

**OPERATOR CHANGE WORKSHEET**

**005**

**ROUTING**

|         |
|---------|
| 1. GLH  |
| 2. CDW  |
| 3. FILE |

Change of Operator (Well Sold)

Designation of Agent/Operator

**X Operator Name Change**

Merger

The operator of the well(s) listed below has changed, effective:

**2/1/2003**

|  |   |
|--|---|
| <b>FROM: (Old Operator):</b><br>N4235-Shenandoah Energy Inc<br>11002 E 17500 S<br>Vernal, UT 84078-8526<br>Phone: (435) 781-4341 | <b>TO: ( New Operator):</b><br>N2460-QEP Uinta Basin Inc<br>11002 E 17500 S<br>Vernal, UT 84078-8526<br>Phone: (435) 781-4341 |
|--|---|

**CA No.**

**Unit:**

**WELL(S)**

| NAME                     | SEC | TWN  | RNG  | API NO     | ENTITY NO | LEASE TYPE | WELL TYPE | WELL STATUS | Confid |
|--------------------------|-----|------|------|------------|-----------|------------|-----------|-------------|--------|
| RED WASH U 34-27C        | 27  | 070S | 240E | 4304735045 |           | Federal    | GW        | APD         | C      |
| WV EXT 1W-17-8-21        | 17  | 080S | 210E | 4304734927 |           | Federal    | GW        | APD         | C      |
| WV EXT 8W-17-8-21        | 17  | 080S | 210E | 4304734929 | 13792     | Federal    | GW        | DRL         | C      |
| N DUCK CREEK 9M-22-8-21  | 22  | 080S | 210E | 4304734901 |           | Federal    | GW        | APD         | C      |
| N DUCK CREEK 11M-22-8-21 | 22  | 080S | 210E | 4304734902 |           | Federal    | GW        | APD         | C      |
| NDC 10W-25-8-21          | 25  | 080S | 210E | 4304734923 |           | Federal    | GW        | APD         | C      |
| N DUCK CREEK 3M-27-8-21  | 27  | 080S | 210E | 4304734900 |           | Federal    | GW        | APD         | C      |
| NDC 11M-27-8-21          | 27  | 080S | 210E | 4304734952 | 13809     | Federal    | GW        | DRL         | C      |
| NDC 9M-27-8-21           | 27  | 080S | 210E | 4304734956 |           | Federal    | GW        | APD         | C      |
| NDC 1M-27-8-21           | 27  | 080S | 210E | 4304734957 |           | Federal    | GW        | APD         | C      |
| NDC 15M-28-8-21          | 28  | 080S | 210E | 4304734958 |           | Federal    | GW        | APD         | C      |
| GB 7W-36-8-21            | 36  | 080S | 210E | 4304734893 |           | State      | GW        | APD         |        |
| GB 3W-36-8-21            | 36  | 080S | 210E | 4304734894 | 13791     | State      | GW        | DRL         |        |
| GB 5W-36-8-21            | 36  | 080S | 210E | 4304734925 | 13808     | State      | GW        | DRL         |        |
| GB 4W-36-8-21            | 36  | 080S | 210E | 4304734926 |           | State      | GW        | APD         |        |
| WRU EIH 9W-26-8-22       | 26  | 080S | 220E | 4304735047 |           | Federal    | GW        | APD         | C      |
| NC 8M-32-8-22            | 32  | 080S | 220E | 4304734897 |           | State      | GW        | APD         |        |
| NC 3M-32-8-22            | 32  | 080S | 220E | 4304734899 |           | State      | GW        | APD         |        |
| NC 11M-32-8-22           | 32  | 080S | 220E | 4304735040 |           | State      | GW        | NEW         |        |
| WRU EIH 10W-35-8-22      | 35  | 080S | 220E | 4304735046 | 13544     | Federal    | GW        | DRL         | C      |

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/2/2003
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/2/2003
3. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/19/2003
4. Is the new operator registered in the State of Utah: YES Business Number: 5292864-0151
5. If NO, the operator was contacted on: \_\_\_\_\_

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 7/21/2003

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 7/21/2003

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

**DATA ENTRY:**

- 1. Changes entered in the **Oil and Gas Database** on: 9/11/2003
- 2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 9/11/2003
- 3. Bond information entered in RBDMS on: n/a
- 4. Fee wells attached to bond in RBDMS on: n/a

**STATE WELL(S) BOND VERIFICATION:**

1. State well(s) covered by Bond Number: 965-003-032

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: ESB000024

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 799446

**FEE WELL(S) BOND VERIFICATION:**

- 1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 965-003-033
- 2. The **FORMER** operator has requested a release of liability from their bond on: n/a  
The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

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## SEI (N4235) to QEP (N2460)

| well name               | Sec | T    | R    | api DOGM   | Entity | type    | stat |       |
|-------------------------|-----|------|------|------------|--------|---------|------|-------|
| WV 14W-4-8-21           | 04  | 080S | 210E | 4304734040 |        | Federal | GW   | APD C |
| WV 16W-4-8-21           | 04  | 080S | 210E | 4304734041 |        | Federal | GW   | APD C |
| WV 5W-36-7-21           | 36  | 070S | 210E | 4304734099 | 13807  | State   | GW   | DRL C |
| WV 16W-31-7-22          | 31  | 070S | 220E | 4304734257 |        | Federal | GW   | APD C |
| RED WASH 16W-19-7-22    | 19  | 070S | 220E | 4304734258 |        | Federal | GW   | APD C |
| WV 9W-16-7-21           | 16  | 070S | 210E | 4304734324 |        | State   | GW   | APD   |
| GH 6W-20-8-21           | 20  | 080S | 210E | 4304734331 |        | Federal | GW   | APD C |
| WV 10W-23-8-21          | 23  | 080S | 210E | 4304734341 | 13766  | Federal | GW   | PA C  |
| WV 11W-23-8-21          | 23  | 080S | 210E | 4304734342 |        | Federal | GW   | APD C |
| WV 13W-23-8-21          | 23  | 080S | 210E | 4304734344 |        | Federal | GW   | APD C |
| WV 14W-23-8-21          | 23  | 080S | 210E | 4304734345 |        | Federal | GW   | APD C |
| WV 15W-23-8-21          | 23  | 080S | 210E | 4304734346 |        | Federal | GW   | APD C |
| WV 7W-31-7-22           | 31  | 070S | 220E | 4304734379 |        | Federal | GW   | APD C |
| WV 9W-30-7-22           | 30  | 070S | 220E | 4304734381 |        | Federal | GW   | APD C |
| WV 10W-25-7-21          | 25  | 070S | 210E | 4304734382 |        | Federal | GW   | APD C |
| WV 10W-26-7-21          | 26  | 070S | 210E | 4304734383 |        | Federal | GW   | APD C |
| WV 14W-30-7-22          | 30  | 070S | 220E | 4304734384 | 13750  | Federal | GW   | DRL C |
| WV 15W-27-7-21          | 27  | 070S | 210E | 4304734385 |        | Federal | GW   | APD C |
| GH 8W-20-8-21           | 20  | 080S | 210E | 4304734393 |        | Federal | GW   | APD C |
| SU PURDY 3W-30-7-22     | 30  | 070S | 220E | 4304734394 |        | Federal | GW   | APD C |
| STIRRUP UNIT 10G-5-8-22 | 05  | 080S | 220E | 4304734396 |        | Federal | OW   | APD C |
| WV 10W-35-7-21          | 35  | 070S | 210E | 4304734397 |        | Federal | GW   | APD C |
| WV 16G-6-8-22           | 06  | 080S | 220E | 4304734404 |        | Federal | OW   | APD C |
| SU 4W-26-7-21           | 26  | 070S | 210E | 4304734408 |        | Federal | GW   | APD C |
| STIRRUP U 12W-6-8-22    | 06  | 080S | 220E | 4304734449 |        | Federal | GW   | APD C |
| STIRRUP U 10W-6-8-22    | 06  | 080S | 220E | 4304734451 |        | Federal | GW   | APD C |
| STIRRUP U 8W-5-8-22     | 05  | 080S | 220E | 4304734453 |        | Federal | GW   | APD C |
| STIRRUP U 6W-5-8-22     | 05  | 080S | 220E | 4304734454 |        | Federal | GW   | APD C |
| WV EXT 10W-17-8-21      | 17  | 080S | 210E | 4304734561 | 13744  | Federal | GW   | P C   |
| STIRRUP U 7G-5-8-22     | 05  | 080S | 220E | 4304734609 |        | Federal | OW   | APD C |
| STIRRUP U 9G-5-8-22     | 05  | 080S | 220E | 4304734610 |        | Federal | OW   | APD C |
| STIRRUP U 9G-6-8-22     | 06  | 080S | 220E | 4304734611 |        | Federal | OW   | APD C |
| OU GB 10W-16-8-22       | 16  | 080S | 220E | 4304734616 |        | State   | GW   | APD C |
| OU GB 14W-16-8-22       | 16  | 080S | 220E | 4304734619 |        | State   | GW   | APD C |
| OU GB 16W-20-8-22       | 20  | 080S | 220E | 4304734633 |        | Federal | GW   | APD C |
| OU WIH 15W-21-8-22      | 21  | 080S | 220E | 4304734634 |        | Federal | GW   | APD C |
| OU GB 8W-17-8-22        | 17  | 080S | 220E | 4304734647 |        | Federal | GW   | APD C |
| OU GB 11W-15-8-22       | 15  | 080S | 220E | 4304734648 | 13822  | Federal | GW   | DRL C |
| OU GB 16W-16-8-22       | 16  | 080S | 220E | 4304734655 | 13815  | State   | GW   | DRL C |
| OU GB 1W-16-8-22        | 16  | 080S | 220E | 4304734656 |        | State   | GW   | APD C |
| OU GB 8W-16-8-22        | 16  | 080S | 220E | 4304734660 | 13769  | State   | GW   | DRL C |
| OU GB 3W-15-8-22        | 15  | 080S | 220E | 4304734677 |        | Federal | GW   | APD C |
| OU GB 4W-21-8-22        | 21  | 080S | 220E | 4304734685 | 13772  | Federal | GW   | P C   |
| OU WIH 2W-21-8-22       | 21  | 080S | 220E | 4304734687 | 13837  | Federal | GW   | PA C  |
| OU GB 9W-16-8-22        | 16  | 080S | 220E | 4304734692 |        | State   | GW   | APD C |
| OU WIH 1W-21-8-22       | 21  | 080S | 220E | 4304734693 |        | Federal | GW   | APD C |
| OU GB 7G-19-8-22        | 19  | 080S | 220E | 4304734694 |        | Federal | OW   | APD C |
| OU GB 5G-19-8-22        | 19  | 080S | 220E | 4304734695 | 13786  | Federal | OW   | P C   |
| OU GB 8W-20-8-22        | 20  | 080S | 220E | 4304734706 |        | Federal | GW   | APD C |
| OU SG 14W-15-8-22       | 15  | 080S | 220E | 4304734710 | 13821  | Federal | GW   | DRL C |
| OU SG 15W-15-8-22       | 15  | 080S | 220E | 4304734711 | 13790  | Federal | GW   | DRL C |
| OU SG 16W-15-8-22       | 15  | 080S | 220E | 4304734712 | 13820  | Federal | GW   | DRL C |
| OU SG 4W-15-8-22        | 15  | 080S | 220E | 4304734713 | 13775  | Federal | GW   | DRL C |
| OU SG 12W-15-8-22       | 15  | 080S | 220E | 4304734714 | 13828  | Federal | GW   | DRL C |
| OU SG 5W-15-8-22        | 15  | 080S | 220E | 4304734715 |        | Federal | GW   | APD C |
| OU SG 6W-15-8-22        | 15  | 080S | 220E | 4304734716 | 13865  | Federal | GW   | PA C  |
| OU SG 8W-15-8-22        | 15  | 080S | 220E | 4304734717 | 13819  | Federal | GW   | DRL C |

## SEI (N4235) to QEP (N2460)

| well name                  | Sec | T    | R    | api DOGM   | Entity | type    | stat |     |   |
|----------------------------|-----|------|------|------------|--------|---------|------|-----|---|
| OU SG 9W-15-8-22           | 15  | 080S | 220E | 4304734718 | 13773  | Federal | GW   | P   | C |
| OU SG 1W-15-8-22           | 15  | 080S | 220E | 4304734720 |        | Federal | GW   | APD | C |
| OU SG 2W-15-8-22           | 15  | 080S | 220E | 4304734721 |        | Federal | GW   | APD | C |
| OU SG 7W-15-8-22           | 15  | 080S | 220E | 4304734722 |        | Federal | GW   | APD | C |
| GYP SUM HILLS 13HG-17-8-22 | 17  | 080S | 210E | 4304734723 | 13765  | Federal | GW   | DRL | C |
| OU GB 14SG-29-8-22         | 29  | 080S | 220E | 4304734743 |        | Federal | GW   | APD | C |
| OU GB 16SG-29-8-22         | 29  | 080S | 220E | 4304734744 | 13771  | Federal | GW   | DRL | C |
| OU GB 13W-10-8-22          | 10  | 080S | 220E | 4304734754 | 13774  | Federal | GW   | P   | C |
| OU GB 6W-21-8-22           | 21  | 080S | 220E | 4304734755 | 13751  | Federal | GW   | P   | C |
| OU SG 10W-10-8-22          | 10  | 080S | 220E | 4304734764 |        | Federal | GW   | DRL | C |
| OU SG 15W-10-8-22          | 10  | 080S | 220E | 4304734765 | 13849  | Federal | GW   | DRL | C |
| OU GB 14W-10-8-22          | 10  | 080S | 220E | 4304734768 | 13781  | Federal | GW   | P   | C |
| OU SG 16W-10-8-22          | 10  | 080S | 220E | 4304734784 | 13777  | Federal | GW   | P   | C |
| OU GB 15G-16-8-22          | 16  | 080S | 220E | 4304734829 |        | State   | OW   | DRL |   |
| BASER WASH 6W-7-7-22       | 07  | 070S | 220E | 4304734837 |        | Federal | GW   | APD | C |
| GB 5G-15-8-22              | 15  | 080S | 220E | 4304734876 |        | Federal | OW   | APD | C |
| GB 4G-21-8-22              | 21  | 080S | 220E | 4304734882 |        | Federal | OW   | APD | C |
| W IRON HORSE 2W-28-8-22    | 28  | 080S | 220E | 4304734883 |        | Federal | GW   | APD | C |
| OU GB 8WX-29-8-22          | 29  | 080S | 220E | 4304734884 |        | Federal | GW   | APD | C |
| GB 7W-36-8-21              | 36  | 080S | 210E | 4304734893 |        | State   | GW   | APD |   |
| GB 3W-36-8-21              | 36  | 080S | 210E | 4304734894 | 13791  | State   | GW   | DRL |   |
| NC 8M-32-8-22              | 32  | 080S | 220E | 4304734897 |        | State   | GW   | APD |   |
| NC 3M-32-8-22              | 32  | 080S | 220E | 4304734899 |        | State   | GW   | APD |   |
| N DUCK CREEK 3M-27-8-22    | 27  | 080S | 210E | 4304734900 |        | Federal | GW   | APD | C |
| N DUCK CREEK 9M-22-8-22    | 22  | 080S | 210E | 4304734901 |        | Federal | GW   | APD | C |
| N DUCK CREEK 11M-22-8-22   | 22  | 080S | 210E | 4304734902 |        | Federal | GW   | APD | C |
| NDC 10W-25-8-21            | 25  | 080S | 210E | 4304734923 |        | Federal | GW   | APD | C |
| GB 5W-36-8-21              | 36  | 080S | 210E | 4304734925 | 13808  | State   | GW   | DRL |   |
| GB 4W-36-8-21              | 36  | 080S | 210E | 4304734926 |        | State   | GW   | APD |   |
| WV EXT 1W-17-8-21          | 17  | 080S | 210E | 4304734927 |        | Federal | GW   | APD | C |
| WV EXT 8W-17-8-21          | 17  | 080S | 210E | 4304734929 | 13792  | Federal | GW   | DRL | C |
| NDC 11M-27-8-21            | 27  | 080S | 210E | 4304734952 | 13809  | Federal | GW   | DRL | C |
| NDC 9M-27-8-21             | 27  | 080S | 210E | 4304734956 |        | Federal | GW   | APD | C |
| NDC 1M-27-8-21             | 27  | 080S | 210E | 4304734957 |        | Federal | GW   | APD | C |
| NDC 15M-28-8-21            | 28  | 080S | 210E | 4304734958 |        | Federal | GW   | APD | C |
| NC 11M-32-8-22             | 32  | 080S | 220E | 4304735040 |        | State   | GW   | NEW |   |
| RED WASH U 34-27C          | 27  | 070S | 240E | 4304735045 |        | Federal | GW   | APD | C |
| WRU EIH 10W-35-8-22        | 35  | 080S | 220E | 4304735046 | 13544  | Federal | GW   | DRL | C |
| WRU EIH 9W-26-8-22         | 26  | 080S | 220E | 4304735047 |        | Federal | GW   | APD | C |
| WRU EIH 15W-26-8-22        | 26  | 080S | 220E | 4304735048 |        | Federal | GW   | APD | C |
| WRU EIH 1W-35-8-22         | 35  | 080S | 220E | 4304735049 |        | Federal | GW   | APD | C |
| WRU EIH 9W-35-8-22         | 35  | 080S | 220E | 4304735050 |        | Federal | GW   | APD | C |
| WRU EIH 7W-35-8-22         | 35  | 080S | 220E | 4304735051 |        | Federal | GW   | APD | C |
| WRU EIH 2W-35-8-22         | 35  | 080S | 220E | 4304735052 |        | Federal | GW   | APD | C |

