                             |                            |
|-----------------------------|----------------------------|
| ( X ) Abandonment *         | ( ) New Construction       |
| ( ) Casing Repair           | ( ) Pull or Alter Casing   |
| ( ) Change of Plans         | ( ) Shoot of Acidize       |
| ( ) Conversion to Injection | ( ) Vent or Flare          |
| ( ) Fracture Treat          | ( ) Water Shut-Off Shutoff |
| ( ) Other _____             |                            |

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Reclamations 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).

On 7/9/98 Union Pacific Resources Company filed a sundry advising you that this well had been plugged. This is to further advise that the location has been reclaimed and is ready for inspection and release from our Bond.



13. Name/Signature: Dorothy Moravek Dmoravek Title: Regulatory Analyst Date: 1/21/99

(This space for State use only)

**UNION PACIFIC RESOURCES COMPANY**

**UPRR CAVE CREEK #19-1H**

**1320' FNL & 1980 FEL**

**W NE SEC 19, T5N, R8E**

**CAVE CREEK FIELD**

**SUMMIT COUNTY, UTAH**

**Note:** *This is the first horizontal Twin Creek development well in the Cave Creek Field. Bottom hole location is 3,309' south & 2,321' west of the surface location [Sw Sw Section 19].*

**Prepared by:**

Shawn Lacey  
c/o Sunburst Consulting  
235 Alkali Creek Road  
Billings, Montana 59105  
(406) 259-4124

**Prepared for:**

Ross Matthews  
c/o Union Pacific Resources  
801 Cherry St., MS #3706  
Ft. Worth, Texas 76102  
(817) 877-6763

**Sunburst Consulting**  
**A Geological Service**

## WELL EVALUATION

The Union Pacific Resources Corporation UPRR Cave Creek #19-1H is the first horizontal well drilled in the Cave Creek Field of Summit County, Utah. It is part of a series of wells in the Overthrust Belt drilled by UPRC, targeting a fractured and faulted zone within the Watton Canyon member of the Jurassic Twin Creek Formation.

Cave Creek Field lies near the Utah/Wyoming border, approximately 10 miles southwest of Evanston, Wyoming. Twin Creek production in Cave Creek was first established in 1981 by Amoco. As of September 1994 the State of Utah lists cumulative production for the field at 131,230 BO, 9 BCF gas, and 4,601 BW. Three wells in the field are still productive today.

The horizontal target zone within the Twin Creek Formation was expected to be 40'-60' thick, occurring at the base of the Watton Canyon member. Three primary lobes of good porosity development were expected, with the basal lobe designated the "sweet spot". A structural dip of 1-5° up to the southwest was anticipated in the planned wellbore direction of S38E.

### OPERATIONS:

The UPRR Cave Creek #19-1H was spudded on November 3, 1994 at a surface location 1320' FNL and 1980' FEL in the west half of the northeast quarter of Section 19, Township 5 North, Range 8 East in Summit County, Utah. The well was drilled conventionally to about 4000', at which time some hole deviation problems developed. Directional tools and stabilization, provided by Delmar Directional, were employed in drilling the remainder of the vertical hole, in order to insure a straight hole at the kick-off point. At 6520', Western Atlas ran a suite of E-logs over selected sections of the well. A intermediate string of 7 5/8" and 7 3/4" casing was set at this point.

The directional portion of the well was kicked off at 6565' with directional steering provided by Delmar Directional. MWD gamma ray services were supplied by Sperry-Sun. Entry was made into the targeted zone of the Watton Canyon by a measured depth of 7126' (6837' TVD), at an angle of 88°. Vertical section at the entry point was 637'. Problems with lost circulation began shortly after entry to the target, initially with 100 barrels/hour lost to the formation. By 7800', mud losses were up to 300 barrels/hour. Drilling continued without returns within the Watton Canyon target zone to TD. The "Sweet Spot" was entered at a measured depth of 9424' (6722' TVD) and was penetrated for 600' (based upon very clean MWD gamma ray readings). At 10295' (6707' TVD), a fault of unknown displacement was encountered. Drilling was becoming increasingly difficult by this time and the decision was made to TD at 09:00 on December 8, 1994. Total measured depth was 10535', with an estimated TVD of 6700'.

The lateral leg trended on an azimuth of 215° (south-southwest) from the surface location for a total vertical section of 4034'. After the initial penetration of the Watton Canyon target zone, 3409' of lateral hole were cut, all within the target zone. The bottom hole location is estimated to be 3308.63' south and 2321.04' west of the surface location, in the southwest of the southwest quarter of Section 19, Township 5 North, Range 8 East.

## GEOLOGICAL EVALUATION:

Geological evaluation of the #19-1H began at 3800', just above the Stump Formation. A two-man "combination" geologic consultant/mudlogging crew was provided by Sunburst Consulting.

No shows were recorded prior to entering the Watton Canyon target zone. Background gas was consistently 3-4 units prior to losing returns around 7200'. Trip gases and connection gases were minimal, when present. Only sporadic gas readings (maximum of 11 units) were obtained in the target zone due to the lost circulation problems.

No shows were noted in the samples seen in the lateral hole. Samples primarily consisted of a chalky, cryptocrystalline to microcrystalline limestone with poor visible porosity. After 7656', the lack of returns precluded examination of any samples.

The lost circulation problems encountered while drilling the #19-1H points to a highly fractured and possibly depleted Watton Canyon zone. An estimated 70,000+ barrels of drilling fluid (water) were lost while drilling the lateral leg.

Formation dip was estimated to be approximately 4-5° [up relative to the well pad] during the early portions of the lateral. The apparent dip decreased to 2-2.5° [up dip] toward the end of the lateral. Dip interpretations were made by UPRC personnel on the True-Stratigraphic Dip workstation.

## CONCLUSIONS:

- 1.) The UPRC Cave Creek #19-1H was an engineering success. The well successfully penetrated the fractured and faulted Watton Canyon target zone and drilled 3409' of lateral hole within the target.
- 2.) The Watton Canyon target zone appears to be highly fractured, based upon the lost circulation problems encountered while drilling the #19-1H. An estimated 70,000 barrels of drilling fluid were lost while drilling the target zone.
- 3.) Due to the lack of returns, the geologic evaluation of the Watton Canyon is limited. Obviously, a highly permeable reservoir condition exists, but only a completion attempt will reveal the ultimate potential of the well.

Respectfully submitted,

Shawn Lacey  
Sunburst Consulting

# WELL DATA SUMMARY

**OPERATOR:** UNION PACIFIC RESOURCES CORPORATION

**ADDRESS:** 801 Cherry Street, Suite 3706  
Ft. Worth, Texas 76102

**WELL NAME:** UPRR Cave Creek #19-1H

**SURFACE LOCATION:** 1320' FNL, 1980' FEL  
W NE Section 19, T5N, R8E

**BOTTOM HOLE LOCATION:** estimated 3308.63' S & 2321.04' W of surface location  
SW SW Section 19, T5N, R8E

**COUNTY:** Summit

**STATE:** Utah

**FIELD:** Cave Creek

**BASIN:** Overthrust Belt

**WELL TYPE:** Horizontal Development (Watton Canyon)

**PERMIT #:** API #43-043-30309

**BASIS OF PROSPECT:** Well control

**ELEVATION:** **GL:** 7182' **SUB:** 23.5' **KB:** 7205.5'

**SPUD DATE:** November 4, 1994

**TOTAL DEPTH/DATE:** 10535'(driller), 09:00am MST December 8, 1994

**BOTTOM HOLE DATA:** Kick-off Point: 6565'  
Vertical Section: 4034.41'  
Drift of Azimuth: 215° (south-southwest)  
Angle of Inclination: 87.7° to 95.9° in lateral  
Lateral Hole: 3409' after entering the Watton Canyon target

**TOTAL DRILLING DAYS:** 35                      **TOTAL DRILLING HOURS:** 512.25

**STATUS OF WELL:**                      To be completed in the Watton Canyon

**CONTRACTOR:**                              Cardinal Drilling Rig #16E

**TOOLPUSHER:**                              Leo Roller, Garney Rosendahl

**FIELD SUPERVISORS:**                      Bob Williams, Bob Austin

**MUD ENGINEERS:**                              Baker Hughes Inteq; Allan Curie

**MUD TYPE:**                                      Salt Gel, Fresh Water

**WELLSITE GEOLOGIST:**                      Shawn Lacey of Sunburst Consulting

**PROSPECT GEOLOGIST:**                      Ross Matthews, Steve Walker of UPRC

**MUDLOGGERS:**                                  Shawn Lacey, Matt Drake of Sunburst Consulting

**ROCK SAMPLING:**                              30' caught by the rig crews from 3800' to 6520'  
10' caught by the mudloggers from 6520' to 7650'  
No returns from 7650' to 10535'

**DIRECTIONAL COMPANY:** Delmar Directional

**DRILLER:**    Charles Hodges

**MWD SERVICES:**                              Sperry-Sun Drilling Services

**PERSONNEL:**                                  Tom Saims, Joe Johnson

**HOLE SIZE:**                                      14.75" from surface to 1000'  
9.875" from 1000' to 6520'  
6.5" from 6520' to 10535'

**CASING:**    10.75" surface casing set at 1000'  
7.625" intermediate casing set at 6520'  
Pre-perforated liner to be set to total depth

**DRILL STEM TESTS:**                          None

**ELECTRIC LOGGING PROGRAM:**                      1) Dual Laterlog  
from 6515' to 900'  
  
CNL/CDL/GR  
from 6515' to 5300'

**LOG TOPS:**

Stump @ 3871'; Preuss @ 4199'; Preuss Salt @ 5416'; Base Salt @ 5876'; Giraffe Creek @ 5912'; Leeds Creek @ 6401'

**LOGGING COMPANY:** Western Atlas

Union Pacific Resources  
UPRR Cave Creek #19-1H

## FORMATION / MARKER TOPS

GL: 7182' Sub: 23.5'KB: 7205.5'

| <u>Formation/Zone</u> | <u>TVD Prognosis</u> | <u>Measured Depth Estimate</u> | <u>E-Log</u> | <u>True Vertical Depth</u> | <u>TVD Datum</u> | <u>Thick</u> |
|-----------------------|----------------------|--------------------------------|--------------|----------------------------|------------------|--------------|
| Stump                 | 3974'                | 3980'                          | 3871'        | 3869'                      | +3336.5'         | 328'         |
| Preuss                | 4271'                | 4390'                          | 4199'        | 4197'                      | +3008.5'         | 1213'        |
| Preuss Salt           | 5231'                | 5426'                          | 5416'        | 5410'                      | +1795.5'         | 459'         |
| Base Salt             | 5533'                | 5868'                          | 5876'        | 5869'                      | +1336.5'         | 36'          |
| Giraffe Creek         | 5563'                | 5926'                          | 5912'        | 5905'                      | +1300.5'         | 489'         |
| Leeds Creek           | 6084'                | 6410'                          | 6401'        | 6394'                      | +811.5'          | 362'         |

| <u>Formation/Zone</u> | <u>TVD Prognosis</u> | <u>MD Estimate</u> | <u>MWD Gamma Ray</u> | <u>True Vertical Depth</u> | <u>TVD Datum</u> |
|-----------------------|----------------------|--------------------|----------------------|----------------------------|------------------|
| Watton Canyon         | 6439'                | 6792'              | 6792'                | 6756'                      | +449.5'          |
| Target Zone           | 6592'                | 7126'              | 7126'                | 6837'                      | +368.5'          |
| "Sweet Spot"          | -----                | 9424'              | 9424'                | 6722'                      | +483.5'          |

## LITHOLOGY

|               |                   |  |
|---------------|-------------------|--|
| 3800' - 3830' | <u>Shale:</u>     | (60%), brown to red brown, trace brown orange, earthy, silty, calcareous   |
|               | <u>Siltstone:</u> | (40%), grading to shale, red brown to brown orange, trace red orange, arenaceous   |
| 3830' - 3860' | <u>Sandstone:</u> | (60%), clear, fine to coarse grained, subangular, poorly to fairly sorted, quartzitic, clean, no show  |
|               | <u>Siltstone:</u> | (40%)  |
| 3860' - 3950' | <u>Sandstone:</u> | (70%), as above, clear to brown orange in part, argillaceous matrix in part, occasionally very fine grained, generally fine to occasionally medium grained, subround to subangular, moderately to fairly sorted            |
|               | <u>Siltstone:</u> | (30%), generally red brown, arenaceous, blocky, calcareous   |
| 3950' - 4010' | <u>Shale:</u>     | (80%), brown to red brown, silty, earthy, subblocky, calcareous  |
|               | <u>Siltstone:</u> | (20%)  |
| 4010' - 4070' | <u>Sandstone:</u> | (50%), clear to brown orange and red orange, very fine to medium grained, predominantly subangular, occasionally subrounded, moderately to fairly sorted, friable to firm, unconsolidated in part, generally poor porosity |
|               | <u>Siltstone:</u> | (30%)  |
|               | <u>Shale:</u>     | (20%)  |
| 4070' - 4130' | <u>Siltstone:</u> | (80%), red orange to red brown, rust, occasional brown; earthy, arenaceous, calcareous   |
|               | <u>Shale:</u>     | (20%), as above  |
| 4130' - 4190' | <u>Shale:</u>     | (80%), brown orange to red brown and brown, earthy, silty, blocky to subblocky, calcareous   |
|               | <u>Siltstone:</u> | (20%)  |
| 4190' - 4220' | <u>Sandstone:</u> | (50%), clear to red brown, very fine to medium grained, generally fine grained, subangular, moderately sorted, calcareous, firm to friable, tight  |
|               | <u>Siltstone:</u> | (50%)  |

|               |                   |   |
|---------------|-------------------|---|
| 4220' - 4250' | <u>Shale:</u>     | (100%), as above, with siltstone, abundant sandstone  |
| 4250' - 4280' | <u>Shale:</u>     | (80%), possibly becoming more red brown to rust, earthy, slightly silty, subplaty to blocky   |
|               | <u>Siltstone:</u> | (20%)   |
| 4280' - 4340' | <u>Siltstone:</u> | (100%), brown, brown orange, earthy, arenaceous, blocky   |
| 4340' - 4400' | <u>Sandstone:</u> | (50%), clear to red brown, fine grained, subangular to subrounded, moderately well to fairly sorted, predominantly firm, argillaceous, poor porosity, increasingly unconsolidated, clayey   |
|               | <u>Siltstone:</u> | (30%)   |
|               | <u>Shale:</u>     | (20%), as above   |
| 4400' - 4460' | <u>Shale:</u>     | (60%), brown to slightly red brown, earthy, silty, subblocky to blocky, calcareous, firm, slightly clayey   |
|               | <u>Siltstone:</u> | (40%)   |
| 4460' - 4520' | <u>Siltstone:</u> | (100%), brown to red brown, arenaceous, calcareous, firm  |
| 4520' - 4550' | <u>Sandstone:</u> | (60%), clear to light orange and red orange, occasional brown orange, very fine to coarse grained, generally very fine to fine grained, subangular, moderately to fairly sorted, friable, poor to fair porosity, slightly calcareous, no show |
|               | <u>Siltstone:</u> | (40%)   |
| 4550' - 4610' | <u>Shale:</u>     | (70%), brown to red brown, earthy, clayey, silty, subblocky, calcareous   |
|               | <u>Siltstone:</u> | (20%), brown to red brown, arenaceous in part, clayey, blocky   |
|               | <u>Sandstone:</u> | (10%)   |
| 4610' - 4670' | <u>Siltstone:</u> | (50%), generally brown, arenaceous in part, clayey in part, calcareous, firm  |
|               | <u>Shale:</u>     | (40%), light to medium brown, trace red brown and brown orange, earthy, silty, calcareous in part, subblocky to blocky  |
|               | <u>Sandstone:</u> | (10%)   |
| 4670' - 4700' | No sample         |   |

|               |                   |  |
|---------------|-------------------|--|
| 4700' - 4730' | <u>Shale:</u>     | (60%), as above  |
|               | <u>Siltstone:</u> | (40%), red brown to brown, earthy, calcareous, slightly clayey   |
|               | <u>Sandstone:</u> | (presence), very fine to medium grained, unconsolidated  |
| 4730' - 4820' | <u>Shale:</u>     | (80%), becoming more red brown, occasional brick red, firm, silty, calcareous, blocky  |
|               | <u>Siltstone:</u> | (20%)  |
| 4820' - 4880' | <u>Shale:</u>     | (40%), as above  |
|               | <u>Siltstone:</u> | (40%), red brown, arenaceous, calcareous, slightly clayey, firm  |
|               | <u>Sandstone:</u> | (20%), clear to red brown, very fine to medium grained, subrounded to subangular, argillaceous in part, moderately sorted, friable, poor to fair porosity, no show                 |
| 4880' - 4910' | <u>Siltstone:</u> | (60%), as above  |
|               | <u>Shale:</u>     | (30%), red brown to brown, occasional brown orange, earthy, silty  |
|               | <u>Sandstone:</u> | (10%), as above  |
| 4910' - 4970' | <u>Limestone:</u> | (trace to presence), beige to light grey brown, cryptocrystalline, dense, tight  |
|               | <u>Siltstone:</u> | (70%), red brown to brown and brown orange, some arenaceous, argillaceous in part, calcareous, firm, subblocky to blocky   |
|               | <u>Shale:</u>     | (20%), as above  |
|               | <u>Sandstone:</u> | (10%), as above  |
| 4970' - 5030' | <u>Limestone:</u> | (trace), as above  |
|               | <u>Shale:</u>     | (20%), as above  |
|               | <u>Sandstone:</u> | trace  |
|               | <u>Siltstone:</u> | (80%), as above, occasional clay texture   |
| 5030' - 5060' | <u>Sandstone:</u> | (20%), clear to light red brown, red orange in part, very fine to medium grained, friable to unconsolidated, moderately to fairly sorted, argillaceous, tight, slightly calcareous |
|               | <u>Siltstone:</u> | (50%), as above  |
|               | <u>Shale:</u>     | (30%), red brown to brown, earthy, arenaceous, blocky, calcareous  |
| 5060' - 5090' | <u>Sandstone:</u> | (10%), as above  |
|               | <u>Shale:</u>     | (20%), as above  |

|               |  |  |
|---------------|--|--|
|               | <u>Siltstone:</u>                        | (70%), red brown to brown, arenaceous, calcareous, scattered imbedded sandstone grains, blocky, firm   |
| 5090' - 5120' | <u>Shale:</u>                            | (40%), light to medium red brown, silty, earthy, calcareous, subblocky   |
|               | <u>Sandstone:</u>                        | (presence), as above   |
|               | <u>Siltstone:</u>                        | (60%), as above  |
| 5120' - 5150' | <u>Shale:</u>                            | (80%), red brown and brown orange, earthy, occasionally silty, calcareous, subplaty to blocky  |
|               | <u>Siltstone:</u>                        | (20%), red orange, arenaceous in part, calcareous, blocky  |
| 5150' - 5180' | No sample                                |  |
| 5180' - 5240' | <u>Shale:</u>                            | (70%), as above  |
|               | <u>Siltstone:</u>                        | (30%), as above  |
| 5240' - 5300' | <i>Abundant metal shavings in sample</i> |  |
|               | <u>Shale:</u>                            | (60%), brown to occasional red brown, earthy, silty, calcareous, slightly clayey, subblocky to blocky  |
|               | <u>Siltstone:</u>                        | (40%), gradational with shale; brown to red brown, occasional sandstone grains in matrix, firm, calcareous, blocky   |
| 5300' - 5330' | Sloughing redbeds                        |  |
|               | <u>Siltstone:</u>                        | (100%), brown, occasional red brown, earthy, arenaceous, calcareous, blocky  |
| 5330' - 5360' | <u>Sandstone:</u>                        | (20%), light red orange, very fine to medium grained, rare loose coarse grains, clear in part, subangular to subrounded, argillaceous clay in matrix, moderately calcareous, friable to firm, generally poor porosity, no show |
|               | <u>Siltstone:</u>                        | (40%), as above, red orange to brown orange in part  |
|               | <u>Shale:</u>                            | (40%), red brown to occasional brown, brown orange in part, earthy, silty, calcareous  |
| 5360' - 5420' | <u>Shale:</u>                            | (80%), as above  |
|               | <u>Siltstone:</u>                        | (20%), brown orange, occasional light red brown to light red orange, occasional sandstone grains in matrix, some arenaceous, argillaceous in part, calcareous  |
|               | <u>Sandstone:</u>                        | (presence), as above   |