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

|   |  |  |   |
|---|--|--|---|
| <b>APPLICATION FOR PERMIT TO DRILL</b>  |  | 5. MINERAL LEASE NO:<br><b>ML-3085</b>   | 6. SURFACE:<br><b>TRIBAL</b>                            |
| 1A. TYPE OF WORK: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN  |  | 7. IF INDIAN, ALLOTTEE OR TRIBE NAME<br><b>UTE TRIBE</b>   |   |
| B. TYPE OF WELL <input type="checkbox"/> OIL <input checked="" type="checkbox"/> GAS OTHER _____ <input checked="" type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE |  | 8. UNIT OF CA AGREEMENT NAME:<br><b>N/A</b>  |   |
| 2. NAME OF OPERATOR:<br><b>SHENANDOAH ENERGY, INC.</b>  |  | 9. WELL NAME and NUMBER:<br><b>NC 8M-32-8-22</b>   |   |
| 3. ADDRESS OF OPERATOR:<br><b>11002 E. 17500 S. CITY VERNAL STATE UT ZIP 84078</b>  |  | 10. FIELD AND POOL, OR WILDCAT:<br><b>NATURAL BUTTES</b>   |   |
| PHONE NUMBER:<br><b>(435) 781-4341</b>  |  | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE,<br>MERIDIAN:<br><b>SENE 32 8S 22E</b>                                     |   |
| 4. LOCATION OF WELL (FOOTAGES)<br>AT SURFACE: <b>2163' FNL, 774' FEL</b><br>AT PROPOSED PRODUCING ZONE: <b>SAME</b>   |  | 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE:<br><b>15+/- MILES EAST OF VERNAL, UTAH</b> |   |
| 15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)<br><b>774' +/-</b>  |  | 16. NUMBER OF ACRES IN LEASE:<br><b>600</b>  | 17. NUMBER OF ACRES ASSIGNED TO THIS WELL:<br><b>40</b> |
| 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)<br><b>2000' +/-</b>   |  | 19. PROPOSED DEPTH<br><b>12,000</b>  | 20. BOND DESCRIPTION:<br><b>159261960</b>               |
| 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):<br><b>4751' KB</b>  |  | 22. APPROXIMATE DATE WORK WILL START:<br><b>ASAP</b>   | 23. ESTIMATED DURATION:<br><b>10 DAYS</b>               |

| 24 PROPOSED CASING AND CEMENTING PROGRAM |   |               |   |
|--|---|---------------|---|
| SIZE OF HOLE                             | CASING SIZE, GRADE, AND WEIGHT PER FOOT | SETTING DEPTH | CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT                                       |
| See attached cement calculations         |   |               | <b>RECEIVED</b><br><br><b>FEB 18 2003</b><br><br><b>DIV. OF OIL, GAS &amp; MINING</b> |
|  |   |               |   |
|  |   |               |   |
|  |   |               |   |
|  |   |               |   |
|  |   |               |   |

25 ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERATION GENERAL RULES:

WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER  COMPLETE DRILLING PLAN

EVIDNECE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER  FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OW

NAME (PLEASE PRINT) John Busch TITLE Construction Supervisor

SIGNATURE *John Busch* DATE Feb 14-03

(This space for State use only)

API NUMBER ASSIGNED: 43-047-34897 APPROVAL: \_\_\_\_\_

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 03-05-03

By: *[Signature]*

T8S, R22E, S.L.B.&M.

SHENANDOAH ENERGY, INC.

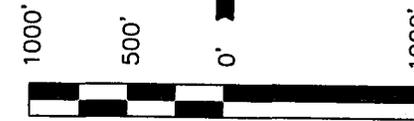
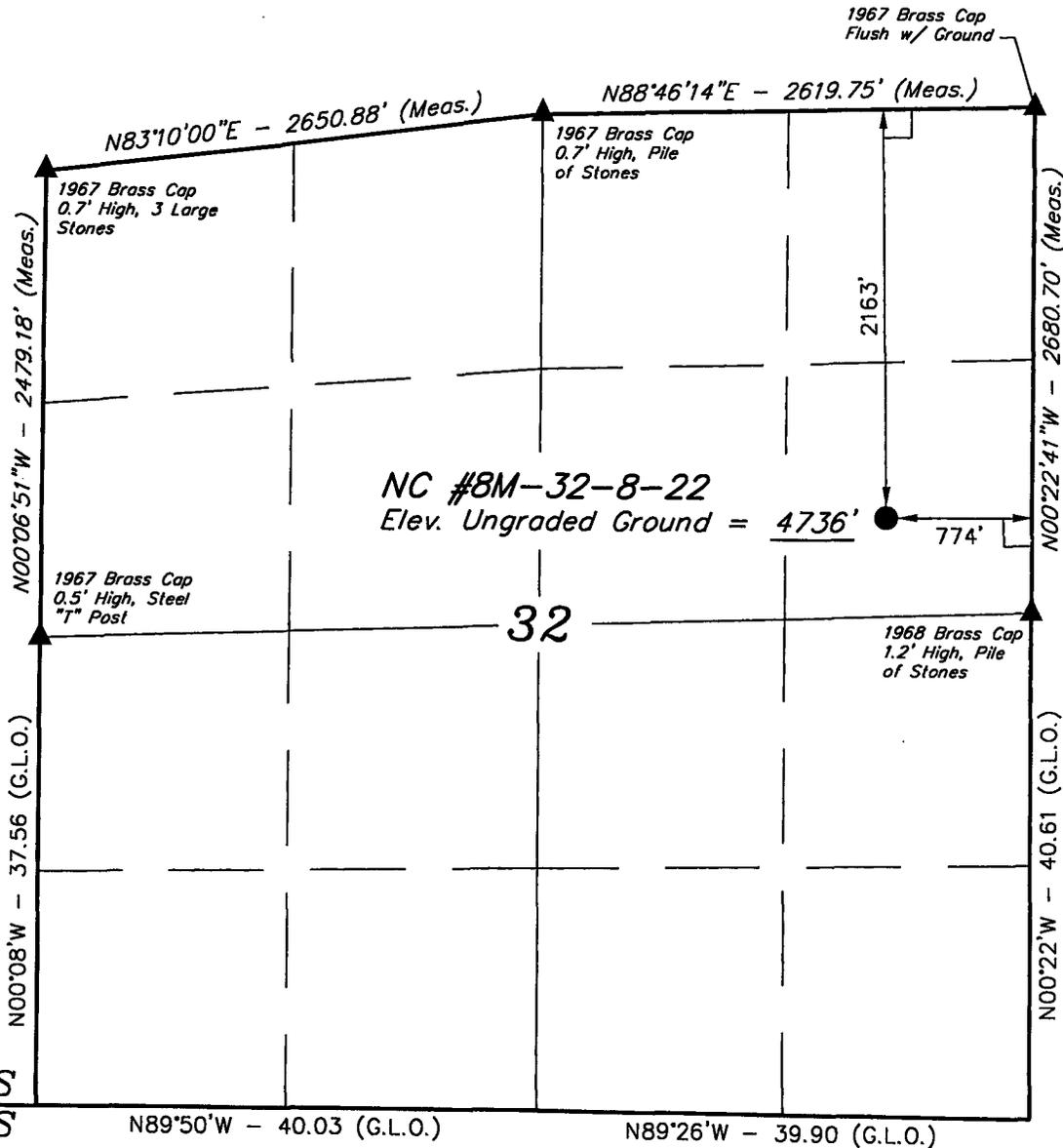
Well location, NC #8M-32-8-22, located as shown in the SE 1/4 NE 1/4 of Section 32, T8S, R22E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



SCALE  
CERTIFICATE

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

*Robert H. Kay*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)  
LATITUDE = 40°04'52.16" (40.081156)  
LONGITUDE = 109°27'26.15" (109.457264)

|                     |                             |                         |
|---------------------|-----------------------------|-------------------------|
| SCALE<br>1" = 1000' | DATE SURVEYED:<br>01-30-03  | DATE DRAWN:<br>01-31-03 |
| PARTY<br>S.H. D.COX | REFERENCES<br>G.L.O. PLAT   |                         |
| WEATHER<br>COLD     | FILE<br>EOG RESOURCES, INC. |                         |

## DRILLING PROGRAM

## ONSHORE OIL &amp; GAS ORDER NO. 1

## Approval of Operations on Onshore

## Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

| <u>Formation</u> | <u>Depth</u> | <u>Prod. Phase Anticipated</u> |
|------------------|--------------|--------------------------------|
| Uinta            | Surface      |                                |
| Green River      | 2242'        |                                |
| Mahongy          | 2837'        |                                |
| Wasatch          | 5297'        |                                |
| Mesa Verde       | 7960'        |                                |
| Black Hawk       | 10845'       |                                |
| Mancos B         | 11635'       |                                |
| TD               | 12000'       |                                |

2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas. Or other mineral bearing formations are expected to be encountered are as follows:

| <u>Substance</u> | <u>Formation</u> | <u>Depth</u> |
|------------------|------------------|--------------|
| Oil/Gas          | Mancos           | 12000'       |

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

DRILLING PROGRAM

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If no flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right #36125 or where possible a fresh water line (poly pipe) will be laid in the access road to each location to supply fresh water for drilling purposes.

3. Operator's Specification for Pressure Control Equipment:

- A. 5,000 psi W.P. Double Gate BOP or Single Gate BOP (schematic attached)
- B. Functional test daily
- C. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- D. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing whichever is less. Tests shall be done at the time of installation, prior to drilling out and weekly. All tests shall be for a period of 15 minutes

4. Casing Program

|                         | <u>Depth</u> | <u>Hole Size</u> | <u>Csg Size</u> | <u>Type</u>     | <u>Weight</u>      |
|-------------------------|--------------|------------------|-----------------|-----------------|--------------------|
| Surface                 | 700'         | 17-1/2"          | 13-3/8"         | H-40            | 48lb/ft (new) ST&C |
| Intermediate            | 4400'        | 12 -1/4"         | 9-5/8"          | N-80            | 40lb/ft (new) LT&C |
| Intermediate            | 5900'        | 12 -1/4"         | 9- 5/8"         | S-95            | 40lb/ft (new) LT&C |
| Production<br>(new)LT&C | 11400'       | 8 -1/2"          | 4 -1/2"         | HCP-110seamless | 11.6lb/ft          |
| Production<br>LT&C      | 12000' -     | 8 -1/2"          | 4 -1/2"         | P-110 seamless  | 13.5lb/ft (new)    |

5. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – no
- C. Monitoring equipment on the mud system – visually

DRILLING PROGRAM

5. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – no
- C. Monitoring equipment on the mud system – visually
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes
- F. The blooie line shall be at least 6” in diameter and extend at least 100’ from the well bore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’).
- H. Compressor shall be tied directly to the blooie line through a manifold.
- I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

6. Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

Gas detector will be used from surface casing depth to TD.

DRILLING PROGRAM

6. Testing, logging and coring program

A. Cores – none anticipated

B. DST – none anticipated

Logging – Mud logging – 4500 to TD  
GR-SP-Induction  
Neutron Density  
MRI

C. Formation and Completion Interval: Mancos interval, final determination of completion will be made by analysis of logs. Stimulation – Stimulation will be designed for the particular area of interest as encountered.

7. Cementing Program

| <u>Casing</u> | <u>Volume</u> | <u>Type &amp; Additives</u> |
|---------------|---------------|-----------------------------|
|---------------|---------------|-----------------------------|

See attached cement calculations

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 4800.0 psi. Maximum anticipated bottom hole temperature is 140° F.

**Lessee's or Operator's Representative:**

John Busch  
Red Wash Operations Rep.  
Shenandoah Energy Inc.  
11002 East 17500 South  
Vernal, Utah 84078  
(435) 781-4341

**Certification:**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

Shenandoah Energy Inc. will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Shenandoah Energy Inc. its' contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
John Busch  
Red Wash Operations Representative

February 13, 2003  
\_\_\_\_\_  
Date

Under the Federal regulations in effect as of June 15, 1988, an operator is now required to submit a self-certification statement to the appropriate Bureau office stating that said operator has the right to operate upon the leasehold premises. Said notification may be in the following format:

"Please be advised that Shenandoah Eneris considered to be the operator of Well No. NC 8M-32-8-22 1/4 SENE, Section 37 Township 8S Range 22E; Lease ML-3085; UINTAH County, UT; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by UT-1237."