|               |                   |  |
|---------------|-------------------|--|
| 5420' - 5450' | <u>Siltstone:</u> | (50%), red brown to slightly red orange, arenaceous, calcareous, blocky  |
|               | <u>Sandstone:</u> | (20%), clear to red orange, very fine to coarse grains, generally very fine to fine grains, moderately to poorly sorted, friable, slightly calcareous, clay-filled in part |
|               | <u>Shale:</u>     | (30%), red brown, earthy, silty, calcareous, sub-blocky to blocky  |
| 5450' - 5480' | <u>Shale:</u>     | (70%), as above  |
|               | <u>Siltstone:</u> | (30%)  |
|               | <u>Sandstone:</u> | presence   |
| 5480' - 5510' | <u>Siltstone:</u> | (70%), red brown, slightly red orange in part, arenaceous, calcareous  |
|               | <u>Shale:</u>     | (20%), red brown, trace brown, very silty, earthy, calcareous, blocky, firm  |
|               | <u>Sandstone:</u> | (10%), clear to red brown, predominantly very fine to fine grained, subrounded, occasionally subangular, moderately sorted, friable to unconsolidated, poor porosity       |
| 5510' - 5540' | No sample         |  |
| 5540' - 5600' | <u>Shale:</u>     | (40%), as above  |
|               | <u>Siltstone:</u> | (40%), red brown to brown orange, occasional light red orange, arenaceous, calcareous, blocky  |
|               | <u>Sandstone:</u> | (20%), as above  |
| 5600' - 5630' | <u>Limestone:</u> | (presence), cream to buff, occasional very light grey, cryptocrystalline, dense, mudstone texture, tight, chalky in part, no show  |
|               | <u>Sandstone:</u> | (10%), as above  |
|               | <u>Siltstone:</u> | (40%), as above  |
|               | <u>Shale:</u>     | (50%), red brown, silty, anhydritic, earthy, calcareous, subblocky; occasional metal shavings  |
| 5630' - 5660' | <u>Limestone:</u> | (trace), as above  |
|               | <u>Sandstone:</u> | (20%), pink to orange and clear, very fine to medium grained, moderately sorted, firm, tight   |
|               | <u>Siltstone:</u> | (60%)  |
|               | <u>Shale:</u>     | (20%)  |
| 5660' - 5690' | <u>Sandstone:</u> | (40%), very fine to fine grained, clear to brown orange, subangular to subrounded, occasional red, occasional angular cherty fragments, fairly sorted,                     |

|               |                   |   |
|---------------|-------------------|---|
|               | <u>Siltstone:</u> | unconsolidated<br>(50%), red brown to red orange, arenaceous, calcareous, firm  |
|               | <u>Shale:</u>     | (10%)   |
| 5690' - 5750' | <u>Shale:</u>     | (50%), red brown, earthy, calcareous, blocky, silty   |
|               | <u>Siltstone:</u> | (40%), as above   |
|               | <u>Sandstone:</u> | (10%), as above, occasionally moderately loose to coarse grains   |
|               |                   | <i>Abundant metal shavings</i>  |
|               | <u>Limestone:</u> | trace, as above   |
| 5750' - 5810' | <u>Shale:</u>     | (30%), as above   |
|               | <u>Sandstone:</u> | (30%), clear, red orange in part, very fine to coarse grains, occasionally cherty, subangular, fairly sorted, friable to unconsolidated, clay in part, poor to occasionally fair porosity |
|               | <u>Siltstone:</u> | (30%), brown orange to red brown, arenaceous, calcareous, firm, subblocky to blocky   |
|               |                   | <i>Metal shavings (10%)</i>   |
| 5810' - 5870' | <u>Sandstone:</u> | (10%), as above   |
|               | <u>Shale:</u>     | (40%), red brown, earthy, silty, calcareous   |
|               | <u>Siltstone:</u> | (40%), as above   |
|               |                   | <i>Metal shavings (10%)</i>   |
| 5870' - 5900' | <u>Chert:</u>     | (20%), clear to light grey, occasionally slightly orange, brittle   |
|               | <u>Sandstone:</u> | (presence)  |
|               | <u>Siltstone:</u> | (40%), red brown to rust, arenaceous, calcareous, slightly anhydritic   |
|               | <u>Shale:</u>     | (40%), as above   |
| 5900' - 5930' | <u>Limestone:</u> | (40%), light to medium grey, argillaceous, cryptocrystalline, firm, occasional dense, tight, no show  |
|               | <u>Siltstone:</u> | (20%)   |
|               | <u>Shale:</u>     | (40%), occasionally grades to marlstone, light to medium grey and light red brown, occasional light brown, earthy, blocky, very calcareous  |
| 5930' - 5960' | <u>Limestone:</u> | (70%), as above   |
|               | <u>Siltstone:</u> | (20%), red brown, some arenaceous, argillaceous in part, very calcareous, blocky  |
|               | <u>Shale:</u>     | (10%), grey, earthy, marly  |

|               |                                 |   |
|---------------|---------------------------------|---|
| 5960' - 6020' | <u>Limestone:</u>               | (100%), light to medium grey, occasional light grey brown, increasingly well indurated, cryptocrystalline, argillaceous, dense in part, tight                                   |
| 6020' - 6080' | <u>Limestone:</u>               | becoming light to very grey and very light grey brown, trace buff, crypto- to very fine crystalline, trace microsucrosic, moderately dense, argillaceous, no show               |
| 6080' - 6110' | <u>Limestone:</u>               | generally light to medium grey, crypto to microcrystalline, argillaceous, trace dense, tight  |
| 6110' - 6140' | No sample                       |   |
| 6140' - 6200' | <u>Limestone:</u>               | light to medium grey, predominantly cryptocrystalline, argillaceous/shaly appearance, poor porosity   |
| 6200' - 6290' | <u>Limestone:</u>               | light to medium grey, crypto to microcrystalline, trace very fine crystalline, very argillaceous in part, occasional dense, generally tight, moderately well indurated, no show |
| 6290' - 6350' | <u>Limestone:</u>               | microcrystalline, occasional dense, very argillaceous in part, firm to hard   |
| 6350' - 6410' | <u>Shale:</u>                   | (20%), light grey, soft to firm, earthy, subblocky to blocky, very calcareous and marly   |
|               | <u>Limestone:</u>               | (80%), medium grey, crypto to very fine crystalline, generally argillaceous, some dense, tight  |
| 6410' - 6520' | <u>Limestone:</u>               | (100%), light to medium grey, crypto to very fine crystalline, dense in part, argillaceous in part, trace microsucrosic texture, firm to hard, tight, no show                   |
| <u>Note:</u>  | <i>Run intermediate casing.</i> |   |
| 6520' - 6530' | <u>Cement:</u>                  | (10%)   |
|               | <u>Limestone:</u>               | (90%), light to medium grey, micro to very fine crystalline, occasional cryptocrystalline, dense in part, generally argillaceous, firm to hard                                  |
| 6530' - 6550' | <u>Cement:</u>                  | (trace)   |
|               | <u>Limestone:</u>               | (100%), more light grey, medium grey in part, crypto to very fine crystalline, trace microsucrosic, poor intercrystalline porosity, no show                                     |

|               |                   |  |
|---------------|-------------------|--|
| 6550' - 6570' | <u>Limestone:</u> | (100%), light to medium grey, trace dark grey, crypto to microcrystalline, earthy in part, argillaceous, occasional dense, tight, trace condensate film  |
| 6570' - 6580' | <u>Limestone:</u> | (100%), light to medium grey, occasional dark grey, occasional slight grey brown, micro to fine crystalline, sucrosic in part, oolitic in part, poor to fair porosity, high gravity condensate film on sample  |
| 6580' - 6600' | <u>Limestone:</u> | light to medium grey, trace buff, micro to fine crystalline, occasional sucrosic texture, slightly dolomitic, poor to fair intercrystalline porosity, trace anhydrite, no show   |
| 6600' - 6630' | <u>Limestone:</u> | light to medium grey, slightly dark grey in part, trace buff, crypto to very fine crystalline, trace fine crystalline, trace sucrosic texture, occasionally microsucrosic, dense in part, some argillaceous, shaly appearance in part, occasional trace oolites, generally poor porosity |
| 6630' - 6680' | <u>Limestone:</u> | light to medium grey, crypto to very fine crystalline, dense in part, generally argillaceous, tight; predominantly mudstone  |
| 6680' - 6700' | <u>Limestone:</u> | becoming buff to grey brown in part, also light to medium grey, crypto to very fine crystalline, dense, slightly argillaceous in part, poor porosity, no show  |
| 6700' - 6730' | <u>Limestone:</u> | generally light to more medium grey, crypto to occasionally very fine crystalline, argillaceous appearance, some dense, slightly waxy texture, hard  |
| 6730' - 6750' | <u>Dolomite:</u>  | (30%), buff, light grey, very fine to fine crystalline, microsucrosic to sucrosic, occasionally fair intercrystalline porosity, very slight dull grey fluorescence in part, no show  |
|               | <u>Limestone:</u> | (70%), as above  |
| 6750' - 6760' | <u>Limestone:</u> | (100%), predominantly medium grey with slight grey brown cast, generally cryptocrystalline mudstone texture, dense, argillaceous in part, tight  |

|               |                   |  |
|---------------|-------------------|--|
| 6760' - 6780' | <u>Dolomite:</u>  | (20%), buff to light grey, very fine to fine crystalline, microsucrosic to sucrosic, slightly argillaceous, occasional fair porosity, trace fluorescence, no show            |
|               | <u>Limestone:</u> | (80%), as above  |
| 6780' - 6820' | <u>Limestone:</u> | (100%), generally medium grey and slight medium to dark grey brown coloration, cryptocrystalline, dense, tight   |
| 6820' - 6830' | <u>Limestone:</u> | (100%), buff and light to medium grey brown, crypto to very fine crystalline, firm to hard, dense in part, poor porosity   |
| 6830' - 6860' | <u>Limestone:</u> | (100%), predominantly medium grey brown, cryptocrystalline mudstone, dense, occasional slight waxy appearance, tight, no show  |
| 6860' - 6880' | <u>Limestone:</u> | buff to medium grey brown, cream in part, crypto to microcrystalline, trace very fine crystalline, dense, argillaceous in part, firm to hard, trace brittle                  |
| 6880' - 6900' | <u>Limestone:</u> | increase in medium grey brown cryptocrystalline, mudstone texture, argillaceous, dense in part, tight  |
| 6900' - 6930  | <u>Limestone:</u> | increase in buff to light grey brown and cream, generally clean appearance, crypto to microcrystalline, dense, hard  |
| 6930' - 6990' | <u>Limestone:</u> | light grey brown, buff in part, crypto to very fine crystalline, microsucrosic in part, slightly dolomitic, chalky in part, no show  |
| 6990' - 7040' | <u>Limestone:</u> | buff to light grey brown, light grey in part, occasionally slightly brown, crypto to microcrystalline, predominantly mudstone, trace microsucrosic, trace chalky             |
| 7040' - 7080' | <u>Limestone:</u> | more argillaceous, slightly chalky; light grey, occasional medium grey brown, occasional buff to light grey brown, crypto to microcrystalline, dense in part, tight, no show |
| 7080' - 7100' | <u>Limestone:</u> | becoming predominantly buff to very light grey brown, occasional light brown, clean, crypto to   |

|               |                              |   |
|---------------|------------------------------|---|
|               |                              | microcrystalline, dense, tight  |
| 7100' - 7130' | <u>Limestone:</u>            | buff to light grey brown, occasional light grey, slightly argillaceous, predominantly clean, crypto to microcrystalline mudstone, no show                                   |
| 7130' - 7170' | <u>Limestone:</u>            | buff to light grey brown and medium grey brown, clean, trace argillaceous, crypto to microcrystalline, dense  |
| 7170' - 7200' | <u>Limestone:</u>            | buff to light grey brown, occasional medium grey brown, generally clean appearance, crypto to microcrystalline, trace very fine crystalline, poor intercrystalline porosity |
| 7200' - 7240' | <u>Limestone:</u>            | buff to light grey brown, trace cream, crypto to microcrystalline, trace chalky, generally dense  |
| 7240' - 7280' | Lost circulation - no sample |   |
| 7280' - 7300' | <u>Limestone:</u>            | light to medium grey, buff to medium grey brown, crypto to microcrystalline, trace very fine crystalline, argillaceous in part, poor porosity                               |
| 7300' - 7340' | <u>Limestone:</u>            | becoming generally medium grey brown, grey in part, dense, cryptocrystalline, mudstone texture, tight   |
| 7340' - 7360' | <u>Limestone:</u>            | becoming buff to very light grey brown in part, chalky in part, crypto to microcrystalline, dense in part, no show  |
| 7360' - 7390' | <u>Limestone:</u>            | light grey to light grey brown, trace buff, increasingly chalky (flaky), argillaceous, crypto to microcrystalline; occasional dense, medium grey brown                      |
| 7390' - 7410' | <u>Limestone:</u>            | very light grey brown, trace buff, very chalky (flaky), crypto to very fine crystalline, trace microsucrosic, no show   |
| 7410' - 7430' | <u>Limestone:</u>            | very light brown to buff, crypto to microcrystalline, dense, poor porosity, LCM in sample   |
| 7430' - 7470' | <u>Limestone:</u>            | very light grey brown, trace light grey, crypto to microcrystalline, dense  |

|               |                   |  |
|---------------|-------------------|--|
| 7470' - 7520' | <u>Limestone:</u> | buff to very light grey brown, trace light brown, crypto to occasionally very fine crystalline, trace microsucrosic, trace calcite   |
| 7520' - 7580' | <u>Limestone:</u> | buff to very light brown, occasional light grey brown and very light grey, crypto to microcrystalline, dense, trace flaky argillaceous material, generally tight, no show; with calcite: clear to white, crystalline |
| 7580' - 7620' | <u>Limestone:</u> | buff to very light brown, light grey brown in part, crypto to very fine crystalline, trace microsucrosic, generally dense, no show   |
| 7620' - 7640' | <u>Limestone:</u> | buff to very light grey brown, chalky appearance in part, crypto to microcrystalline, trace very fine crystalline, slightly argillaceous, dense in part, tight   |
| 7640' - 7656' | <u>Limestone:</u> | very light grey brown, occasionally very light grey, crypto to very fine crystalline, slightly argillaceous, dense, poor porosity, no show   |

## LOGGING REPORT

Logging Company: Western Atlas

Engineer: D. Tribble

Witnessed by: Bob Williams

Date: 11/19/94

Driller's TD Depth: 6520'

Logger's TD Depth: 6512'

Driller's Casing Depth: 1000'

Logger's Casing Depth: 1000'

Elevation: GL: 7182' Sub: 23.5' KB: 7205.5'

Mud Conditions: Wt: 10.6 Vis: 39 WL: 11.0 Cl: 188K

BHT: 158°F Rmf: .042 Rmf @ BHT: 0.028 @ 158°F

Hole Condition: Good

Logging Time: Time Arrived: 08:00 MST 11/19/94 First Tool in Hole: 19:00 MST 11/19/94

Last Tool Out: 20:30 MST 11/19/94 Time of Departure: 00:00 11/20/94

Electric Logging  
Program:

1.) Dual Laterlog  
from TD to 900'

CNL/CDL/GR  
from TD to 5300'

Log Tops:

Stump @ 3871'; Pruess @ 4199'; Pruess Salt @ 5416'; Base Salt @ 5876'; Giraffe Creek @ 5912'; Leed Creek @ 6401'

Comments:

Logged for intermediate casing per Amoco's requirements.

12-10-1994

\*\*\* O-N-S-C-R-E-E-N \*\*\*  
SURVEY CALCULATION REPORT

UNION PACIFIC RESOURCES  
WELL- CAVE CREEK 19-1H  
SUMMIT COUNTY UTAH

Section Calculated on 218.46

Calculation Method: Minimum Curvature

| #   | Depth<br>(f) | Angle | Azimuth | TVD<br>(f) | N/S<br>(f) | E/W<br>(f) | Section<br>(f) | DogLeg<br>(/100) |
|-----|--------------|-------|---------|------------|------------|------------|----------------|------------------|
| 134 | 9445.00      | 90.40 | 214.10  | 6722.47    | -2404.11   | -1714.29   | 2948.75        | 2.44             |
| 135 | 9476.00      | 90.30 | 213.60  | 6722.29    | -2429.85   | -1731.56   | 2979.65        | 1.65             |
| 136 | 9508.00      | 90.40 | 211.70  | 6722.09    | -2456.79   | -1748.82   | 3011.49        | 5.95             |
| 137 | 9540.00      | 90.30 | 213.20  | 6721.89    | -2483.80   | -1765.99   | 3043.31        | 4.70             |
| 138 | 9572.00      | 90.20 | 213.60  | 6721.75    | -2510.51   | -1783.61   | 3075.18        | 1.29             |
| 139 | 9603.00      | 90.60 | 214.80  | 6721.54    | -2536.15   | -1801.03   | 3106.10        | 4.08             |
| 140 | 9635.00      | 91.10 | 212.90  | 6721.06    | -2562.72   | -1818.85   | 3137.99        | 6.14             |
| 141 | 9667.00      | 90.80 | 211.80  | 6720.53    | -2589.75   | -1835.97   | 3169.80        | 3.56             |
| 142 | 9699.00      | 91.00 | 212.50  | 6720.03    | -2616.84   | -1853.00   | 3201.60        | 2.27             |
| 143 | 9730.00      | 91.30 | 210.70  | 6719.41    | -2643.24   | -1869.24   | 3232.37        | 5.89             |
| 144 | 9762.00      | 91.50 | 212.60  | 6718.63    | -2670.47   | -1886.02   | 3264.14        | 5.97             |
| 145 | 9794.00      | 91.20 | 211.50  | 6717.87    | -2697.58   | -1903.00   | 3295.93        | 3.56             |
| 146 | 9826.00      | 91.30 | 213.20  | 6717.17    | -2724.61   | -1920.12   | 3327.74        | 5.32             |
| 147 | 9857.00      | 91.50 | 213.90  | 6716.42    | -2750.44   | -1937.25   | 3358.61        | 2.35             |
| 148 | 9889.00      | 91.20 | 210.60  | 6715.66    | -2777.49   | -1954.31   | 3390.41        | 10.35            |
| 149 | 9921.00      | 91.40 | 212.00  | 6714.94    | -2804.82   | -1970.93   | 3422.15        | 4.42             |
| 150 | 9953.00      | 91.00 | 211.70  | 6714.27    | -2832.00   | -1987.82   | 3453.93        | 1.56             |
| 151 | 9985.00      | 91.10 | 211.50  | 6713.68    | -2859.25   | -2004.58   | 3485.70        | 0.70             |
| 152 | 10017.00     | 90.90 | 213.10  | 6713.12    | -2886.29   | -2021.68   | 3517.51        | 5.04             |
| 153 | 10049.00     | 90.80 | 213.80  | 6712.65    | -2912.99   | -2039.31   | 3549.38        | 2.21             |
| 154 | 10080.00     | 91.10 | 214.60  | 6712.13    | -2938.62   | -2056.74   | 3580.29        | 2.76             |
| 155 | 10112.00     | 91.40 | 215.90  | 6711.44    | -2964.75   | -2075.20   | 3612.23        | 4.17             |
| 156 | 10144.00     | 91.30 | 216.00  | 6710.68    | -2990.65   | -2093.98   | 3644.19        | 0.44             |
| 157 | 10176.00     | 91.70 | 214.10  | 6709.84    | -3016.83   | -2112.35   | 3676.12        | 6.07             |
| 158 | 10207.00     | 91.40 | 213.90  | 6709.01    | -3042.53   | -2129.68   | 3707.02        | 1.16             |
| 159 | 10239.00     | 90.90 | 213.90  | 6708.36    | -3069.08   | -2147.52   | 3738.91        | 1.56             |
| 160 | 10271.00     | 90.70 | 213.40  | 6707.92    | -3095.72   | -2165.25   | 3770.80        | 1.68             |
| 161 | 10303.00     | 90.60 | 214.30  | 6707.55    | -3122.29   | -2183.08   | 3802.69        | 2.83             |
| 162 | 10335.00     | 91.10 | 215.00  | 6707.08    | -3148.61   | -2201.27   | 3834.62        | 2.69             |
| 163 | 10367.00     | 90.90 | 217.80  | 6706.52    | -3174.36   | -2220.25   | 3866.59        | 8.77             |
| 164 | 10399.00     | 91.60 | 216.80  | 6705.82    | -3199.81   | -2239.64   | 3898.57        | 3.81             |
| 165 | 10431.00     | 91.60 | 216.80  | 6704.93    | -3225.42   | -2258.80   | 3930.55        | 0.00             |
| 166 | 10462.00     | 92.80 | 216.80  | 6703.74    | -3250.23   | -2277.36   | 3961.51        | 3.87             |
| 167 | 10494.00     | 92.40 | 216.80  | 6702.29    | -3275.82   | -2296.51   | 3993.46        | 1.25             |
| Bit | 10535.00     | 92.40 | 216.80  | 6700.57    | -3308.63   | -2321.04   | 4034.41        | 0.00             |