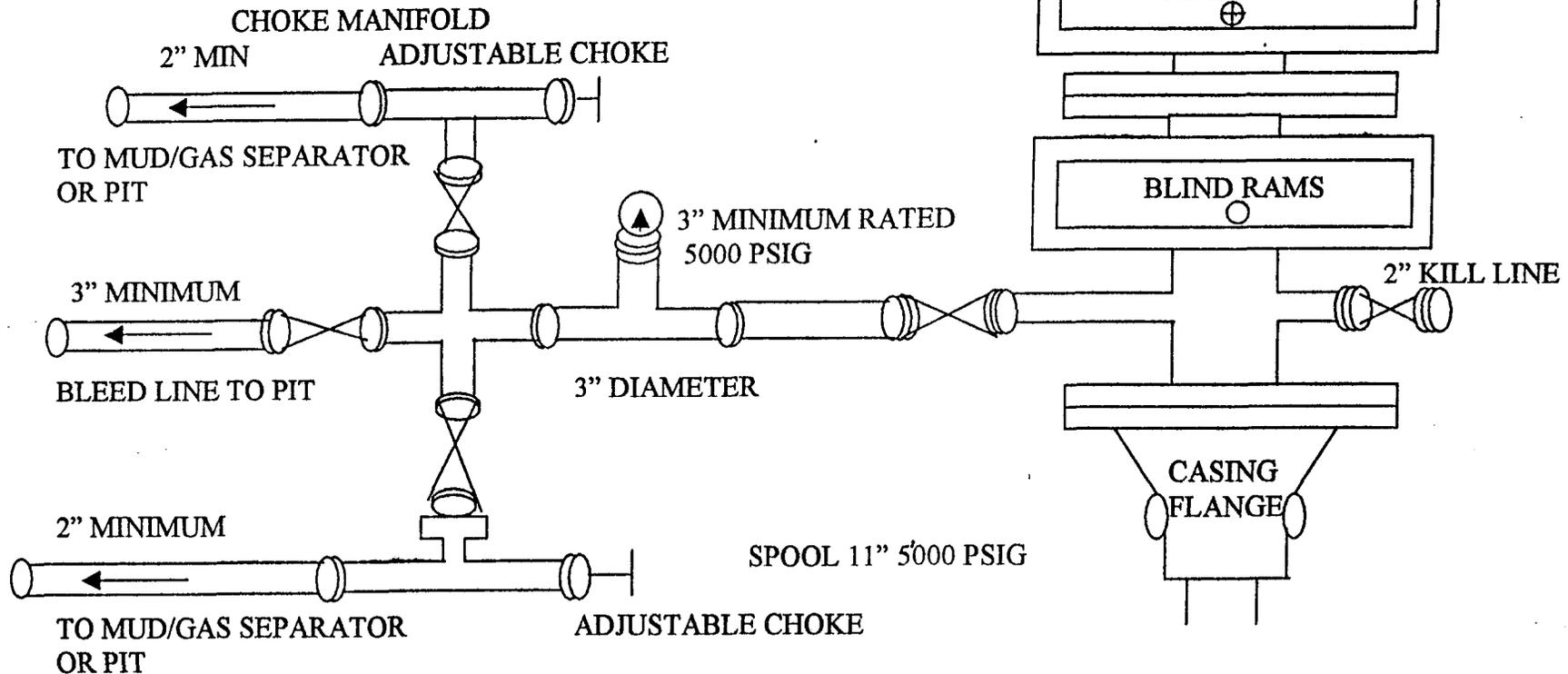
135-7

### 5000 PSIG DIAGRAM

ANNULAR PREVENTOR AND BOTH RAMS ARE 5000 PSIG RATED.  
CASING FLANGE IS 11" 5000 PSIG RATED.  
BOPE 11" 5000 PSIG

#### TESTING PROCEDURE:

1. BOPE's will be tested with a professional tester to conform to Onshore Order #2 with retest every 14 days.
2. Blind & Pipe rams will be tested to rated working pressure, 5000 psig.
3. Annular preventor will be tested to 50% of working pressure, 2500 psig.
4. Casing will be tested to 0.22 psi/ft. or 2500 psig. Not to exceed 70% of burst strength, whichever is greater.
5. All lines subject to well pressure will be pressure-tested to the same pressure as blind & pipe rams.
6. All BOPE specifications and configurations will meet Onshore Order #2 requirements for 5000 psig BOPE specifications.





**Shenandoah Energy Inc.**  
**475 17th Street, Suite 1000**  
**Denver, Colorado 80202**

NC 8M-32-8-22

Uintah County, Utah  
United States of America

## **Cementing Recommendation**

Prepared for: Mr. Darryl Knopp  
February 13, 2003  
Version: 1

Submitted by:  
Rob Kruger  
Halliburton Energy Services  
Vernal Ut Us  
1085 E Main  
Vernal, Utah 84078  
+435.789.2550

**HALLIBURTON**

*Halliburton appreciates the opportunity to present this proposal and looks forward to being of service to you.*

## **Foreword**

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Enclosed is our recommended procedure for cementing the casing strings in the referenced well. The information in this proposal includes well data, calculations, materials requirements, and cost estimates. This proposal is based on information from our field personnel and previous cementing services in the area.

Halliburton Energy Services recognizes the importance of meeting society's needs for health, safety, and protection of the environment. It is our intention to proactively work with employees, customers, the public, governments, and others to use natural resources in an environmentally sound manner while protecting the health, safety, and environmental processes while supplying high quality products and services to our customers.

We appreciate the opportunity to present this proposal for your consideration and we look forward to being of service to you. Our Services for your well will be coordinated through the Service Center listed below. If you require any additional information or additional designs, please feel free to contact myself or our field representative listed below.

Prepared by: \_\_\_\_\_  
John Jorgensen  
Procedure Analyst

Submitted by: \_\_\_\_\_  
Rob Kruger  
Technical Advisor

SERVICE CENTER: Vernal Utah  
SERVICE COORDINATOR: Dale Horrald  
OPER. ENGINEER: Mike Stahl  
PHONE NUMBER:(800)874-2550

**Job Information**

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NC 8M-32-8-22

## Well Intervals:

|                   |                  |
|-------------------|------------------|
| 17 1/2" Open Hole | 0 - 700 ft (MD)  |
|                   | 0 - 700 ft (TVD) |
| Inner Diameter    | 17.500 in        |
| Job Excess        | 50 %             |
| <br>              |                  |
| 13 3/8" Surface   | 0 - 700 ft (MD)  |
|                   | 0 - 700 ft (TVD) |
| Outer Diameter    | 13.375 in        |
| Inner Diameter    | 12.615 in        |
| Linear Weight     | 48 lbm/ft        |
| Job Excess        | 0 %              |

**Calculations**

Spacer:

$$\begin{aligned} \text{Total Spacer} &= 112.29 \text{ ft}^3 \\ &= 20.00 \text{ bbl} \end{aligned}$$

Cement : (700.00 ft fill)

$$\begin{aligned} 700.00 \text{ ft} * 0.6946 \text{ ft}^3/\text{ft} * 50 \% &= 729.37 \text{ ft}^3 \\ \text{Primary Cement} &= 729.37 \text{ ft}^3 \\ &= 129.91 \text{ bbl} \end{aligned}$$

Shoe Joint Volume: (42.00 ft fill)

$$\begin{aligned} 42.00 \text{ ft} * 0.868 \text{ ft}^3/\text{ft} &= 36.45 \text{ ft}^3 \\ &= 6.49 \text{ bbl} \\ \text{Tail plus shoe joint} &= 765.82 \text{ ft}^3 \\ &= 136.40 \text{ bbl} \\ \text{Total Tail} &= 649 \text{ sks} \end{aligned}$$

Total Pipe Capacity:

$$\begin{aligned} 700.00 \text{ ft} * 0.868 \text{ ft}^3/\text{ft} &= 607.58 \text{ ft}^3 \\ &= 108.21 \text{ bbl} \end{aligned}$$

Displacement Volume to Shoe Joint:

$$\begin{aligned} \text{Capacity of Pipe - Shoe Joint} &= 108.21 \text{ bbl} - 6.49 \text{ bbl} \\ &= 101.72 \text{ bbl} \end{aligned}$$

## Job Recommendation

## 13 3/8" Surface

### Fluid Instructions

Fluid 1: Water Based Spacer

Gel Water Ahead

Fluid Density: 8.40 lbm/gal

Fluid Volume: 20 bbl

### Fluid 2: Primary Cement

Premium Plus Cement

94 lbm/sk Premium Plus Cement (Cement-api)

2 % Calcium Chloride (Accelerator)

0.25 lbm/sk Flocele (Lost Circulation Additive)

Fluid Weight 15.60 lbm/gal

Slurry Yield: 1.18 ft<sup>3</sup>/sk

Total Mixing Fluid: 5.25 Gal/sk

Top of Fluid: 0 ft

Calculated Fill: 700 ft

Volume: 136.40 bbl

Calculated Sacks: 649.00 sks

Proposed Sacks: 650 sks

### Fluid 3: Water Spacer

Displacement

Fluid Density: 8.33 lbm/gal

Fluid Volume: 101.72 bbl

**Detailed Pumping Schedule**

| Fluid # | Fluid Type | Fluid Name      | Surface Density<br>lbm/gal | Estimated Avg Rate<br>bbl/min | Downhole Volume |
|---------|------------|-----------------|----------------------------|-------------------------------|-----------------|
| 1       | Spacer     | Gel Water Ahead | 8.4                        | 3.0                           | 20 bbl          |
| 2       | Cement     | Premium Plus V  | 15.6                       | 3.0                           | 650 sks         |
| 3       | Spacer     | Displacement    | 8.3                        | 3.0                           | 101.72 bbl      |

## Cost Estimate

## 13 3/8" Surface

### SAP Quote #0

| Mtrl Nbr                        | Description   | Qty            | U/M | Unit Price | Gross Amt        | Discount     | Net Amt          |
|---------------------------------|---|----------------|-----|------------|------------------|--------------|------------------|
| 7521                            | PSL - CMT SURFACE CASING - BOM                              | 1              | JOB | 0.00       | 0.00             | 47%          | 0.00             |
| 1                               | "ZI-MILEAGE FROM NEAREST HES BASE,/UNIT"<br>Number of Units | 80<br>1        | MI  | 4.41       | 352.80           | 47%          | 186.98           |
| 2                               | MILEAGE FOR CEMENTING CREW,ZI<br>Number of Units            | 80<br>1        | MI  | 2.60       | 208.00           | 47%          | 110.24           |
| 16091                           | ZI - PUMPING CHARGE<br>DEPTH<br>FEET/METRES (FT/M)          | 1<br>700<br>FT | EA  | 2,405.00   | 2,405.00         | 47%          | 1,274.65         |
| <b>Equipment &amp; Services</b> |   |                |     |            |                  |              |                  |
| <b>SubTotal</b>                 |   |                |     | <b>USD</b> | <b>2,965.80</b>  | <b>47.0%</b> | <b>1,571.87</b>  |
| 100003167                       | PLUG - CMTG - TOP PLASTIC - 13-3/8                          | 1              | EA  | 510.00     | 510.00           | 47%          | 270.30           |
| 100005048                       | HOWCO GEL   | 4              | SK  | 26.44      | 105.76           | 47%          | 56.05            |
| 100003684                       | PREMIUM PLUS V CEMENT                                       | 650            | SK  | 17.58      | 11,427.00        | 47%          | 6,056.31         |
| 100005053                       | CALCIUM CHLORIDE  | 16             | SK  | 122.40     | 1,958.40         | 47%          | 1,037.95         |
| 100005049                       | FLOCELE   | 163            | LB  | 2.71       | 441.73           | 47%          | 234.12           |
| 76400                           | ZI MILEAGE,CMT MTLs DEL/RET MIN<br>NUMBER OF TONS           | 40<br>31.24    | MI  | 1.51       | 1,886.90         | 47%          | 1,000.05         |
| 3965                            | HANDLE&DUMP SVC CHRg, CMT&ADDITIVES,ZI<br>NUMBER OF EACH    | 680<br>1       | CF  | 2.47       | 1,679.60         | 47%          | 890.19           |
| <b>Materials</b>                |   |                |     |            |                  |              |                  |
| <b>SubTotal</b>                 |   |                |     | <b>USD</b> | <b>18,009.39</b> | <b>47.0%</b> | <b>9,544.97</b>  |
| 100004730                       | SHOE,GID,13 3/8 8RD,CEM                                     | 1              | EA  | 489.00     | 489.00           | 42%          | 283.62           |
| 100004705                       | V ASSY,INSR FLOAT,13 3/8,8RD                                | 1              | EA  | 689.00     | 689.00           | 42%          | 399.62           |
| 100004631                       | CLAMP - LIMIT - 13-3/8 - HINGED -                           | 1              | EA  | 38.00      | 38.00            | 42%          | 22.04            |
| 100004487                       | CENTRALIZER-13 3/8"-CSG-17 1/2"-HINGED                      | 8              | EA  | 186.90     | 1,495.20         | 42%          | 867.22           |
| 100005045                       | HALLIBURTON WELD-A KIT                                      | 1              | EA  | 18.43      | 18.43            | 42%          | 10.69            |
| <b>Float Equipment</b>          |   |                |     |            |                  |              |                  |
| <b>SubTotal</b>                 |   |                |     | <b>USD</b> | <b>2,729.63</b>  | <b>42.0%</b> | <b>1,583.19</b>  |
| 7                               | ENVIRONMENTAL SURCHARGE,/JOB,ZI                             | 1              | JOB | 66.24      | 66.24            |              | 66.24            |
| 8                               | IRON SAFETY INSPECTION SURCHARGE /JOB ZI                    | 1              | JOB | 39.74      | 39.74            |              | 39.74            |
| <b>Surcharges</b>               |   |                |     |            |                  |              |                  |
| <b>SubTotal</b>                 |   |                |     | <b>USD</b> | <b>105.98</b>    | <b>0.0%</b>  | <b>105.98</b>    |
| <b>Total</b>                    |   |                |     | <b>USD</b> |                  |              | <b>23,810.80</b> |
| <b>Discount</b>                 |   |                |     | <b>USD</b> |                  |              | <b>11,004.78</b> |
| <b>Discounted Total</b>         |   |                |     | <b>USD</b> |                  |              | <b>12,806.01</b> |

Primary Plant: VERNAL, UT, USA  
 Secondary Plant: VERNAL, UT, USA

Price Book Ref: 01 Western US  
 Price Date: 4/1/2001

**Job Information****9 5/8" Intermediate**

---

NC 8M-32-8-22

## Well Intervals:

|                     |                     |
|---------------------|---------------------|
| 13 3/8" Surface     | 0 - 700 ft (MD)     |
|                     | 0 - 700 ft (TVD)    |
| Outer Diameter      | 13.375 in           |
| Inner Diameter      | 12.615 in           |
| Linear Weight       | 48 lbm/ft           |
| Job Excess          | 0 %                 |
| 12 1/4" Open Hole   | 700 - 5297 ft (MD)  |
|                     | 700 - 5297 ft (TVD) |
| Inner Diameter      | 12.250 in           |
| Job Excess          | 50 %                |
| 9 5/8" Intermediate | 0 - 5297 ft (MD)    |
|                     | 0 - 5297 ft (TVD)   |
| Outer Diameter      | 9.625 in            |
| Inner Diameter      | 8.921 in            |
| Job Excess          | 0 %                 |

**Calculations**

Spacer:

$$\begin{aligned} \text{Total Spacer} &= 168.44 \text{ ft}^3 \\ &= 30.00 \text{ bbl} \end{aligned}$$

Cement : (3297.00 ft fill)

$$\begin{aligned} 700.00 \text{ ft} * 0.3627 \text{ ft}^3/\text{ft} * 0 \% &= 253.88 \text{ ft}^3 \\ 2597.00 \text{ ft} * 0.3132 \text{ ft}^3/\text{ft} * 50 \% &= 1220.02 \text{ ft}^3 \\ \text{Total Lead Cement} &= 1473.90 \text{ ft}^3 \\ &= 262.51 \text{ bbl} \\ \text{Sacks of Cement} &= 386 \text{ sks} \end{aligned}$$

Cement : (2000.00 ft fill)

$$\begin{aligned} 2000.00 \text{ ft} * 0.3132 \text{ ft}^3/\text{ft} * 50 \% &= 939.56 \text{ ft}^3 \\ \text{Tail Cement} &= 939.56 \text{ ft}^3 \\ &= 167.34 \text{ bbl} \end{aligned}$$

Shoe Joint Volume: (42.00 ft fill)

$$\begin{aligned} 42.00 \text{ ft} * 0.4341 \text{ ft}^3/\text{ft} &= 18.23 \text{ ft}^3 \\ &= 3.25 \text{ bbl} \\ \text{Tail plus shoe joint} &= 957.79 \text{ ft}^3 \\ &= 170.59 \text{ bbl} \\ \text{Total Tail} &= 764 \text{ sks} \end{aligned}$$

Total Pipe Capacity:

$$\begin{aligned} 5297.00 \text{ ft} * 0.4341 \text{ ft}^3/\text{ft} &= 2299.24 \text{ ft}^3 \\ &= 409.51 \text{ bbl} \end{aligned}$$

Displacement Volume to Shoe Joint:

$$\begin{aligned} \text{Capacity of Pipe - Shoe Joint} &= 409.51 \text{ bbl} - 3.25 \text{ bbl} \\ &= 406.26 \text{ bbl} \end{aligned}$$

## Job Recommendation

## 9 5/8" Intermediate

### Fluid Instructions

Fluid 1: Water Spacer

Water Ahead

Fluid Density: 8.33 lbm/gal

Fluid Volume: 30 bbl

Fluid 2: Lead Cement

Halliburton Hi-Fill

Fluid Weight 11 lbm/gal

Slurry Yield: 3.82 ft<sup>3</sup>/sk

Total Mixing Fluid: 22.92 Gal/sk

Top of Fluid: 0 ft

Calculated Fill: 3297 ft

Volume: 262.51 bbl

Calculated Sacks: 385.84 sks

Proposed Sacks: 390 sks

Fluid 3: Tail Cement

50/50 Poz Premium AG

2 % Total Bentonite (Light Weight Additive)

5 % Salt (Accelerator)BWOW

0.4 % Halad(R)-322 (Low Fluid Loss Control)

0.25 lbm/sk Flocele (Lost Circulation Additive)

Fluid Weight 14.20 lbm/gal

Slurry Yield: 1.25 ft<sup>3</sup>/sk

Total Mixing Fluid: 5.56 Gal/sk

Top of Fluid: 3297 ft

Calculated Fill: 2000 ft

Volume: 170.59 bbl

Calculated Sacks: 764.40 sks

Proposed Sacks: 765 sks

Fluid 4: Water Spacer

Displacement

Fluid Density: 8.33 lbm/gal

Fluid Volume: 406.26 bbl

Fluid 5: Top Out Cement

Premium Plus V Cement

2 % Calcium Chloride (Accelerator)

(On The Side)

Fluid Weight 15.60 lbm/gal

Slurry Yield: 1.18 ft<sup>3</sup>/sk

Total Mixing Fluid: 5.26 Gal/sk

Proposed Sacks: 200 sks

### Detailed Pumping Schedule

| Fluid # | Fluid Type | Fluid Name     | Surface Density<br>lbm/gal | Estimated<br>Avg Rate<br>bbl/min | Downhole<br>Volume |
|---------|------------|----------------|----------------------------|----------------------------------|--------------------|
| 1       | Spacer     | Water Ahead    | 8.3                        | 5.0                              | 30 bbl             |
| 2       | Cement     | Hi Fill        | 11.0                       | 5.0                              | 390 sks            |
| 3       | Cement     | 50/50 Poz      | 14.2                       | 5.0                              | 765 sks            |
| 4       | Spacer     | Displacement   | 8.3                        | 5.0                              | 406.26 bbl         |
| 5       | Cement     | Premium Plus V | 15.6                       |                                  | 200 sks            |

# HALLIBURTON

## Cost Estimate

## 9 5/8" Intermediate

SAP Quote #0

| Mtrl Nbr  | Description   | Qty             | U/M | Unit Price | Gross Amt        | Discount     | Net Amt          |
|-----------|---|-----------------|-----|------------|------------------|--------------|------------------|
| 7522      | PSL - CMT INTERMEDIATE CASING - BOM                                       | 1               | JOB | 0.00       | 0.00             | 47%          | 0.00             |
| 1         | "ZI-MILEAGE FROM NEAREST HES BASE,/UNIT"<br>Number of Units               | 80<br>2         | MI  | 4.41       | 705.60           | 47%          | 373.97           |
| 2         | MILEAGE FOR CEMENTING CREW,ZI<br>Number of Units                          | 80<br>1         | MI  | 2.60       | 208.00           | 47%          | 110.24           |
| 16091     | ZI - PUMPING CHARGE<br>DEPTH<br>FEET/METRES (FT/M)                        | 1<br>5297<br>FT | EA  | 3,556.00   | 3,556.00         | 47%          | 1,884.68         |
| 16115     | FIELD STORAGE BIN ON SITE >8 HRS,DAY,ZI<br>DAYS OR PARTIAL DAY(WHOLE NO.) | 1<br>1          | EA  | 320.00     | 320.00           | 47%          | 169.60           |
| 139       | ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI<br>NUMBER OF UNITS                   | 1<br>1          | JOB | 1,109.00   | 1,109.00         | 47%          | 587.77           |
| 132       | PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI<br>NUMBER OF DAYS                    | 1<br>1          | JOB | 916.00     | 916.00           | 47%          | 485.48           |
|           | <b>Equipment &amp; Services</b>   |                 |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                 |     | <b>USD</b> | <b>6,814.60</b>  | <b>47.0%</b> | <b>3,611.74</b>  |
| 100003164 | PLUG - CMTG - TOP PLASTIC - 9-5/8   | 1               | EA  | 239.00     | 239.00           | 47%          | 126.67           |
| 21832     | HALLIBURTON HI-FILL   | 390             | SK  | 29.43      | 11,477.70        | 47%          | 6,083.18         |
| 12302     | SBM 50-50 POZ (PREMIUM)   | 765             | SK  | 14.35      | 10,977.75        | 47%          | 5,818.21         |
| 100003652 | SALT  | 1773            | LB  | 0.22       | 390.06           | 47%          | 206.73           |
| 100003646 | HALAD(R)-322  | 252             | LB  | 9.21       | 2,320.92         | 47%          | 1,230.09         |
| 100005049 | FLOCELE   | 192             | LB  | 2.71       | 520.32           | 47%          | 275.77           |
| 100003684 | PREMIUM PLUS V ( TOP OUT SIDE)  | 200             | SK  | 17.58      | 3,516.00         | 47%          | 1,863.48         |
| 100005053 | CALCIUM CHLORIDE ( TOP OUT)   | 5               | SK  | 122.40     | 612.00           | 47%          | 324.36           |
| 76400     | ZI MILEAGE,CMT MTLs DEL/RET MIN<br>NUMBER OF TONS                         | 40<br>66.86     | MI  | 1.51       | 4,038.34         | 47%          | 2,140.32         |
| 3965      | HANDLE&DUMP SVC CHRg, CMT&ADDITIVES,ZI<br>NUMBER OF EACH                  | 1635<br>1       | CF  | 2.47       | 4,038.45         | 47%          | 2,140.38         |
|           | <b>Materials</b>  |                 |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                 |     | <b>USD</b> | <b>38,130.54</b> | <b>47.0%</b> | <b>20,209.19</b> |
| 100004728 | SHOE,GID,9-5/8 8RD  | 1               | EA  | 346.00     | 346.00           | 42%          | 200.68           |
| 100004823 | CLR,FLOAT,9-5/8 8RD,29.3-40#/FT,2 3/4                                     | 1               | EA  | 792.00     | 792.00           | 42%          | 459.36           |
| 100004629 | COLLAR-STOP-9 5/8"-FRICTION-HINGED  | 1               | EA  | 30.00      | 30.00            | 42%          | 17.40            |
| 100004485 | CENTRALIZER-9-5/8"-CSG-12 1/4"-HINGED                                     | 12              | EA  | 98.70      | 1,184.40         | 42%          | 686.95           |
| 100005045 | HALLIBURTON WELD-A KIT  | 2               | EA  | 18.43      | 36.86            | 42%          | 21.38            |
|           | <b>Float Equipment</b>  |                 |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                 |     | <b>USD</b> | <b>2,389.26</b>  | <b>42.0%</b> | <b>1,385.77</b>  |
| 7         | ENVIRONMENTAL SURCHARGE,/JOB,ZI   | 1               | JOB | 66.24      | 66.24            |              | 66.24            |
| 8         | IRON SAFETY INSPECTION SURCHARGE /JOB ZI                                  | 1               | JOB | 39.74      | 39.74            |              | 39.74            |
|           | <b>Surcharges</b>   |                 |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                 |     | <b>USD</b> | <b>105.98</b>    | <b>0.0%</b>  | <b>105.98</b>    |
|           | <b>Total</b>  |                 |     | <b>USD</b> |                  |              | <b>47,440.38</b> |

# HALLIBURTON

| <u>Mtrl Nbr</u> | <u>Description</u> | <u>Qty</u> | <u>U/M</u> | <u>Unit Price</u> | <u>Gross Amt</u> | <u>Discount</u> | <u>Net Amt</u> |
|-----------------|--------------------|------------|------------|-------------------|------------------|-----------------|----------------|
|                 | Discount           |            |            | USD               |                  |                 | 22,127.70      |
|                 | Discounted Total   |            |            | USD               |                  |                 | 25,312.68      |

Primary Plant: VERNAL, UT, USA  
Secondary Plant: VERNAL, UT, USA

Price Book Ref: 01 Western US  
Price Date: 4/1/2001

## Job Information

## 4 1/2" Production

NC 8M-32-8-22

Well Intervals:

|                     |                       |
|---------------------|-----------------------|
| 9 5/8" Intermediate | 0 - 5297 ft (MD)      |
|                     | 0 - 5297 ft (TVD)     |
| Outer Diameter      | 9.625 in              |
| Inner Diameter      | 8.921 in              |
| Job Excess          | 0 %                   |
| <br>                |                       |
| 7 7/8" Open Hole    | 5297 - 12000 ft (MD)  |
|                     | 5297 - 12000 ft (TVD) |
| Inner Diameter      | 7.875 in              |
| Job Excess          | 25 %                  |
| <br>                |                       |
| 4 1/2" Production   | 0 - 12000 ft (MD)     |
|                     | 0 - 12000 ft (TVD)    |
| Outer Diameter      | 4.500 in              |
| Inner Diameter      | 4.000 in              |
| Job Excess          | 0 %                   |

**Calculations****4 1/2" Production**

Spacer:

$$\begin{aligned} 347.00 \text{ ft} * 0.3236 \text{ ft}^3/\text{ft} * 0 \% &= 112.30 \text{ ft}^3 \\ \text{Total Spacer} &= 112.29 \text{ ft}^3 \\ &= 20.00 \text{ bbl} \end{aligned}$$

Spacer:

$$\begin{aligned} 173.00 \text{ ft} * 0.3236 \text{ ft}^3/\text{ft} * 0 \% &= 55.99 \text{ ft}^3 \\ \text{Total Spacer} &= 56.15 \text{ ft}^3 \\ &= 10.00 \text{ bbl} \end{aligned}$$

Cement : (7203.00 ft fill)

$$\begin{aligned} 500.00 \text{ ft} * 0.3236 \text{ ft}^3/\text{ft} * 0 \% &= 161.81 \text{ ft}^3 \\ 6703.00 \text{ ft} * 0.2278 \text{ ft}^3/\text{ft} * 25 \% &= 1908.65 \text{ ft}^3 \\ \text{Primary Cement} &= 2070.46 \text{ ft}^3 \\ &= 368.76 \text{ bbl} \end{aligned}$$

Shoe Joint Volume: (42.00 ft fill)

$$\begin{aligned} 42.00 \text{ ft} * 0.0873 \text{ ft}^3/\text{ft} &= 3.67 \text{ ft}^3 \\ &= 0.65 \text{ bbl} \\ \text{Tail plus shoe joint} &= 2074.12 \text{ ft}^3 \\ &= 369.42 \text{ bbl} \\ \text{Total Tail} &= 1614 \text{ sks} \end{aligned}$$

Total Pipe Capacity:

$$\begin{aligned} 12000.00 \text{ ft} * 0.0873 \text{ ft}^3/\text{ft} &= 1047.20 \text{ ft}^3 \\ &= 186.51 \text{ bbl} \end{aligned}$$

Displacement Volume to Shoe Joint:

$$\begin{aligned} \text{Capacity of Pipe - Shoe Joint} &= 186.51 \text{ bbl} - 0.65 \text{ bbl} \\ &= 185.86 \text{ bbl} \end{aligned}$$

## Job Recommendation

## 4 1/2" Production

### Fluid Instructions

Fluid 1: Reactive Spacer  
Super Flush

Fluid Density: 9.20 lbm/gal  
Fluid Volume: 20 bbl

Fluid 2: Water Spacer  
Water Spacer

Fluid Density: 8.33 lbm/gal  
Fluid Volume: 10 bbl

Fluid 3: Primary Cement  
50/50 Poz Premium AG

2 % Total Bentonite (Light Weight Additive)  
0.6 % Halad(R)-322 (Low Fluid Loss Control)  
0.2 % HR-5 (Expander)  
5 % Salt (Salt)BWOW  
0.25 lbm/sk Flocele (Lost Circulation Additive)  
0.3 % Super CBL (Expander)  
2 % Microbond (Expander)

Fluid Weight 14.20 lbm/gal  
Slurry Yield: 1.28 ft<sup>3</sup>/sk  
Total Mixing Fluid: 5.70 Gal/sk  
Top of Fluid: 4797 ft  
Calculated Fill: 7203 ft  
Volume: 369.42 bbl  
Calculated Sacks: 1614.10 sks  
Proposed Sacks: 1615 sks

Fluid 4: Water Spacer  
Displacement

Fluid Density: 8.33 lbm/gal  
Fluid Volume: 185.86 bbl

**Detailed Pumping Schedule**

| Fluid # | Fluid Type | Fluid Name   | Surface Density<br>lbm/gal | Estimated<br>Avg Rate<br>bbl/min | Downhole<br>Volume |
|---------|------------|--------------|----------------------------|----------------------------------|--------------------|
| 1       | Spacer     | Super Flush  | 9.2                        | 5.0                              | 20 bbl             |
| 2       | Spacer     | Water Spacer | 8.3                        | 5.0                              | 10 bbl             |
| 3       | Cement     | 50/50 Poz    | 14.2                       | 5.0                              | 1615 sks           |
| 4       | Spacer     | Displacement | 8.3                        | 5.0                              | 185.86 bbl         |