Final Closure is 4041.57 feet on an Azimuth of 215.05

12-08-1994

\*\*\* O-N-S-C-R-E-E-N \*\*\*  
SURVEY CALCULATION REPORT

UNION PACIFIC RESOURCES  
WELL- CAVE CREEK 19-1H  
SUMMIT COUNTY UTAH

Section Calculated on 218.46

Calculation Method: Minimum Curvature

| #   | Depth<br>(f) | Angle | Azimuth | TVD<br>(f) | N/S<br>(f) | E/W<br>(f) | Section<br>(f) | DogLeg<br>(/100) |
|-----|--------------|-------|---------|------------|------------|------------|----------------|------------------|
| 120 | 9001.00      | 93.10 | 214.60  | 6742.96    | -2038.16   | -1463.90   | 2506.46        | 2.52             |
| 121 | 9033.00      | 93.50 | 214.80  | 6741.12    | -2064.42   | -1482.09   | 2538.34        | 1.40             |
| 122 | 9065.00      | 93.80 | 213.60  | 6739.08    | -2090.83   | -1500.04   | 2570.19        | 3.86             |
| 123 | 9097.00      | 94.40 | 215.90  | 6736.79    | -2117.06   | -1518.23   | 2602.04        | 7.41             |
| 124 | 9128.00      | 93.90 | 213.80  | 6734.55    | -2142.43   | -1535.89   | 2632.89        | 6.95             |
| 125 | 9160.00      | 93.00 | 214.30  | 6732.62    | -2168.90   | -1553.78   | 2664.74        | 3.22             |
| 126 | 9191.00      | 93.00 | 215.40  | 6731.00    | -2194.30   | -1571.47   | 2695.63        | 3.54             |
| 127 | 9223.00      | 92.50 | 215.20  | 6729.46    | -2220.39   | -1589.94   | 2727.55        | 1.68             |
| 128 | 9254.00      | 92.20 | 215.40  | 6728.19    | -2245.67   | -1607.84   | 2758.48        | 1.16             |
| 129 | 9286.00      | 92.20 | 212.90  | 6726.96    | -2272.13   | -1625.79   | 2790.36        | 7.81             |
| 130 | 9318.00      | 91.90 | 213.40  | 6725.82    | -2298.90   | -1643.27   | 2822.20        | 1.82             |
| 131 | 9349.00      | 92.00 | 212.50  | 6724.77    | -2324.90   | -1660.13   | 2853.04        | 2.92             |
| 132 | 9381.00      | 91.90 | 216.20  | 6723.68    | -2351.30   | -1678.17   | 2884.93        | 11.56            |
| 133 | 9413.00      | 91.00 | 213.60  | 6722.87    | -2377.53   | -1696.47   | 2916.86        | 8.60             |
| 134 | 9445.00      | 90.40 | 214.10  | 6722.47    | -2404.11   | -1714.29   | 2948.75        | 2.44             |
| 135 | 9476.00      | 90.30 | 213.60  | 6722.29    | -2429.85   | -1731.56   | 2979.65        | 1.65             |
| 136 | 9508.00      | 90.40 | 211.70  | 6722.09    | -2456.79   | -1748.82   | 3011.49        | 5.95             |
| 137 | 9540.00      | 90.30 | 213.20  | 6721.89    | -2483.80   | -1765.99   | 3043.31        | 4.70             |
| 138 | 9572.00      | 90.20 | 213.60  | 6721.75    | -2510.51   | -1783.61   | 3075.18        | 1.29             |
| 139 | 9603.00      | 90.60 | 214.80  | 6721.54    | -2536.15   | -1801.03   | 3106.10        | 4.08             |
| 140 | 9635.00      | 91.10 | 212.90  | 6721.06    | -2562.72   | -1818.85   | 3137.99        | 6.14             |
| 141 | 9667.00      | 90.80 | 211.80  | 6720.53    | -2589.75   | -1835.97   | 3169.80        | 3.56             |
| 142 | 9699.00      | 91.00 | 212.50  | 6720.03    | -2616.84   | -1853.00   | 3201.60        | 2.27             |
| 143 | 9730.00      | 91.30 | 210.70  | 6719.41    | -2643.24   | -1869.24   | 3232.37        | 5.89             |
| 144 | 9762.00      | 91.50 | 212.60  | 6718.63    | -2670.47   | -1886.02   | 3264.14        | 5.97             |
| 145 | 9794.00      | 91.20 | 211.50  | 6717.87    | -2697.58   | -1903.00   | 3295.93        | 3.56             |
| 146 | 9826.00      | 91.30 | 213.20  | 6717.17    | -2724.61   | -1920.12   | 3327.74        | 5.32             |
| 147 | 9857.00      | 91.50 | 213.90  | 6716.42    | -2750.44   | -1937.25   | 3358.61        | 2.35             |
| 148 | 9889.00      | 91.20 | 210.60  | 6715.66    | -2777.49   | -1954.31   | 3390.41        | 10.35            |
| 149 | 9921.00      | 91.40 | 216.00  | 6714.94    | -2804.22   | -1971.87   | 3422.26        | 16.88            |

Final Closure is 3428.11 feet on an Azimuth of 215.11

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\*\*\* O-N-S-C-R-E-E-N \*\*\*  
SURVEY CALCULATION REPORT

UNION PACIFIC RESOURCES  
WELL- CAVE CREEK 19-1H  
SUMMIT COUNTY UTAH

Section Calculated on 218.46

Calculation Method: Minimum Curvature

| #   | Depth<br>(f) | Angle | Azimuth | TVD<br>(f) | N/S<br>(f) | E/W<br>(f) | Section<br>(f) | DogLeg<br>(/100) |
|-----|--------------|-------|---------|------------|------------|------------|----------------|------------------|
| 80  | 7731.00      | 91.60 | 216.20  | 6831.46    | -1017.90   | -713.86    | 1241.06        | 1.25             |
| 81  | 7763.00      | 91.20 | 216.00  | 6830.68    | -1043.75   | -732.71    | 1273.02        | 1.40             |
| 82  | 7793.00      | 90.80 | 216.20  | 6830.16    | -1067.99   | -750.38    | 1302.99        | 1.49             |
| 83  | 7825.00      | 91.20 | 216.00  | 6829.60    | -1093.84   | -769.23    | 1334.96        | 1.40             |
| 84  | 7856.00      | 91.50 | 216.00  | 6828.87    | -1118.91   | -787.45    | 1365.92        | 0.97             |
| 85  | 7888.00      | 91.90 | 215.90  | 6827.92    | -1144.80   | -806.23    | 1397.88        | 1.29             |
| 86  | 7920.00      | 92.50 | 216.90  | 6826.69    | -1170.54   | -825.20    | 1429.83        | 3.64             |
| 87  | 7952.00      | 92.90 | 217.60  | 6825.18    | -1195.98   | -844.55    | 1461.79        | 2.52             |
| 88  | 7983.00      | 93.10 | 218.00  | 6823.56    | -1220.45   | -863.53    | 1492.75        | 1.44             |
| 89  | 8015.00      | 93.70 | 217.50  | 6821.66    | -1245.70   | -883.08    | 1524.69        | 2.44             |
| 90  | 8047.00      | 93.70 | 216.70  | 6819.60    | -1271.17   | -902.34    | 1556.61        | 2.49             |
| 91  | 8079.00      | 93.70 | 217.60  | 6817.53    | -1296.62   | -921.63    | 1588.54        | 2.81             |
| 92  | 8099.00      | 93.90 | 217.60  | 6816.21    | -1312.44   | -933.80    | 1608.49        | 1.00             |
| 93  | 8142.00      | 94.00 | 218.30  | 6813.24    | -1346.26   | -960.19    | 1651.39        | 1.64             |
| 94  | 8174.00      | 93.80 | 216.90  | 6811.07    | -1371.56   | -979.66    | 1683.31        | 4.41             |
| 95  | 8206.00      | 94.00 | 216.20  | 6808.89    | -1397.20   | -998.68    | 1715.21        | 2.27             |
| 96  | 8238.00      | 93.70 | 216.80  | 6806.74    | -1422.87   | -1017.67   | 1747.12        | 2.09             |
| 97  | 8270.00      | 94.10 | 216.80  | 6804.56    | -1448.43   | -1036.79   | 1779.04        | 1.25             |
| 98  | 8302.00      | 94.50 | 216.60  | 6802.17    | -1474.02   | -1055.86   | 1810.93        | 1.40             |
| 99  | 8334.00      | 94.60 | 217.10  | 6799.63    | -1499.54   | -1074.99   | 1842.82        | 1.59             |
| 100 | 8365.00      | 94.80 | 216.80  | 6797.09    | -1524.23   | -1093.57   | 1873.70        | 1.16             |
| 101 | 8397.00      | 95.20 | 217.30  | 6794.30    | -1549.68   | -1112.77   | 1905.57        | 2.00             |
| 102 | 8428.00      | 95.50 | 217.50  | 6791.41    | -1574.20   | -1131.52   | 1936.43        | 1.16             |
| 103 | 8460.00      | 95.60 | 217.10  | 6788.31    | -1599.53   | -1150.82   | 1968.27        | 1.28             |
| 104 | 8492.00      | 95.60 | 218.00  | 6785.19    | -1624.78   | -1170.23   | 2000.12        | 2.80             |
| 105 | 8524.00      | 95.50 | 216.60  | 6782.09    | -1650.12   | -1189.53   | 2031.96        | 4.37             |
| 106 | 8556.00      | 95.90 | 216.60  | 6778.92    | -1675.68   | -1208.51   | 2063.78        | 1.25             |
| 107 | 8586.00      | 95.80 | 215.50  | 6775.86    | -1699.81   | -1226.08   | 2093.60        | 3.66             |
| 108 | 8620.00      | 95.20 | 215.50  | 6772.60    | -1727.36   | -1245.73   | 2127.40        | 1.76             |
| 109 | 8651.00      | 95.30 | 218.00  | 6769.76    | -1752.09   | -1264.20   | 2158.25        | 8.04             |
| 110 | 8683.00      | 95.50 | 215.70  | 6766.75    | -1777.58   | -1283.30   | 2190.10        | 7.18             |
| 111 | 8715.00      | 95.20 | 215.90  | 6763.77    | -1803.42   | -1301.94   | 2221.92        | 1.12             |
| 112 | 8747.00      | 94.90 | 215.90  | 6760.95    | -1829.24   | -1320.63   | 2253.77        | 0.94             |
| 113 | 8779.00      | 95.00 | 215.70  | 6758.19    | -1855.10   | -1339.28   | 2285.61        | 0.70             |
| 114 | 8810.00      | 94.50 | 215.20  | 6755.62    | -1880.27   | -1357.20   | 2316.46        | 2.28             |
| 115 | 8842.00      | 93.80 | 214.60  | 6753.31    | -1906.44   | -1375.46   | 2348.32        | 2.88             |
| 116 | 8874.00      | 94.00 | 212.40  | 6751.13    | -1933.06   | -1393.08   | 2380.12        | 6.89             |
| 117 | 8906.00      | 94.20 | 214.80  | 6748.84    | -1959.65   | -1410.74   | 2411.92        | 7.51             |
| 118 | 8938.00      | 93.80 | 213.80  | 6746.61    | -1986.02   | -1428.73   | 2443.76        | 3.36             |
| 119 | 8969.00      | 93.20 | 213.80  | 6744.72    | -2011.73   | -1445.94   | 2474.60        | 1.94             |

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UNION PACIFIC RESOURCES  
WELL- CAVE CREEK 19-1H  
SUMMIT COUNTY UTAH