## Cost Estimate

## 4 1/2" Production

### SAP Quote #0

| Mtrl Nbr  | Description   | Qty              | U/M | Unit Price | Gross Amt        | Discount     | Net Amt          |
|-----------|---|------------------|-----|------------|------------------|--------------|------------------|
| 7523      | PSL - CMT PRODUCTION CASING - BOM   | 1                | JOB | 0.00       | 0.00             | 47%          | 0.00             |
| 1         | "ZI-MILEAGE FROM NEAREST HES BASE,/UNIT"<br>Number of Units               | 80<br>2          | MI  | 4.41       | 705.60           | 47%          | 373.97           |
| 2         | MILEAGE FOR CEMENTING CREW,ZI<br>Number of Units                          | 80<br>1          | MI  | 2.60       | 208.00           | 47%          | 110.24           |
| 16091     | ZI - PUMPING CHARGE<br>DEPTH<br>FEET/METRES (FT/M)                        | 1<br>12000<br>FT | EA  | 8,711.00   | 8,711.00         | 47%          | 4,616.83         |
| 132       | PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI<br>NUMBER OF DAYS                    | 1<br>1           | JOB | 916.00     | 916.00           | 47%          | 485.48           |
| 139       | ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI<br>NUMBER OF UNITS                   | 1<br>1           | JOB | 1,109.00   | 1,109.00         | 47%          | 587.77           |
| 16115     | FIELD STORAGE BIN ON SITE >8 HRS,DAY,ZI<br>DAYS OR PARTIAL DAY(WHOLE NO.) | 1<br>1           | EA  | 320.00     | 320.00           | 47%          | 169.60           |
|           | <b>Equipment &amp; Services</b>   |                  |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                  |     | <b>USD</b> | <b>11,969.60</b> | <b>47.0%</b> | <b>6,343.89</b>  |
| 100003140 | PLUG - CMTG - TOP ALUM - 4-1/2  | 1                | EA  | 110.00     | 110.00           | 47%          | 58.30            |
| 100003639 | SUPER FLUSH   | 20               | SK  | 147.76     | 2,955.20         | 47%          | 1,566.26         |
| 12302     | SBM 50-50 POZ (PREMIUM AG)  | 1615             | SK  | 14.35      | 23,175.25        | 47%          | 12,282.88        |
| 100003682 | BENTONITE   | 27               | SK  | 0.00       | N/C              | 47%          | N/C              |
| 100003652 | SALT  | 3835             | LB  | 0.22       | 843.70           | 47%          | 447.16           |
| 100005050 | HR-5  | 266              | LB  | 5.39       | 1,433.74         | 47%          | 759.88           |
| 100003646 | HALAD(R)-322  | 797              | LB  | 9.21       | 7,340.37         | 47%          | 3,890.40         |
| 100005049 | FLOCELE   | 404              | LB  | 2.71       | 1,094.84         | 47%          | 580.27           |
| 100003668 | SUPER CBL   | 399              | LB  | 35.26      | 14,068.74        | 47%          | 7,456.43         |
| 100003669 | MICROBOND   | 2657             | LB  | 1.41       | 3,746.37         | 47%          | 1,985.58         |
| 76400     | ZI MILEAGE,CMT MTLs DEL/RET MIN<br>NUMBER OF TONS                         | 40<br>71.92      | MI  | 1.51       | 4,343.97         | 47%          | 2,302.30         |
| 3965      | HANDLE&DUMP SVC CHRg, CMT&ADDITIVES,ZI<br>NUMBER OF EACH                  | 1821<br>1        | CF  | 2.47       | 4,497.87         | 47%          | 2,383.87         |
|           | <b>Materials</b>  |                  |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                  |     | <b>USD</b> | <b>63,610.05</b> | <b>47.0%</b> | <b>33,713.33</b> |
| 100004879 | SHOE-FLOAT- 4-1/2 8RD - 2-3/4 SUPER                                       | 1                | EA  | 292.00     | 292.00           | 42%          | 169.36           |
| 100004752 | COLLAR-FLOAT- 4-1/2 8RD 9.5-13.5#/FT -                                    | 1                | EA  | 341.00     | 341.00           | 42%          | 197.78           |
| 100004622 | CLAMP - LIMIT - 4-1/2 - HINGED -  | 1                | EA  | 21.00      | 21.00            | 42%          | 12.18            |
| 100004473 | CENTRALIZER ASSY - API - 4-1/2 CSG X                                      | 25               | EA  | 59.85      | 1,496.25         | 42%          | 867.82           |
| 100005045 | HALLIBURTON WELD-A KIT  | 2                | EA  | 18.43      | 36.86            | 42%          | 21.38            |
|           | <b>Float Equipment</b>  |                  |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                  |     | <b>USD</b> | <b>2,187.11</b>  | <b>42.0%</b> | <b>1,268.52</b>  |
| 7         | ENVIRONMENTAL SURCHARGE,/JOB,ZI   | 1                | JOB | 66.24      | 66.24            |              | 66.24            |
| 8         | IRON SAFETY INSPECTION SURCHARGE /JOB ZI                                  | 1                | JOB | 39.74      | 39.74            |              | 39.74            |
|           | <b>Surcharges</b>   |                  |     |            |                  |              |                  |
|           | <b>SubTotal</b>   |                  |     | <b>USD</b> | <b>105.98</b>    | <b>0.0%</b>  | <b>105.98</b>    |

# HALLIBURTON

| <u>Mtrl Nbr</u> | <u>Description</u>      | <u>Qty</u> | <u>U/M</u> | <u>Unit Price</u> | <u>Gross Amt</u> | <u>Discount</u> | <u>Net Amt</u>   |
|-----------------|-------------------------|------------|------------|-------------------|------------------|-----------------|------------------|
|                 |                         |            |            |                   |                  |                 |                  |
|                 | <b>Total</b>            |            |            | <b>USD</b>        |                  |                 | <b>77,872.74</b> |
|                 | <b>Discount</b>         |            |            | <b>USD</b>        |                  |                 | <b>36,441.02</b> |
|                 | <b>Discounted Total</b> |            |            | <b>USD</b>        |                  |                 | <b>41,431.72</b> |

**Primary Plant:** VERNAL, UT, USA  
**Secondary Plant:** VERNAL, UT, USA

**Price Book Ref:** 01 Western US  
**Price Date:** 4/1/2001

## Conditions

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The cost in this analysis is good for the materials and/or services outlined within. These prices are based on Halliburton being awarded the work on a first call basis. Prices will be reviewed for adjustments if awarded on 2<sup>nd</sup> or 3<sup>rd</sup> call basis and/or after 30 days of this written analysis. This is in an effort to schedule our work and maintain a high quality of performance for our customers.

The unit prices stated in the proposal are based on our current published prices. The projected equipment, personnel, and material needs are only estimates based on information about the work presently available to us. At the time the work is actually performed, conditions then existing may require an increase or decrease in the equipment, personnel, and/or material needs. Charges will be based upon unit prices in effect at the time the work is performed and the amount of equipment, personnel, and/or material actually utilized in the work. Taxes, if any, are not included. Applicable taxes, if any, will be added to the actual invoice.

It is understood and agreed between the parties that with the exception of the subject discounts, all services performed and equipment and materials sold are provided subject to Halliburton's General Terms and Conditions contained in our current price list, (which include LIMITATION OF LIABILITY and WARRANTY provisions), and pursuant to the applicable Halliburton Work Order Contract (whether or not executed by you), unless a Master Service and/or Sales Contract applicable to the services, equipment, or materials supplied exists between your company and Halliburton, in which case the negotiated Master Contract shall govern the relationship between the parties. A copy of the latest version of our General Terms and Conditions is available from your Halliburton representative or at:

[http://www.halliburton.com/hes/general\\_terms\\_conditions.pdf](http://www.halliburton.com/hes/general_terms_conditions.pdf) for your convenient review, and we would appreciate receiving any questions you may have about them. Should your company be interested in negotiating a Master Contract with Halliburton, our Law Department would be pleased to work with you to finalize a mutually agreeable contract. In this connection, it is also understood and agreed that Customer will continue to execute Halliburton usual field work orders and/or tickets customarily required by Halliburton in connection with the furnishing of said services, equipment, and materials.

Any terms and conditions contained in purchase orders or other documents issued by the customer shall be of no effect except to confirm the type and quantity of services, equipment, and materials to be supplied to the customer.

If customer does not have an approved open account with Halliburton or a mutually executed written contract with Halliburton, which dictates payment terms different than those set forth in this clause, all sums due are payable in cash at the time of performance of services or delivery of equipment, products, or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice.

Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

# SHENANDOAH ENERGY, INC.

NC #8M-32-8-22

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 32, T8S, R22E, S.L.B.&M.

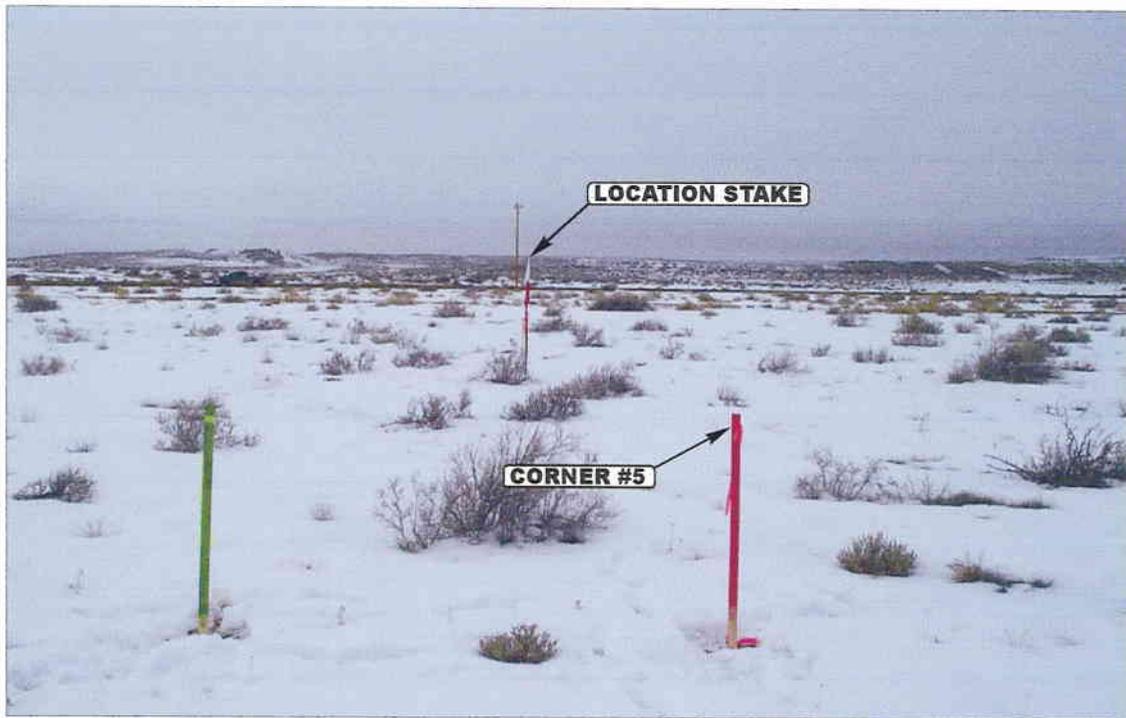


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



- Since 1964 -

**UEL** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

02 04 03  
MONTH DAY YEAR

PHOTO

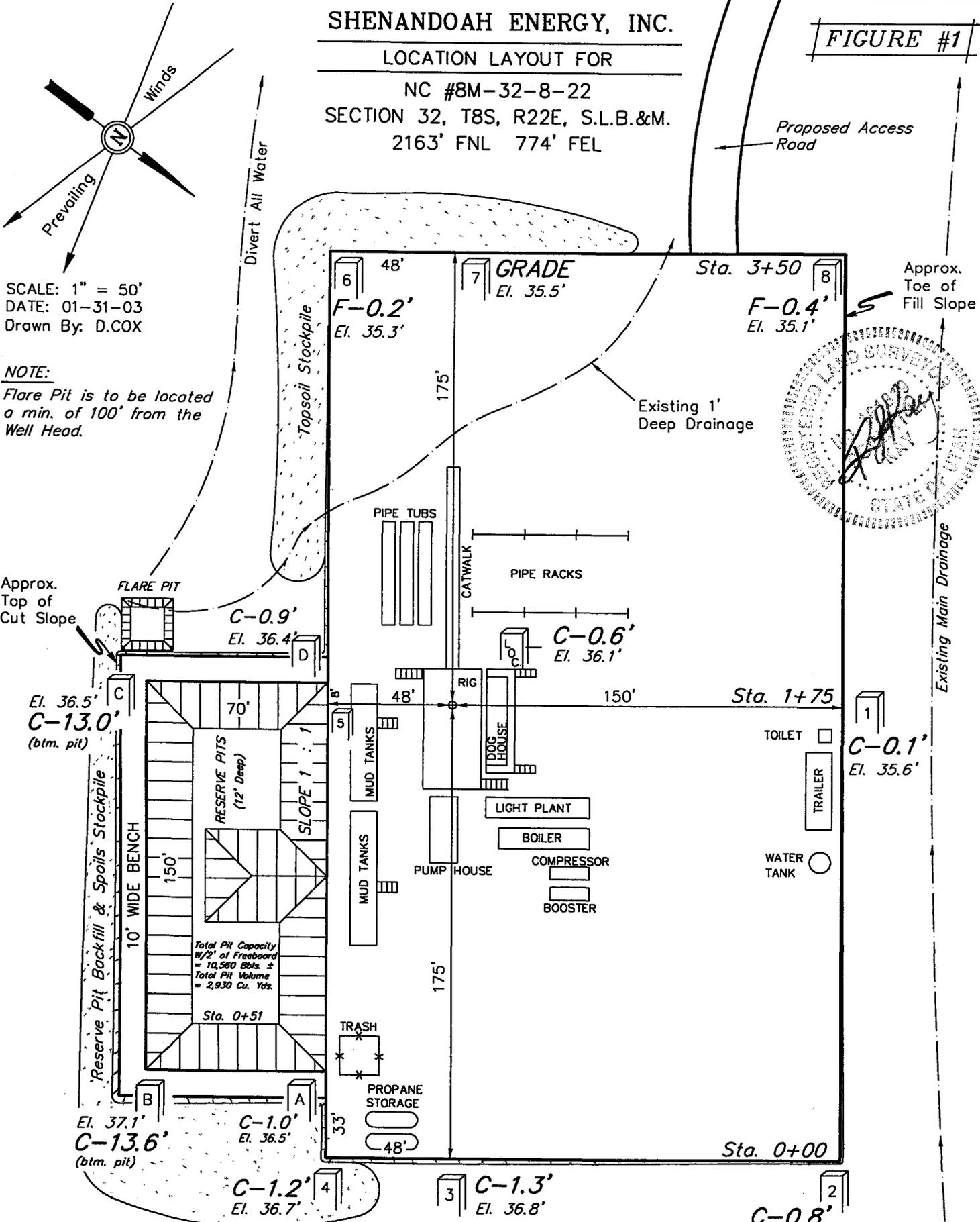
TAKEN BY: S.H. DRAWN BY: P.M. REVISED: 00-00-00

# SHENANDOAH ENERGY, INC.

LOCATION LAYOUT FOR

NC #8M-32-8-22  
SECTION 32, T8S, R22E, S.L.B.&M.  
2163' FNL 774' FEL

FIGURE #1



SCALE: 1" = 50'  
DATE: 01-31-03  
Drawn By: D.COX

**NOTE:**  
Flare Pit is to be located a min. of 100' from the Well Head.

Approx. Top of Cut Slope

Approx. Toe of Fill Slope

**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 4736.1'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4735.5'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

# SHENANDOAH ENERGY, INC.

## TYPICAL CROSS SECTIONS FOR

NC #8M-32-8-22

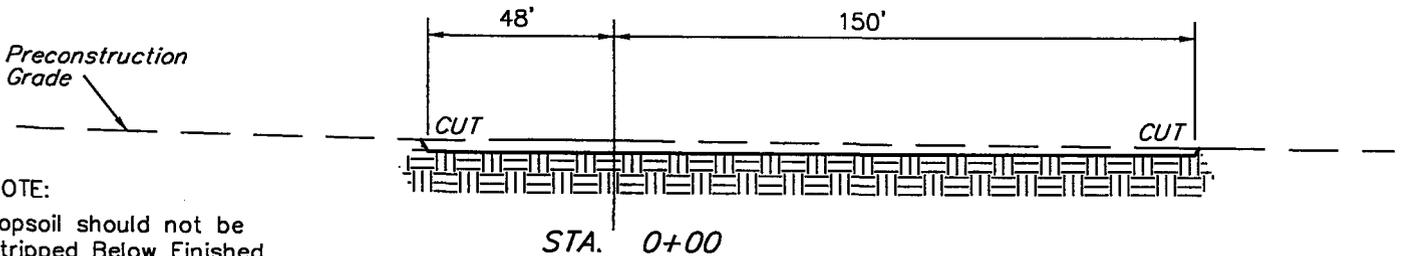
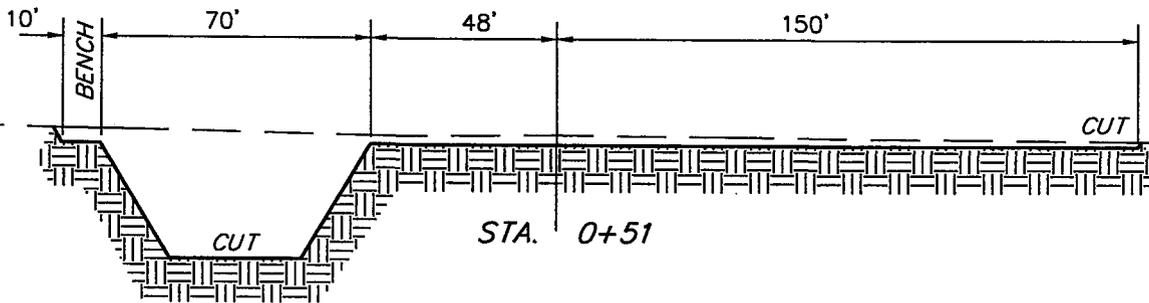
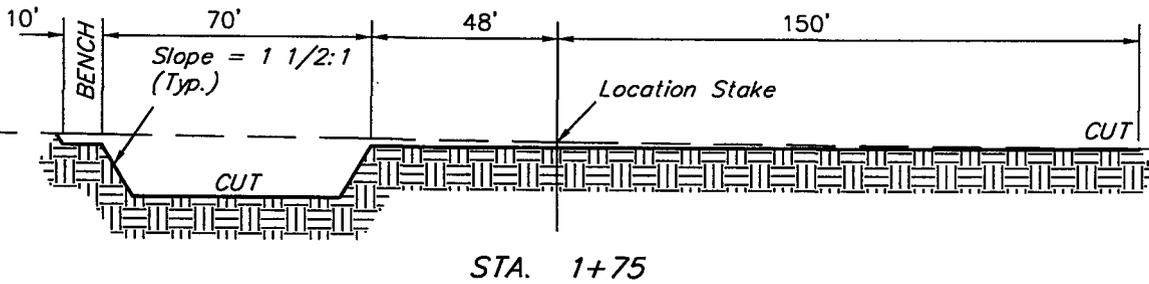
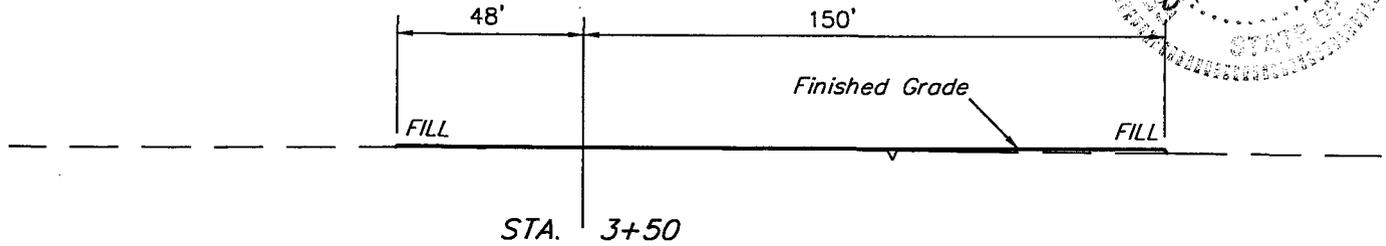
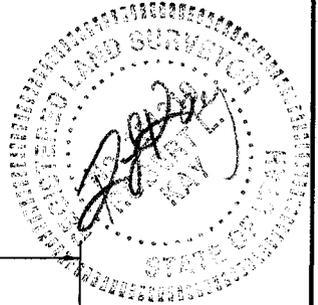
SECTION 32, T8S, R22E, S.L.B.&M.

2163' FNL 774' FEL

FIGURE #2

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 01-31-03  
Drawn By: D.COX

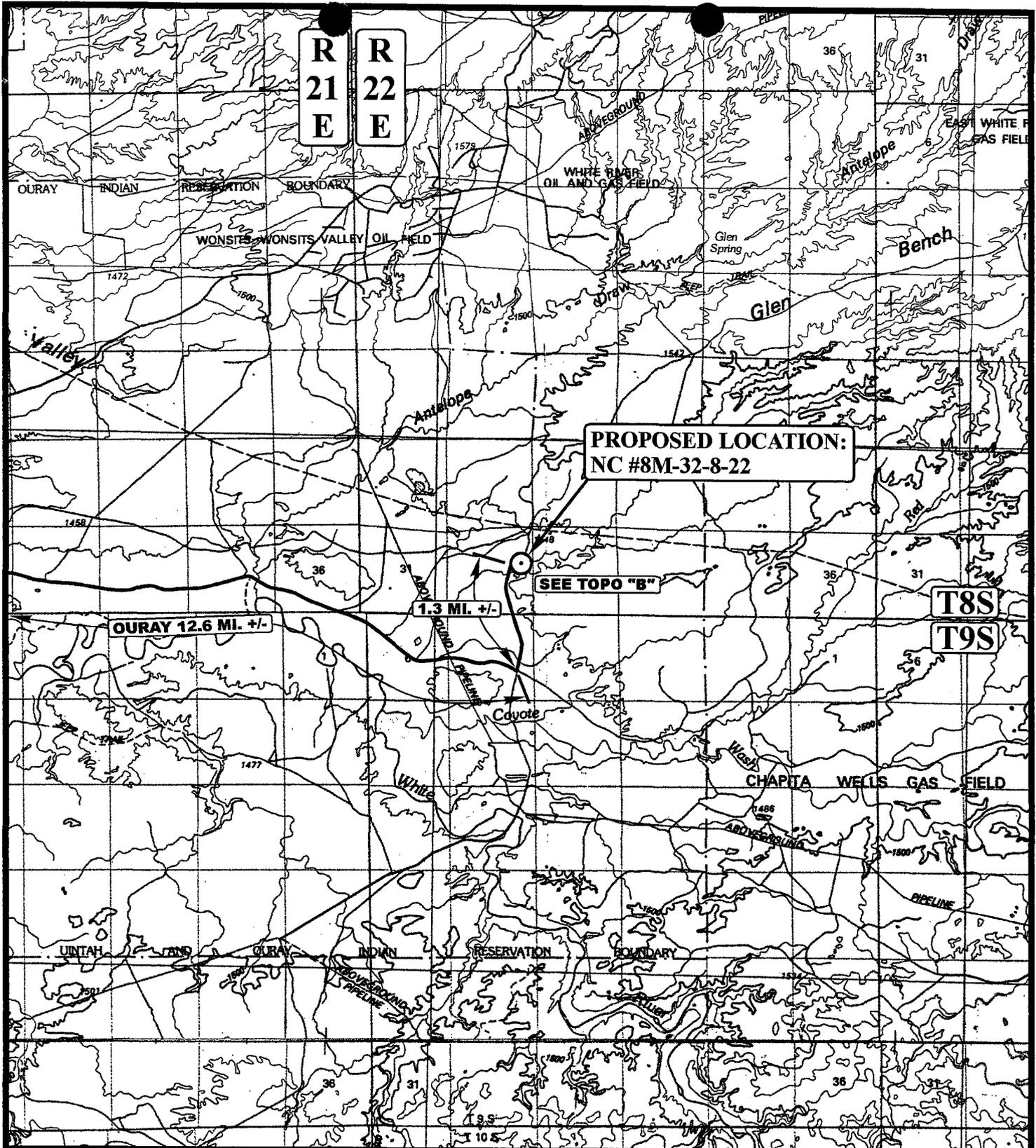


NOTE:  
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### APPROXIMATE YARDAGES

|                         |                        |
|-------------------------|------------------------|
| CUT                     |                        |
| (12") Topsoil Stripping | = 3,070 Cu. Yds.       |
| Remaining Location      | = 2,950 Cu. Yds.       |
| <b>TOTAL CUT</b>        | <b>= 6,020 CU.YDS.</b> |
| <b>FILL</b>             | <b>= 1,420 CU.YDS.</b> |

|   |                  |
|---|------------------|
| EXCESS MATERIAL AFTER 5% COMPACTION     | = 4,530 Cu. Yds. |
| Topsoil & Pit Backfill (1/2 Pit Vol.)   | = 4,530 Cu. Yds. |
| EXCESS UNBALANCE (After Rehabilitation) | = 0 Cu. Yds.     |



**LEGEND:**

○ PROPOSED LOCATION

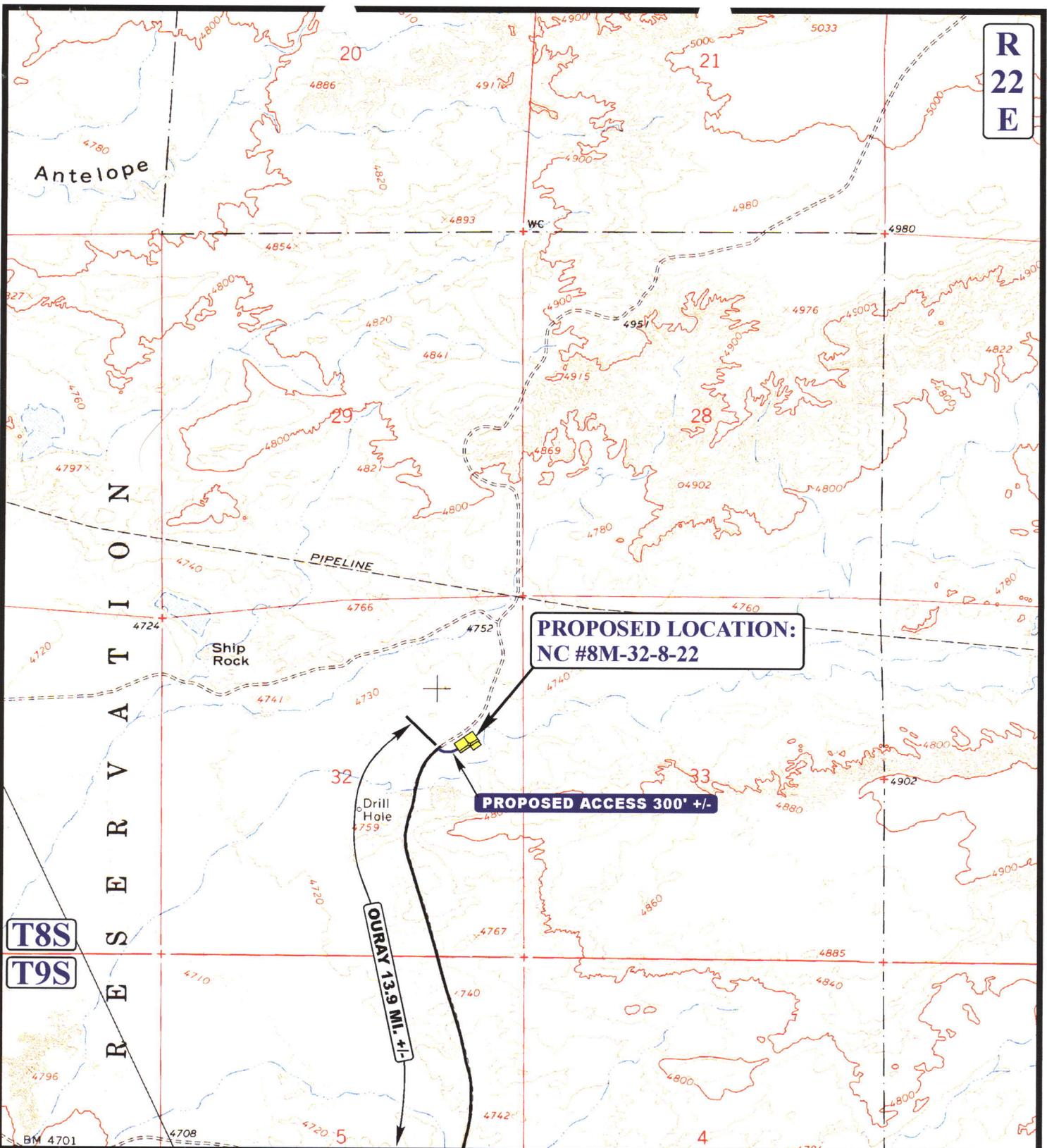


**SHENANDOAH ENERGY, INC.**

NC #8M-32-8-22  
 SECTION 32, T8S, R22E, S.L.B.&M.  
 2163' FNL 774' FEL

**UELS** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC** 02 04 03  
**MAP** MONTH DAY YEAR  
 SCALE: 1:100,000 DRAWN BY: P.M. REVISED: 00-00-00 **A**  
**TOPO**



**R  
22  
E**

**PROPOSED LOCATION:  
NC #8M-32-8-22**

**PROPOSED ACCESS 300' +/-**

**URAY 13.9 MI. +/-**

**T8S  
T9S**

**LEGEND:**

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD



**SHENANDOAH ENERGY INC.**

**NC #8M-32-8-22  
SECTION 32, T8S, R22E, S.L.B.&M.  
2163' FNL 774' FEL**

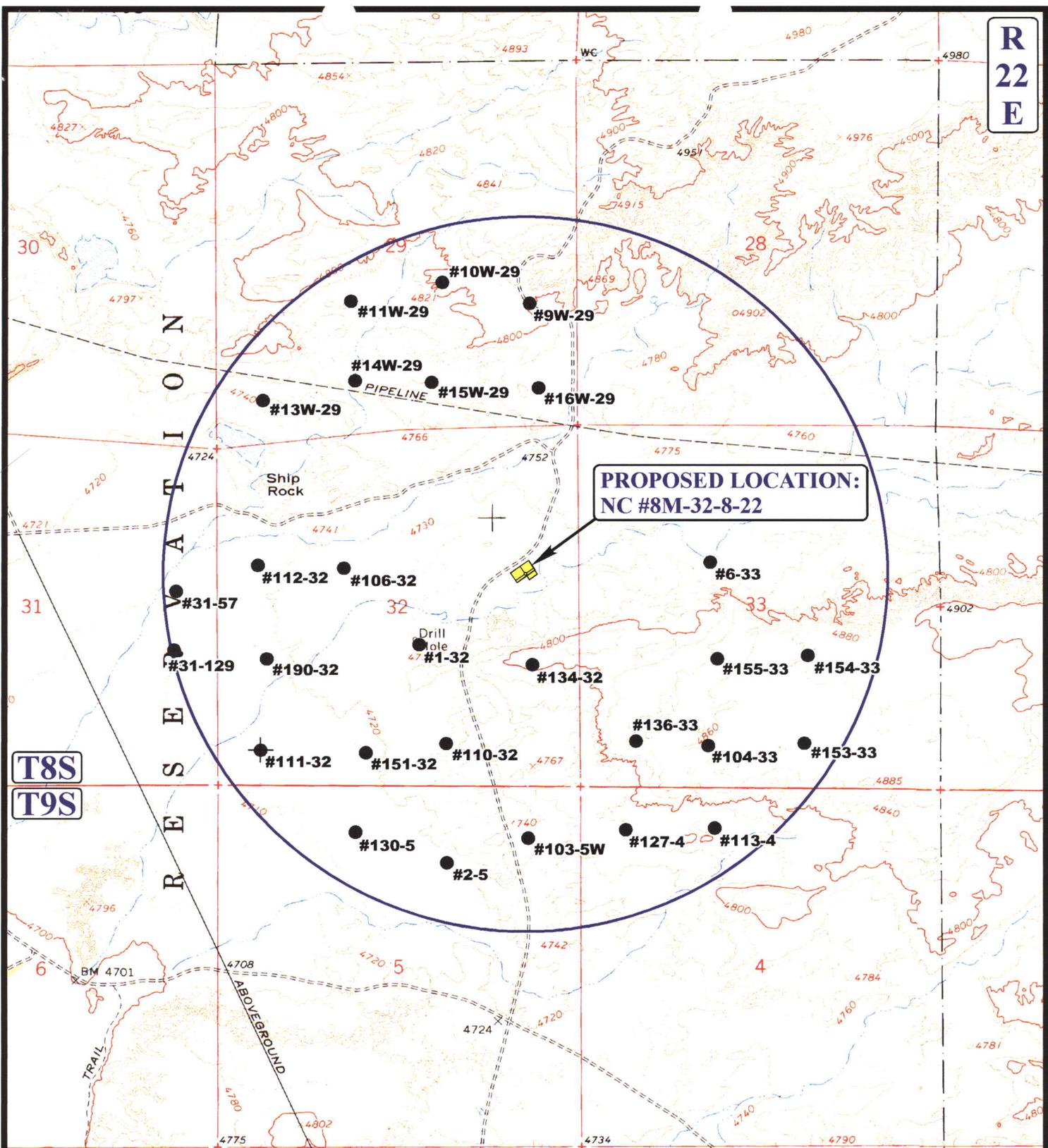


**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC MAP**  
02 04 03  
MONTH DAY YEAR  
SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 00-00-00