Section Calculated on 218.46

Calculation Method: Minimum Curvature

| #  | Depth<br>(f) | Angle | Azimuth | TVD<br>(f) | N/S<br>(f) | E/W<br>(f) | Section<br>(f) | DogLeg<br>(/100) |
|----|--------------|-------|---------|------------|------------|------------|----------------|------------------|
| 40 | 6073.00      | 1.10  | 230.60  | 6066.34    | -160.08    | -115.19    | 196.99         | 1.77             |
| 41 | 6167.00      | 2.00  | 203.20  | 6160.30    | -162.16    | -116.53    | 199.45         | 1.21             |
| 42 | 6261.00      | 2.70  | 199.50  | 6254.22    | -165.75    | -117.91    | 203.13         | 0.76             |
| 43 | 6353.00      | 3.50  | 199.70  | 6346.09    | -170.44    | -119.58    | 207.84         | 0.87             |
| 44 | 6420.00      | 4.10  | 200.90  | 6412.94    | -174.60    | -121.13    | 212.06         | 0.90             |
| 45 | 6480.00      | 4.30  | 200.60  | 6472.78    | -178.71    | -122.68    | 216.24         | 0.34             |
| 46 | 6557.00      | 4.10  | 204.60  | 6549.57    | -183.92    | -124.85    | 221.66         | 0.46             |
| 47 | 6589.00      | 8.70  | 211.00  | 6581.36    | -187.03    | -126.57    | 225.18         | 14.52            |
| 48 | 6620.00      | 14.90 | 210.80  | 6611.69    | -192.47    | -129.82    | 231.46         | 20.00            |
| 49 | 6652.00      | 21.60 | 208.50  | 6642.07    | -201.19    | -134.74    | 241.35         | 21.05            |
| 50 | 6684.00      | 27.60 | 211.50  | 6671.15    | -212.70    | -141.43    | 254.52         | 19.15            |
| 51 | 6715.00      | 33.90 | 213.20  | 6697.78    | -226.07    | -149.93    | 270.27         | 20.51            |
| 52 | 6747.00      | 41.00 | 210.40  | 6723.17    | -242.61    | -160.14    | 289.58         | 22.81            |
| 53 | 6778.00      | 47.10 | 209.40  | 6745.44    | -261.29    | -170.87    | 310.88         | 19.80            |
| 54 | 6809.00      | 53.10 | 212.20  | 6765.32    | -281.70    | -183.06    | 334.44         | 20.55            |
| 55 | 6841.00      | 59.20 | 209.70  | 6783.14    | -304.48    | -196.70    | 360.77         | 20.13            |
| 56 | 6872.00      | 66.00 | 215.00  | 6797.40    | -327.69    | -211.45    | 388.11         | 26.67            |
| 57 | 6904.00      | 72.50 | 213.90  | 6808.73    | -352.35    | -228.36    | 417.94         | 20.56            |
| 58 | 6936.00      | 77.70 | 212.20  | 6816.96    | -378.27    | -245.21    | 448.72         | 17.04            |
| 59 | 6968.00      | 79.90 | 215.90  | 6823.18    | -404.27    | -262.79    | 480.01         | 13.26            |
| 60 | 6999.00      | 81.90 | 214.30  | 6828.08    | -429.31    | -280.39    | 510.56         | 8.22             |
| 61 | 7031.00      | 84.60 | 214.10  | 6831.84    | -455.59    | -298.25    | 542.25         | 8.46             |
| 62 | 7063.00      | 86.60 | 216.40  | 6834.30    | -481.64    | -316.66    | 574.10         | 9.51             |
| 63 | 7094.00      | 87.80 | 218.20  | 6835.81    | -506.27    | -335.42    | 605.05         | 6.97             |
| 64 | 7126.00      | 88.00 | 217.50  | 6836.98    | -531.52    | -355.05    | 637.03         | 2.27             |
| 65 | 7158.00      | 87.80 | 219.00  | 6838.16    | -556.63    | -374.84    | 669.01         | 4.73             |
| 66 | 7189.00      | 87.70 | 216.90  | 6839.37    | -581.06    | -393.89    | 699.98         | 6.78             |
| 67 | 7221.00      | 87.80 | 217.10  | 6840.63    | -606.60    | -413.13    | 731.95         | 0.70             |
| 68 | 7253.00      | 87.90 | 217.10  | 6841.83    | -632.10    | -432.42    | 763.92         | 0.32             |
| 69 | 7284.00      | 87.70 | 215.50  | 6843.02    | -657.07    | -450.76    | 794.87         | 5.20             |
| 70 | 7316.00      | 87.80 | 215.70  | 6844.28    | -683.06    | -469.37    | 826.80         | 0.70             |
| 71 | 7348.00      | 88.00 | 214.60  | 6845.45    | -709.21    | -487.79    | 858.73         | 3.49             |
| 72 | 7380.00      | 89.70 | 215.90  | 6846.09    | -735.34    | -506.25    | 890.67         | 6.69             |
| 73 | 7411.00      | 92.00 | 215.90  | 6845.63    | -760.44    | -524.42    | 921.63         | 7.42             |
| 74 | 7443.00      | 92.10 | 216.90  | 6844.49    | -786.18    | -543.40    | 953.59         | 3.14             |
| 75 | 7507.00      | 92.70 | 218.30  | 6841.81    | -836.84    | -582.41    | 1017.53        | 2.38             |
| 76 | 7539.00      | 92.90 | 215.90  | 6840.24    | -862.33    | -601.69    | 1049.48        | 7.52             |
| 77 | 7571.00      | 93.10 | 215.90  | 6838.57    | -888.22    | -620.43    | 1081.40        | 0.63             |
| 78 | 7602.00      | 93.20 | 215.20  | 6836.87    | -913.40    | -638.43    | 1112.32        | 2.28             |
| 79 | 7699.00      | 92.00 | 216.20  | 6832.47    | -992.09    | -694.97    | 1209.10        | 1.61             |

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UNION PACIFIC RESOURCES  
WELL- CAVE CREEK 19-1H  
SUMMIT COUNTY UTAH

Section Calculated on 218.46

Calculation Method: Minimum Curvature

| #  | Depth<br>(f) | Angle | Azimuth | TVD<br>(f) | N/S<br>(f) | E/W<br>(f) | Section<br>(f) | DogLeg<br>(/100) |
|----|--------------|-------|---------|------------|------------|------------|----------------|------------------|
| 0  | 1010.00      | 0.00  | 0.00    | 1010.00    | 0.00       | 0.00       | 0.00           | 0.00             |
| 1  | 1033.00      | 1.60  | 196.20  | 1033.00    | -0.31      | -0.09      | 0.30           | 6.96             |
| 2  | 1506.00      | 2.00  | 181.90  | 1505.77    | -14.90     | -2.21      | 13.04          | 0.13             |
| 3  | 2283.00      | 2.20  | 187.20  | 2282.24    | -43.25     | -4.52      | 36.68          | 0.04             |
| 4  | 2566.00      | 1.90  | 182.60  | 2565.06    | -53.32     | -5.42      | 45.12          | 0.12             |
| 5  | 2850.00      | 1.70  | 205.00  | 2848.93    | -61.84     | -7.41      | 53.04          | 0.26             |
| 6  | 3133.00      | 1.70  | 236.60  | 3131.81    | -67.96     | -12.69     | 61.11          | 0.33             |
| 7  | 3417.00      | 1.80  | 237.00  | 3415.67    | -72.71     | -19.95     | 69.34          | 0.04             |
| 8  | 3700.00      | 1.90  | 244.20  | 3698.53    | -77.17     | -27.90     | 77.78          | 0.09             |
| 9  | 3984.00      | 2.10  | 233.50  | 3982.36    | -82.31     | -36.32     | 87.05          | 0.15             |
| 10 | 4267.00      | 4.00  | 220.60  | 4264.94    | -92.89     | -46.91     | 101.92         | 0.71             |
| 11 | 4551.00      | 5.60  | 222.00  | 4547.94    | -110.71    | -62.63     | 125.65         | 0.56             |
| 12 | 4631.00      | 6.00  | 223.10  | 4627.53    | -116.67    | -68.10     | 133.71         | 0.52             |
| 13 | 4663.00      | 6.40  | 219.20  | 4659.34    | -119.27    | -70.37     | 137.16         | 1.81             |
| 14 | 4695.00      | 6.40  | 218.20  | 4691.14    | -122.05    | -72.60     | 140.73         | 0.35             |
| 15 | 4726.00      | 6.50  | 217.50  | 4721.95    | -124.80    | -74.74     | 144.21         | 0.41             |
| 16 | 4758.00      | 6.50  | 218.00  | 4753.74    | -127.67    | -76.96     | 147.83         | 0.16             |
| 17 | 4790.00      | 6.50  | 218.00  | 4785.54    | -130.52    | -79.19     | 151.46         | 0.00             |
| 18 | 4821.00      | 6.60  | 215.90  | 4816.33    | -133.35    | -81.31     | 154.99         | 0.84             |
| 19 | 4853.00      | 6.70  | 215.90  | 4848.12    | -136.35    | -83.48     | 158.69         | 0.32             |
| 20 | 4883.00      | 6.40  | 212.90  | 4877.92    | -139.17    | -85.42     | 162.10         | 1.52             |
| 21 | 4914.00      | 5.70  | 209.70  | 4908.75    | -141.96    | -87.12     | 165.35         | 2.51             |
| 22 | 4944.00      | 5.50  | 211.00  | 4938.61    | -144.49    | -88.60     | 168.24         | 0.79             |
| 23 | 4976.00      | 5.00  | 207.40  | 4970.47    | -147.04    | -90.03     | 171.13         | 1.87             |
| 24 | 5007.00      | 4.50  | 206.40  | 5001.37    | -149.33    | -91.19     | 173.65         | 1.63             |
| 25 | 5039.00      | 4.10  | 205.20  | 5033.28    | -151.49    | -92.24     | 175.99         | 1.28             |
| 26 | 5069.00      | 4.00  | 200.80  | 5063.20    | -153.43    | -93.07     | 178.03         | 1.09             |
| 27 | 5100.00      | 3.60  | 206.20  | 5094.13    | -155.32    | -93.88     | 180.01         | 1.73             |
| 28 | 5141.00      | 3.00  | 210.10  | 5135.06    | -157.40    | -94.99     | 182.33         | 1.56             |
| 29 | 5172.00      | 2.90  | 212.20  | 5166.02    | -158.77    | -95.81     | 183.91         | 0.48             |
| 30 | 5204.00      | 2.90  | 215.00  | 5197.98    | -160.12    | -96.71     | 185.53         | 0.45             |
| 31 | 5235.00      | 2.70  | 220.10  | 5228.95    | -161.32    | -97.63     | 187.04         | 1.03             |
| 32 | 5329.00      | 3.10  | 229.90  | 5322.83    | -164.65    | -101.00    | 191.74         | 0.68             |
| 33 | 5423.00      | 3.30  | 233.10  | 5416.68    | -167.91    | -105.10    | 196.85         | 0.29             |
| 34 | 5515.00      | 2.10  | 248.40  | 5508.58    | -170.12    | -108.79    | 200.87         | 1.51             |
| 35 | 5610.00      | 1.10  | 281.60  | 5603.54    | -170.58    | -111.30    | 202.79         | 1.39             |
| 36 | 5703.00      | 1.40  | 316.80  | 5696.52    | -169.57    | -112.95    | 203.03         | 0.87             |
| 37 | 5798.00      | 2.30  | 0.40    | 5791.47    | -166.82    | -113.73    | 201.36         | 1.69             |
| 38 | 5890.00      | 2.50  | 3.50    | 5883.39    | -162.97    | -113.60    | 198.27         | 0.26             |
| 39 | 5983.00      | 1.10  | 323.60  | 5976.35    | -160.22    | -114.01    | 196.37         | 1.94             |