R  
22  
E



**PROPOSED LOCATION:  
NC #8M-32-8-22**

**LEGEND:**

- ⊘ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ⊘ WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



**SHENANDOAH ENERGY INC.**

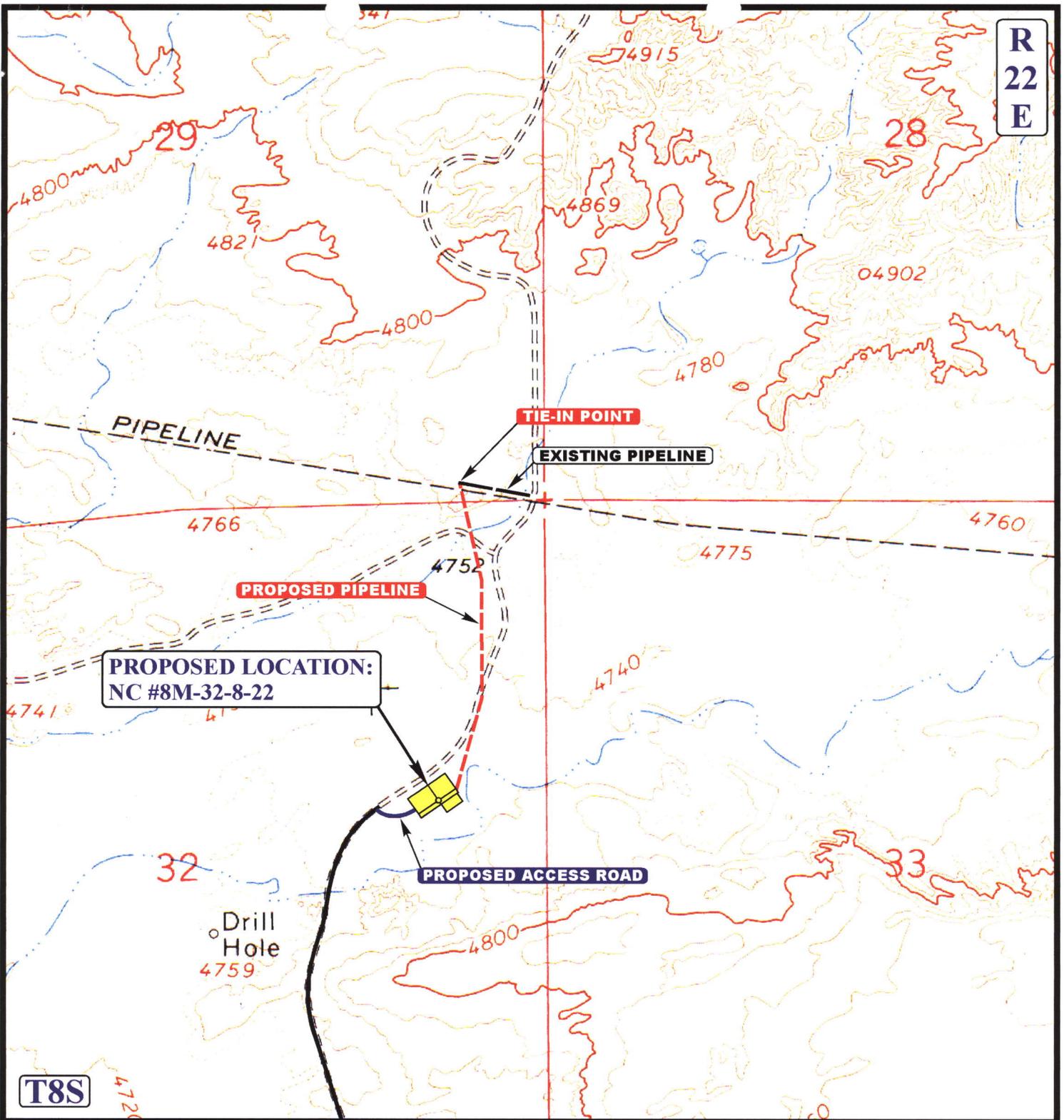
NC #8M-32-8-22  
 SECTION 32, T8S, R22E, S.L.B.&M.  
 2163' FNL 774' FEL

**UELS** Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC MAP** 02 04 03  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: P.M. REVISED: 00-00-00



R  
22  
E



APPROXIMATE TOTAL PIPELINE DISTANCE = 2,110' +/-

**LEGEND:**

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE

**SHENANDOAH ENERGY INC.**

NC #8M-32-8-22  
 SECTION 32, T8S, R22E, S.L.B.&M.  
 2163' FNL 774' FEL



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**TOPOGRAPHIC** 02 04 03  
**MAP** MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: P.M. REVISED: 00-00-00



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 02/18/2003

API NO. ASSIGNED: 43-047-34897

WELL NAME: NC 8M-32-8-22  
OPERATOR: SHENANDOAH ENERGY INC ( N4235 )  
CONTACT: JOHN BUSCH

PHONE NUMBER: 435-781-4341

PROPOSED LOCATION:  
SENE 32 080S 220E  
SURFACE: 2163 FNL 0774 FEL  
BOTTOM: 2163 FNL 0774 FEL  
UINTAH  
NATURAL BUTTES ( 630 )

| INSPECT LOCATN BY: / / |          |        |
|------------------------|----------|--------|
| Tech Review            | Initials | Date   |
| Engineering            | DRD      | 3/3/03 |
| Geology                |          |        |
| Surface                |          |        |

LEASE TYPE: 3 - State  
LEASE NUMBER: ML-3085  
SURFACE OWNER: 2 - Indian  
PROPOSED FORMATION: MNCS

LATITUDE: 40.08120  
LONGITUDE: 109.45683

RECEIVED AND/OR REVIEWED:

Plat

Bond: Fed[] Ind[] Sta[3] Fee[]  
(No. ~~159261960~~ 04127294 )

Potash (Y/N)

Oil Shale 190-5 (B) or 190-3 or 190-13

Water Permit  
(No. 36125 )

RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )

Fee Surf Agreement (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3.  
Unit \_\_\_\_\_

\_\_\_ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells

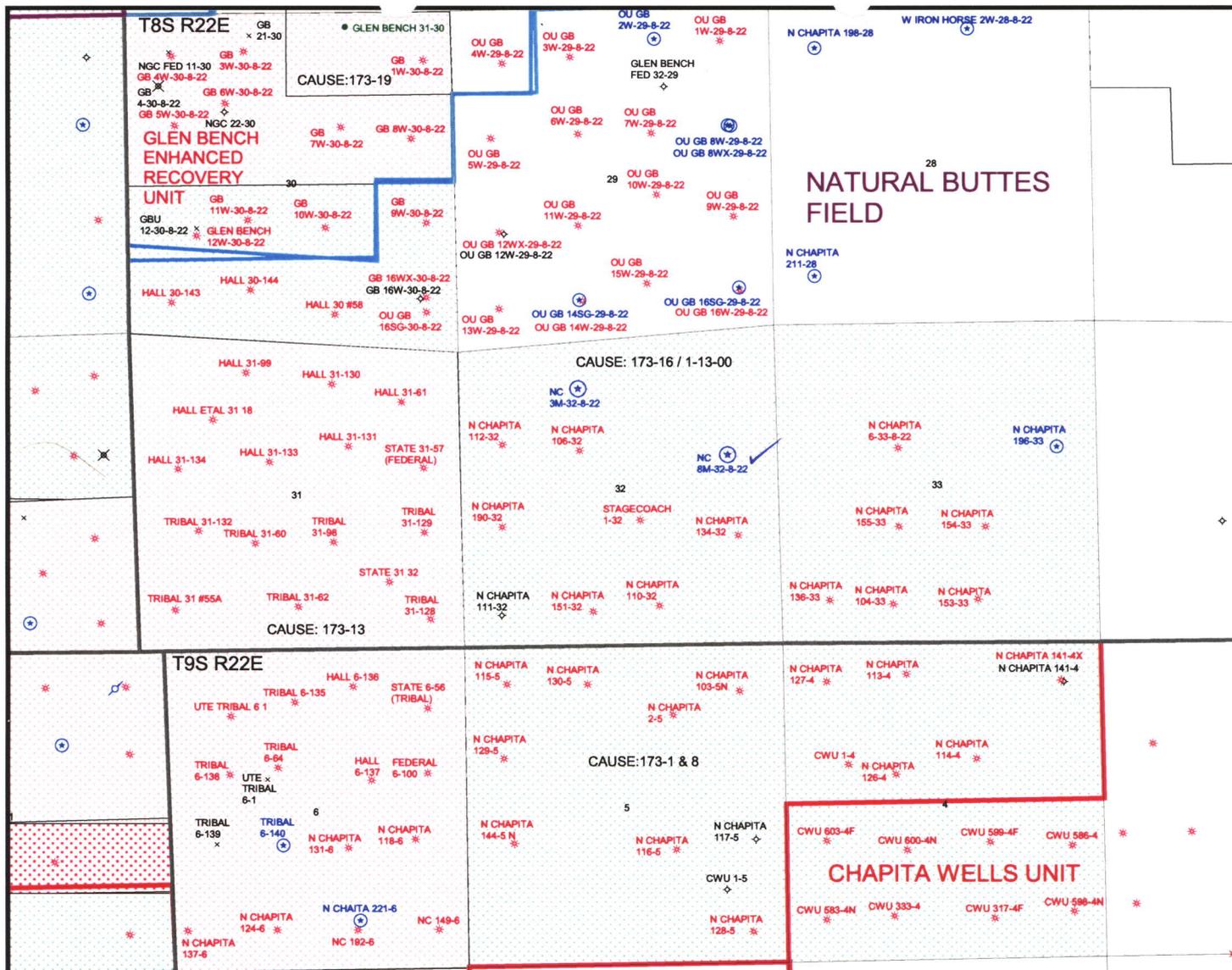
\_\_\_ R649-3-3. Exception

Drilling Unit  
Board Cause No: 173-16 (8/300)  
Eff Date: 1-13-00  
Siting: 460' from boundary & 920' from well

\_\_\_ R649-3-11. Directional Drill

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

STIPULATIONS: + Federal Approval  
2 - Surface Casing Cement Step  
3 - Prod. Casing Cement should be brought up inside intermediate casing ( $\pm 5700'$ )  
4 - STATEMENT OF BASIS



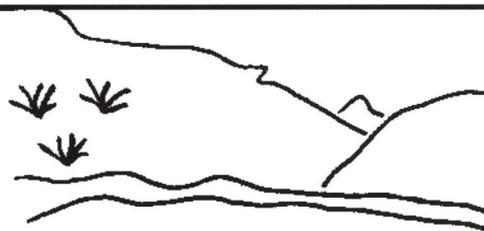
OPERATOR: SHENANDOAH ENERGY (N4235)

SEC. 32 T8S, R22E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 173-16 / 1-13-00



Utah Oil Gas and Mining

WELLS

- ⚡ GAS INJECTION
- GAS STORAGE
- × LOCATION ABANDONED
- ⊕ NEW LOCATION
- ◇ PLUGGED & ABANDONED
- \* PRODUCING GAS
- PRODUCING OIL
- ⊕ SHUT-IN GAS
- + SHUT-IN OIL
- × TEMP. ABANDONED
- TEST WELL
- ▲ WATER INJECTION
- ◆ WATER SUPPLY
- ♁ WATER DISPOSAL

UNIT STATUS

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

FIELD STATUS

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED
- COUNTY BOUNDARY
- SECTION LINES
- TOWNSHIP LINES



PREPARED BY: DIANA MASON  
DATE: 21-FEBRUARY-2003

**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

**OPERATOR:** SHENANDOAH ENERGY, INC.  
**WELL NAME & NUMBER:** NC 8M-32-8-22  
**API NUMBER:** 43-047-34897  
**LOCATION:** 1/4,1/4 SE/NE Sec: 32 TWP: 8S RNG: 22E 2163' FNL 744' FEL

**Geology/Ground Water:**

Shenandoah proposes to set 700' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 800'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of section 32 . This well is owned by R.N. Industries. This well produces water from 1-300' with its use listed as other. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement program should adequately protect any useable ground water at this location.

**Reviewer:** Brad Hill **Date:** 03/05/2003

**Surface:**

Surface rights at the proposed location are owned by the Ute Indian Tribe. Shenandoah is responsible for obtaining any rights-of-way or surface permits needed from the Ute Tribe.

**Reviewer:** Brad Hill **Date:** 03/05/2003

**Conditions of Approval/Application for Permit to Drill:**

None.

UTAH DIVISION OF WATER RIGHTS  
WATER RIGHT POINT OF DIVERSION PLOT CREATED WED, MAR 5, 2003, 9:49 AM  
PLOT SHOWS LOCATION OF 1 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 10000 FEET FROM A POINT  
FEET, FEET OF THE CT CORNER,  
SECTION 32 TOWNSHIP 8S RANGE 22E SL BASE AND MERIDIAN

PLOT SCALE IS APPROXIMATELY 1 INCH = 4000 FEET

N O R T H

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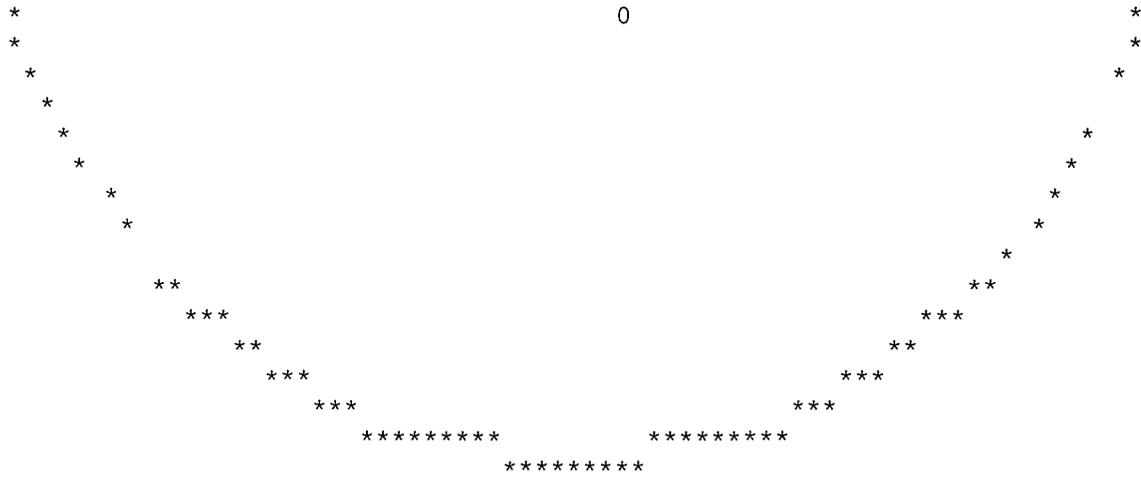
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UTAH DIVISION OF WATER RIGHTS  
 NWPLAT POINT OF DIVERSION LOCATION PROGRAM

| MAP CHAR | WATER RIGHT                         | QUANTITY CFS AND/OR AC-FT | SOURCE DESCRIPTION or WELL INFO DIAMETER DEPTH YEAR LOG | POINT OF DIVERSION DESCRIPTION NORTH EAST CNR SEC TWN RNG B& |
|----------|-------------------------------------|---------------------------|---|--|
| 0        | 49 1645                             | .0700 OR 50.00            | 6 10 - 300  | S 100 E 850 N4 5 9S 22E S                                    |
|          | WATER USE(S): OTHER R.N. Industries |                           | P.O. Box 98   | PRIORITY DATE: 04/10/2 Roosevelt                             |

Casing Schematic

Surface

Unit 9

13-3/8"  
MW 8.4  
Frac 19.3

2242'  
Green River

2837'  
Mahogany

5297'  
Washita

9-5/8"  
MW 9.5  
Frac 19.3

7960'  
Mesquite

10845'  
Blackhawk  
11635'  
Marcos B

4-1/2"  
MW 9.5

TOC @  
163.  
Surface  
700. MD

w/208 washout  
\* Surface Slip

TOC @  
1662.

w/158 washout  
Top out w/ 2005X TYPE V

TOC @  
5864.  
Intermediate  
5900. MD

w/158 washout  
\* assuming 778" as calculated  
by cement company, not 8 1/2" hole  
as suggested in APD  
TOC @ 6967' w/ 8 1/2" hole  
\* prod. casing set STD (+5700')  
inside intermediate

Production  
12000. MD

|              |                                       |              |
|--------------|---------------------------------------|--------------|
| Well name:   | <b>03-03 Shenandoah NC 8M-32-8-22</b> |              |
| Operator:    | <b>Shenandoah Energy Inc.</b>         | Project ID:  |
| String type: | Surface                               | 43-047-34897 |
| Location:    | Uintah County                         |              |

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 0 psi  
 Internal gradient: 0.494 psi/ft  
 Calculated BHP: 345 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Butress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on air weight.  
 Neutral point: 614 ft

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 75 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 450 ft

Cement top:

163 ft  
*\* Surface St. p*

Non-directional string.