## BIT RECORD

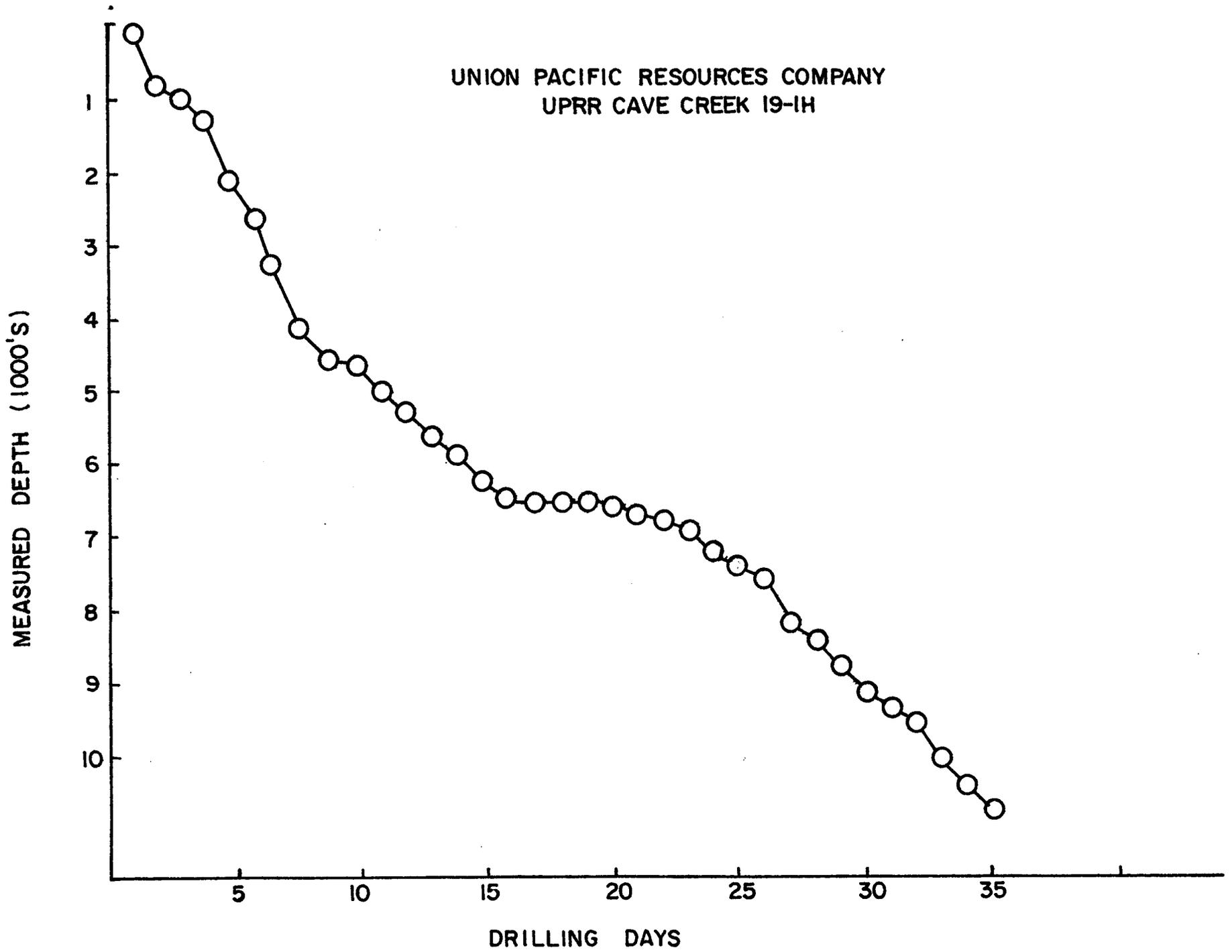
CONTRACTOR: Cardinal Drilling Rig #16E

SPUD DATE: November 3, 1994

T.D. DATE: December 8, 1994

| <u>BIT #</u> | <u>SIZE</u> | <u>MAKE/TYPE</u> | <u>JETS</u> | <u>SERIAL #</u> | <u>DEPTH</u> |             |              | <u>ACCUM.</u> |            |            | <u>VERT.</u> |           |            | <u>DULL COND.</u> |           |          |          |          |
|--------------|-------------|------------------|-------------|-----------------|--------------|-------------|--------------|---------------|------------|------------|--------------|-----------|------------|-------------------|-----------|----------|----------|----------|
|              |             |                  |             |                 | <u>OUT</u>   | <u>FEET</u> | <u>HOURS</u> | <u>HOURS</u>  | <u>WOB</u> | <u>RPM</u> | <u>DEV.</u>  | <u>PP</u> | <u>WT.</u> | <u>VIS</u>        | <u>WL</u> | <u>T</u> | <u>B</u> | <u>G</u> |
| 1            | 14.75"      | Reed Y11         | 18 18 18    | A35595          | 1000'        | 908'        | 19           | 19            | 25/30      | 120        | 1°           | 1500      | 8.3        | 26                | 20        | A        | 4        | 2        |
| 2            | 9.875"      | Reed HP11        | 16 16 16    | J96779          | 2644'        | 1644'       | 45.5         | 64.5          | 8/15       | 80/90      | 2°           | 1400      | 8.4        | 26                | NC        | A        | 2        | 2        |
| 3            | 9.875"      | Sec S82F         | 16 16 16    | 636069          | 4260'        | 1616'       | 43.5         | 108           | 25/40      | 100        | 4°           | 1800      | 10.3       | 38                | 30        | A        | 2        | 2        |
| 4            | 9.875"      | Hycal D571H      | 4-11's      | H37754          | 4681'        | 421'        | 15.5         | 123.5         | 2/6        | 195        | 5.75°        | 2100      | 10.3       | 38                | 22        | X        | X        | 1        |
| 5            | 9.875"      | Sec S84F         | 16 16 16    | 632775          | 5150'        | 469'        | 24.5         | 148           | 30/45      | 195        | 3°           | 2200      | 10.6       | 36                | 18        | LT       | 2        | 1        |
| 6            | 9.875"      | HTC ATJ33        | 16 16 16    | S14WD           | 5885'        | 736'        | 40.5         | 188.5         | 35/40      | 200        | 2.5°         | 1700      | 10.6       | 35                | 8         | 2        | 4        | 1        |
| 7            | 9.875"      | STC F3P          | 16 16 16    | LB0231          | 6520'        | 635'        | 52.25        | 240.75        | 35/40      | 200        | 4.3°         | 1700      | 10.6       | 40                | 10        | TD       | 4        | 1        |
| 8            | 6.25"       | STC FDT          | 16 16 16    | LB4249          | 6565'        | 45'         | 6            | 246.75        | 12/18      | 50/60      | 4.1°         | 500       | 8.3        | 26                | —         | A        | -        | 1        |
| 9            | 6.5"        | Sec S83F         | 15 15 15    | 634955          | 6936'        | 371'        | 34'          | 280.75        | 8/16       | 210        | 77.7°        | 2100      | 8.3        | 26                | —         | BT       | 1        | 1        |
| 10           | 6.5"        | Sec M343         | 15 15 15    | 31873           | 7702'        | 766'        | 65.5         | 346.25        | 8/16       | 260        | 92.0°        | 900       | 8.3        | 26                | —         | A        | X        | I        |
| 11           | 6.5"        | Hycal D571H      | 9 9 9       | 37541           | 9264'        | 1562'       | 97.5         | 443.75        | 10/35      | 260        | 93.0°        | 550       | 8.3        | 26                | —         | BT       | N        | I        |
| 12           | 6.5"        | Hycal D571H      | 9 9 9       | 37953           | 10535'       | 1271'       | 68.5         | 512.25        | 8/10       | 255        | 91.0°        | 550       | 8.3        | 26                | —         | -        | -        | -        |

UNION PACIFIC RESOURCES COMPANY  
UPRR CAVE CREEK 19-1H



**DAILY DRILLING ACTIVITY**

| <u>DAY</u> | <u>DATE</u> | <u>DEPTH</u> | <u>PROG</u> | <u>BIT</u> | <u>WOB</u> | <u>RPM</u> | <u>PP</u> | <u>WT</u> | <u>VIS</u> | <u>PV/YP</u> | <u>pH</u> | <u>WL</u> | <u>CL</u> | <u>SOL</u> | <u>ACTIVITY</u>       | <u>FORMATION</u> |
|------------|-------------|--------------|-------------|------------|------------|------------|-----------|-----------|------------|--------------|-----------|-----------|-----------|------------|-----------------------|------------------|
| 1          | 11/4/94     | 113'         | 113'        | 1          | 25/35      | 80/90      | 1500      | 8.3       | 28         | ---          | ---       | ---       | ---       | ---        | Drill surface hole    |                  |
| 2          | 11/5        | 867'         | 754'        | 1          | 25/35      | 80/90      | 1500      | 8.5       | 34         | 6/4          | 10.0      | 20        | 200       | ---        | Drill surface hole    |                  |
| 3          | 11/6        | 1000'        | 133'        | 1          | 25/30      | 90/120     | 1600      | 8.3       | 26         | 6/4          | 7.5       | 20        | 100       | ---        | Wait on cement        |                  |
| 4          | 11/7        | 1297'        | 297'        | 2          | 15/30      | 80/90      | 1200      | 8.3       | 26         | ---          | 10.0      | ---       | 250       | ---        | Trip f/BHA            |                  |
| 5          | 11/8        | 2067'        | 770'        | 2          | 8/15       | 80/100     | 1400      | 8.3       | 26         | ---          | 9.0       | ---       | 300       | ---        | Drilling ahead        | ASPEN            |
| 6          | 11/9        | 2620'        | 553'        | 2          | 8/16       | 80/100     | 1400      | 8.3       | 26         | ---          | 9.0       | ---       | 500       | ---        | Drilling ahead        | KELVIN           |
| 7          | 11/10       | 3266'        | 646'        | 3          | 20/25      | 90/100     | 1400      | 8.4       | 26         | ---          | 9.0       | ---       | 12000     | ---        | Drilling ahead        | KELVIN           |
| 8          | 11/11       | 4136'        | 870'        | 3          | 25/40      | 90/100     | 1500      | 10.3      | 34         | 12/8         | 8.5       | 30        | 12000     | ---        | Drilling ahead        | STUMP            |
| 9          | 11/12       | 4671'        | 535'        | 4          | 2/12       | 45/150     | 2100      | 10.3      | 38         | 14/10        | 8.5       | 25        | 13000     | ---        | Drilling ahead        | PREUSS           |
| 10         | 11/13       | 4681'        | 10'         | 5          | 4/6        | 45/150     | 2100      | 10.3      | 38         | 15/10        | 10.5      | 22        | 13000     | ---        | TIH w/dir. tools      | PREUSS           |
| 11         | 11/14       | 5000'        | 319'        | 5          | 30/35      | 45/150     | 2200      | 10.2      | 38         | 9/5          | 9.5       | 18        | 13500     | ---        | Drilling ahead        | PREUSS           |
| 12         | 11/15       | 5227'        | 227'        | 6          | 35/40      | 50/150     | 2200      | 10.6      | 36         | 9/3          | 10.5      | 10        | 188K      | ---        | Drilling ahead        | PREUSS           |
| 13         | 11/16       | 5650'        | 423'        | 6          | 35/40      | 50/150     | 2200      | 10.6      | 35         | 9/16         | 9.5       | 8         | 188K      | ---        | Drilling ahead        | PREUSS SALT      |
| 14         | 11/17       | 5945'        | 295'        | 7          | 35/40      | 50/150     | 1650      | 10.6      | 35         | 10/9         | 10.5      | 14        | 180K      | ---        | Drilling ahead        | GIRAFFE CREEK    |
| 15         | 11/18       | 6220'        | 275'        | 7          | 35/40      | 50/150     | 1700      | 10.5      | 36         | 12/9         | 9.5       | 10        | 188K      | ---        | Drilling ahead        | GIRAFFE CREEK    |
| 16         | 11/19       | 6460'        | 240'        | 7          | 35/40      | 50/150     | 1700      | 10.6      | 39         | 15/9         | 10.5      | 11        | 188K      | ---        | Short trip            | LEEDS CREEK      |
| 17         | 11/20       | 6520'        | 60'         | 7          | 35/40      | 50/150     | 1750      | 10.6      | 40         | 14/18        | 10.0      | 10        | 188K      | ---        | Laydown drill pipe    | LEEDS CREEK      |
| 18         | 11/21       | 6520'        | 0'          | ---        | ---        | ---        | ---       | 10.6      | 41         | 10/8         | 10.5      | 18        | 188K      | ---        | Cement intermed. csg. | LEEDS CREEK      |
| 19         | 11/22       | 6520'        | 0'          | ---        | ---        | ---        | ---       | ---       | ---        | ---          | ---       | ---       | ---       | ---        | Wait on cement        | LEEDS CREEK      |
| 20         | 11/23       | 6540'        | 20'         | 8          | 10/15      | 60         | 350       | 8.3       | 26         | ---          | 11.0      | ---       | 2300      | ---        | Drilling ahead        | LEEDS CREEK      |
| 21         | 11/24       | 6603'        | 63'         | 9          | 40         | 120        | 1100      | 8.3       | 26         | ---          | 11.0      | ---       | 4600      | ---        | Drill build section   | LEEDS CREEK      |
| 22         | 11/25       | 6879'        | 276'        | 9          | 15/22      | 210        | 1250      | 8.3       | 26         | ---          | 11.0      | ---       | 4000      | ---        | Drill build section   | LEEDS CREEK      |
| 23         | 11/26       | 6982'        | 103'        | 10         | 10/15      | 210        | 1200      | 8.3       | 26         | ---          | 11.0      | ---       | 4200      | ---        | Drilling ahead        | WATTON CANYON    |
| 24         | 11/27       | 7355'        | 373'        | 10         | 6/12       | 260        | 1450      | 8.7       | 26         | ---          | 11.0      | ---       | 73000     | ---        | Drill lateral hole    | WATTON CANYON    |
| 25         | 11/28       | 7577'        | 222'        | 10         | 6/12       | 260        | 1250      | 8.5       | 26         | ---          | 10.5      | ---       | 24000     | ---        | Drill lateral hole    | WATTON CANYON    |

| <u>DAY</u> | <u>DATE</u> | <u>DEPTH</u> | <u>PROG</u> | <u>BIT</u> | <u>WOB</u> | <u>RPM</u> | <u>PP</u> | <u>WT</u> | <u>VIS</u> | <u>PV/YP</u> | <u>pH</u> | <u>WL</u> | <u>CL</u> | <u>SOL</u> | <u>ACTIVITY</u>    | <u>FORMATION</u> |
|------------|-------------|--------------|-------------|------------|------------|------------|-----------|-----------|------------|--------------|-----------|-----------|-----------|------------|--------------------|------------------|
| 26         | 11/29       | 7733'        | 156'        | 11         | 20/50      | 210        | 1250      | 8.3       | 26         | ---          | 8.5       | ---       | 4400      | ---        | Drill lateral hole | WATTON CANYON    |
| 27         | 11/30       | 8091'        | 358'        | 11         | 6/12       | 255        | 700       | 8.3       | 26         | ---          | 8.5       | ---       | 4000      | ---        | Drill lateral hole | WATTON CANYON    |
| 28         | 12/1        | 8310'        | 219'        | 11         | 10         | 255        | 550       | 8.3       | 26         | ---          | 8.5       | ---       | 3000      | ---        | Drill lateral hole | WATTON CANYON    |
| 29         | 12/2        | 8746'        | 436'        | 11         | 10/12      | 255        | 500       | 8.3       | 26         | ---          | 8.0       | ---       | 1600      | ---        | Drill lateral hole | WATTON CANYON    |
| 30         | 12/3        | 9087'        | 341'        | 11         | 12/14      | 255        | 250/500   | 8.3       | 26         | ---          | 7.5       | ---       | 1400      | ---        | Drill lateral hole | WATTON CANYON    |
| 31         | 12/4        | 9264'        | 177'        | 11         | 14/16      | 255        | 250/500   | 8.3       | 26         | ---          | 7.5       | ---       | 1300      | ---        | Trip f/bit & motor | WATTON CANYON    |
| 32         | 12/5        | 9477'        | 213'        | 12         | 12/14      | 255        | 250/500   | 8.3       | 26         | ---          | 7.5       | ---       | 600       | ---        | Drill lateral hole | WATTON CANYON    |
| 33         | 12/6        | 9910'        | 433'        | 12         | 6/10       | 255        | 150/400   | 8.3       | 26         | ---          | 7.5       | ---       | 400       | ---        | Drill lateral hole | WATTON CANYON    |
| 34         | 12/7        | 10218'       | 308'        | 12         | 8/10       | 255        | 300/550   | 8.3       | 26         | ---          | 7.5       | ---       | 600       | ---        | Drill lateral hole | WATTON CANYON    |
| 35         | 12/8        | 10526'       | 308'        | 12         | 8/10       | 210/250    | 500/700   | 8.3       | 26         | ---          | 7.5       | ---       | 500       | ---        | Wiper trip         | WATTON CANYON    |
| 36         | 12/9        | 10535'       | 9'          | 12         | 8/10       | 210/250    | 500/700   | 8.3       | 26         | ---          | 7.5       | ---       | 500       | ---        |                    | WATTON CANYON    |

## **CHRONOLOGY**

11/4/94 (113') Spud; drill to 113'

11/5/94 (754') Drill surface hole to 754'

11/6/94 (1000') Drill to 1000'; TOH; run 23 joints K55, 10 3/4" casing; cement casing; wait on cement

11/7/94 (1297') Test wellhead; nipple up; test BOP's; nipple up flow line; TIH; drill cement; drill to 1297'; trip for BHA

11/8/94 (2067') TIH with reamer assembly; drill to 2067'

11/9/94 (2620') Drill to 2620'

11/10/94 (3266') Drill to 2644'; trip for bit #3; drill to 3266'

11/11/94 (4136') Drill to 4136'

11/12/94 (4671') Drill to 4260'; trip for mud motor and bit #4; drill to 4671'

11/13/94 (4681') Drill to 4681'; condition mud; wait on MWD; trip for bit and steering tools (to correct sudden angle drift); TIH

11/14/94 (5000') Orient tool; alternate slide and rotate to 4871'; trip out 7 3/4" mud motor; trip in 6 3/4" mud motor; drill to 5000'

11/15/94 (5227') Drill to 5150'; trip for bit #6 and 7 3/4" mud motor; salt up mud; drill to 5227'

11/16/94 (5650') Drill to 5650'

11/17/94 (5945') Drill to 5885'; trip for bit #7; drill to 5945'

11/18/94 (6220') Drill to 6110'; circulate and build volume (lost 30 barrels mud); drill to 6220'

11/19/94 (6460') Drill to 6460'; short trip to top of salt; circulate; short trip

11/20/94 (6520') Finish short trip; circulate one hour; drill to 6520'; TOH for logs; log with Western Atlas; TIH; circulate one hour; TOH - laying down drill pipe

11/21/94 (6520') Lay down drill pipe; run 52 joints 7 3/4" S125 casing and 99 joints 7 5/8" S95 casing; rig up Halliburton; cement with Halliburton

11/22/94 (6520') Cement with Halliburton; wait on cement

11/23/94 (6540') Run casing pressure tests; TIH; drill cement; drill to 6540'

11/24/94 (6603') Drill to 6565'; TOH for MWD; pick up 30 joints HWDP and monel; TIH; drill to 6603'

11/25/94 (6879') Drill build section to 6879'

11/26/94 (6982') Drill to 6936'; trip for bit #10; change out mud motor; TIH; drill to 6982'

11/27/94 (7355') Drill to 7221'; lost circulation (3000 barrels in 10 hours); drill ahead to 7355', losing 120 barrels/hour

11/28/94 (7577') Drill lateral hole to 7307'; lost circulation (500 barrels); drill ahead to 7577', losing 120 barrels/hour

11/29/94 (7733') Drill lateral hole to 7656' - lost all returns, drill to 7702'; TOH; change out directional tools; pick up restrictor sub; TIH; circulate one hour; drill with no returns to 7733'

11/30/94 (8091') Re-log 7669'-7733' with Sperry-Sun; drill lateral hole to 8091'

12/1/94 (8310') Drill lateral hole to 8145'; TOH; re-jet bit; TIH; drill to 8310'

12/2/94 (8746') Drill lateral hole to 8746'

12/3/94 (9087') Drill lateral hole to 9087'

12/4/94 (9264') Drill lateral hole to 9130'; short trip - 25 stands; drill to 9264'; trip for bit #12 and mud motor

12/5/94 (9477') TIH; drill lateral hole to 9271'; repack swivel; TOH for plugged bit; change out mud motor; TIH; drill; work tight hole @ 9367'; drill to 9477'

12/6/94 (9910') Drill lateral hole to 9910'

12/7/94 (10218') Drill lateral hole to 9957'; TOH for mud motor; TIH; drill to 10218'

12/8/94 (10526') Drill lateral hole to 10303'; short trip - 15 stands; drill to 10463'; work tight hole; drill to 10526'; tight connection; TOH for wiper run