**Re subsequent strings:**

Next setting depth: 5,900 ft  
 Next mud weight: 9,500 ppg  
 Next setting BHP: 2,912 psi  
 Fracture mud wt: 19,250 ppg  
 Fracture depth: 700 ft  
 Injection pressure: 700 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Internal Capacity (ft³) |
|---------|---------------------|-----------|-------------------------|-------|------------|----------------------|---------------------|---------------------|-------------------------|
| 1       | 700                 | 13.375    | 48.00                   | H-40  | ST&C       | 700                  | 700                 | 12.59               | 65.7                    |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 1       | 305                 | 740                     | 2.42                   | 345              | 1730                 | 5.01                | 34                  | 322                     | 9.58 J                |

Prepared by: Dustin K. Doucet  
 Utah Dept. of Natural Resources

Phone: 801-538-5281  
 FAX: 801-359-3940

Date: March 3, 2003  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

|              |                                       |                             |
|--------------|---------------------------------------|-----------------------------|
| Well name:   | <b>03-03 Shenandoah NC 8M-32-8-22</b> |                             |
| Operator:    | <b>Shenandoah Energy Inc.</b>         |                             |
| String type: | Intermediate                          | Project ID:<br>43-047-34897 |
| Location:    | Uintah County                         |                             |

**Design parameters:**

**Collapse**

Mud weight: 9.500 ppg  
Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.494 psi/ft  
Calculated BHP: 2,912 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.  
Neutral point: 5,066 ft

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 133 °F  
Temperature gradient: 1.15 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 1,662 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 12,000 ft  
Next mud weight: 9.500 ppg  
Next setting BHP: 5,922 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 5,900 ft  
Injection pressure: 5,900 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Internal Capacity (ft³) |
|---------|---------------------|-----------|-------------------------|-------|------------|----------------------|---------------------|---------------------|-------------------------|
| 2       | 4400                | 9.625     | 40.00                   | N-80  | LT&C       | 4400                 | 4400                | 8.75                | 350                     |
| 1       | 1500                | 9.625     | 40.00                   | S-95  | LT&C       | 5900                 | 5900                | 8.75                | 119.3                   |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 2       | 2171                | 3031                    | 1.40                   | 2171             | 5750                 | 2.65                | 236                 | 737                     | 3.12 J                |
| 1       | 2912                | 4230                    | <u>1.45</u>            | 2912             | 6820                 | <u>2.34</u>         | 60                  | 858                     | <u>14.30 J</u>        |

Prepared by: Dustin K. Doucet  
Utah Dept. of Natural Resources

Phone: 801-538-5281  
FAX: 801-359-3940

Date: March 3, 2003  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:

03-03 Shenandoah NC 8M-32-8-22

Operator: Shenandoah Energy Inc.

String type: Production

Project ID:

43-047-34897

Location: Uintah County

**Design parameters:**

**Collapse**

Mud weight: 9.500 ppg  
Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.494 psi/ft  
Calculated BHP: 5,922 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.  
Neutral point: 10,365 ft

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 203 °F  
Temperature gradient: 1.15 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 5,864 ft

Non-directional string.

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade   | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Internal Capacity (ft³) |
|---------|---------------------|-----------|-------------------------|---------|------------|----------------------|---------------------|---------------------|-------------------------|
| 2       | 11400               | 4.5       | 11.60                   | HCP-110 | LT&C       | 11400                | 11400               | 3.875               | 264.3                   |
| 1       | 600                 | 4.5       | 13.50                   | P-110   | LT&C       | 12000                | 12000               | 3.795               | 16                      |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (Kips) | Tension Strength (Kips) | Tension Design Factor |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 2       | 5626                | 8600                    | 1.53                   | 5626             | 10690                | 1.90                | 140                 | 279                     | 1.99 J                |
| 1       | 5922                | 10680                   | 1.80                   | 5922             | 12410                | 2.10                | 8                   | 338                     | 41.73 J               |

Prepared by: Dustin K. Doucet  
Utah Dept. of Natural Resources

Phone: 801-538-5281  
FAX: 801-359-3940

Date: March 3, 2003  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS:**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

March 5, 2003

Shenandoah Energy, Inc.  
11002 East 17500 South  
Vernal, UT 84078

Re: North Chapita 8M-32-8-22 Well, 2163' FNL, 774' FEL, SE NE, Sec. 32, T. 8 South,  
R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34897.

Sincerely,

A handwritten signature in black ink, appearing to read "John R. Baza".

John R. Baza  
Associate Director

pb  
Enclosures  
cc: Uintah County Assessor  
SITLA

**Operator:** Shenandoah Energy, Inc.  
**Well Name & Number** North Chapita 8M-32-8-22  
**API Number:** 43-047-34897  
**Lease:** ML 3085

**Location:** SE NE      **Sec.** 32      **T.** 8 South      **R.** 22 East

### Conditions of Approval

1. **General**

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- 24 hours prior to cementing or testing casing
- 24 hours prior to testing blowout prevention equipment
- 24 hours prior to spudding the well
- within 24 hours of any emergency changes made to the approved drilling program
- prior to commencing operations to plug and abandon the well

The following are Division of Oil, Gas and Mining contacts and their work telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at (801) 538-5338
- Carol Daniels at (801) 538-5284 (spud)

3. **Reporting Requirements**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. Surface casing shall be cemented to the surface.

7. Production casing cement should be brought up inside intermediate casing ( $\pm 5700'$ ).



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155

In Reply Refer To:  
3106  
(UT-924)

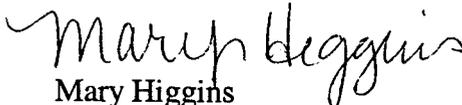
July 21, 2003

### Memorandum

To: Vernal Field Office  
From: **ACTING** Chief, Branch of Minerals Adjudication  
Subject: Name Change Approval

Attached is an approved copy of the name change from BLM-Eastern States, which is recognized by the Utah State Office. We have updated our records to reflect:

The name change from Shenandoah Energy Incorporated into QEP Uinta Basin, Incorporated is effective July 23, 1999. The BLM Bond Number is ESB000024.

  
Mary Higgins  
Acting Chief, Branch of  
Minerals Adjudication

### Enclosure

1. Eastern States Letter
2. List of leases

cc: MMS, James Sykes, PO Box 25165, M/S 357 B1, Denver CO 80225  
State of Utah, DOGM, Earlene Russell (Ste. 1210), Box 145801, SLC UT 84114  
Teresa Thompson (UT-922)  
Joe Incardine (UT-921)

RECEIVED

JUL 29 2003

DIV. OF OIL, GAS & MINING

Exhibit of Leases

|               |              |           |           |
|---------------|--------------|-----------|-----------|
| UTSL-065342   | UTU-0825     | UTU-65472 | UTU-74971 |
| UTSL-065429   | UTU-0826     | UTU-65632 | UTU-74972 |
| UTSL-066409-A | UTU-0827     | UTU-67844 | UTU-75079 |
| UTSL-066446   | UTU-0828     | UTU-68217 | UTU-75080 |
| UTSL-066446-A | UTU-0829     | UTU-68218 | UTU-75081 |
| UTSL-066446-B | UTU-0830     | UTU-68219 | UTU-75082 |
| UTSL-066791   | UTU-0933     | UTU-68220 | UTU-75083 |
| UTSL-069330   | UTU-0971     | UTU-68387 | UTU-75084 |
| UTSL-070932-A | UTU-0971-A   | UTU-68620 | UTU-75085 |
| UTSL-071745   | UTU-01089    | UTU-69001 | UTU-75086 |
| UTSL-071963   | UTU-02025    | UTU-70853 | UTU-75087 |
| UTSL-071964   | UTU-02030    | UTU-70854 | UTU-75088 |
| UTSL-071965   | UTU-02060    | UTU-70855 | UTU-75102 |
|               | UTU-02148    | UTU-70856 | UTU-75103 |
| UTU-046       | UTU-02149    | UTU-71416 | UTU-75116 |
| UTU-055       | UTU-02510-A  | UTU-72066 | UTU-75243 |
| UTU-057       | UTU-09613    | UTU-72109 | UTU-75503 |
| UTU-058       | UTU-09617    | UTU-72118 | UTU-75678 |
| UTU-059       | UTU-09809    | UTU-72598 | UTU-75684 |
| UTU-080       | UTU-011225-B | UTU-72634 | UTU-76278 |
| UTU-081       | UTU-011226   | UTU-72649 | UTU-75760 |
| UTU-082       | UTU-011226-B | UTU-73182 | UTU-75939 |
| UTU-093       | UTU-012457   | UTU-73443 | UTU-76039 |
| UTU-0116      | UTU-012457-A | UTU-73456 | UTU-76482 |
| UTU-0558      | UTU-018260-A | UTU-73680 | UTU-76507 |
| UTU-0559      | UTU-022158   | UTU-73681 | UTU-76508 |
| UTU-0560      | UTU-025960   | UTU-73684 | UTU-76721 |
| UTU-0561      | UTU-025962   | UTU-73686 | UTU-76835 |
| UTU-0562      | UTU-025963   | UTU-73687 | UTU-77063 |
| UTU-0566      | UTU-029649   | UTU-73698 | UTU-77301 |
| UTU-0567      | UTU-65471    | UTU-73699 | UTU-77308 |
| UTU-0568      | UTU-65472    | UTU-73700 | UTU-78021 |
| UTU-0569      | UTU-103144   | UTU-73710 | UTU-78028 |
| UTU-0570      | UTU-140740   | UTU-73914 | UTU-78029 |
| UTU-0571      | UTU-14219    | UTU-73917 | UTU-78214 |
| UTU-0572      | UTU-14639    | UTU-74401 | UTU-78215 |
| UTU-0629      | UTU-16551    | UTU-74402 | UTU-78216 |
| UTU-0802      | UTU-28652    | UTU-74407 | UTU-80636 |
| UTU-0803      | UTU-42050    | UTU-74408 | UTU-80637 |
| UTU0804       | UTU-43915    | UTU-74419 | UTU-80638 |
| UTU0805       | UTU-43916    | UTU-74493 | UTU-80639 |
| UTU0806       | UTU-43917    | UTU-74494 | UTU-80640 |
| UTU0807       | UTU-43918    | UTU-74495 |           |
| UTU0809       | UTU-56947    | UTU-74496 |           |
| UTU0810       | UTU-65276    | UTU-74836 |           |
| UTU-0823      | UTU-65404    | UTU-74842 |           |
| UTU-0824      | UTU-65471    | UTU-74968 |           |

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

006

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
ML-3085

6. If Indian, Allottee or Tribe Name  
UTE TRIBE

7. If Unit or CA, Agreement Designation  
N/A

8. Well Name and No.  
NC 8M-32-8-22

9. API Well No.  
43-047-34897

10. Field and Pool, or Exploratory Area  
NATURAL BUTTES

11. County or Parish, State  
UINTAH, UTAH

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil  Gas   
Well  Well  Other

2. Name of Operator: QEP UINTA BASIN, INC. Contact: John Busch  
Email: john.busch@questar.com

3. Address and Telephone No  
11002 E. 17500 S. VERNAL, UT 84078-8526 (435) 781-4341

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2163' FNL <sup>77'</sup> FEL SENE SEC 32 T8S R22E

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION   |
|--|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Abandonment                           |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Recompletion                          |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Plugging Back                         |
|  | <input type="checkbox"/> Casing Repair                         |
|  | <input type="checkbox"/> Altering Casing                       |
|  | <input checked="" type="checkbox"/> Other <u>APD Extension</u> |
|  | <input type="checkbox"/> Change of Plans                       |
|  | <input type="checkbox"/> New Construction                      |
|  | <input type="checkbox"/> Non-Routine Fracturing                |
|  | <input type="checkbox"/> Water Shut-Off                        |
|  | <input type="checkbox"/> Conversion to Injection               |
|  | <input type="checkbox"/> Dispose Water                         |

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

QEP Uinta Basin, Inc. hereby requests a 1 year extension on the APD for the NC 8M-32-8-22.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 04-01-04  
By: [Signature]

COPY SENT TO OPERATOR  
Date: 4-2-04  
Initials: CHD

**RECEIVED  
MAR 29 2004**

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.  
Signed John Busch Title OPERATIONS Date 3/25/2004

(This space for Federal or State office use)

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

Conditions of approval, if any

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-34897  
**Well Name:** NC 8M-32-8-22  
**Location:** 2163'FNL <sup>77'</sup> FEL SENE SEC 32 T8S R22E  
**Company Permit Issued to:** QEP UINTA BASIN, INC.  
**Date Original Permit Issued:** 3/5/2003

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes  No

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes  No

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes  No

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes  No

Has the approved source of water for drilling changed? Yes  No

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes  No

Is bonding still in place, which covers this proposed well? Yes  No

John Bush  
Signature

3/25/2004  
Date

Title: OPERATIONS

Representing: QEP UINTA BASIN, INC.

RECEIVED

MAR 29 2004

DIV. OF OIL, GAS & MINING



State of Utah

Department of  
Natural Resources

MICHAEL R. STYLER  
*Executive Director*

Division of  
Oil, Gas & Mining

MARY ANN WRIGHT  
*Acting Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

April 13, 2005

Jan Nelson  
QEP Uinta Basin Inc.  
11002 East 17500 South  
Vernal, Utah 84078

Re: APD Rescinded – N Chapita 8M-32-8-22, Sec. 32, T. 8S, R. 22E  
Uintah County, Utah API No. 43-047-34897

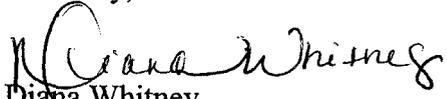
Dear Ms. Nelson:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on March 5, 2003. On April 1, 2004 the Division granted a one-year APD extension. On April 12, 2005, you requested that the division rescind the state approved APD. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective April 12, 2005.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Whitney  
Engineering Technician

cc: Well File  
SITLA, Ed Bonner

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

|                |
|----------------|
| <b>ROUTING</b> |
| 1. DJJ         |
| 2. CDW         |

Change of Operator (Well Sold)

**X - Operator Name Change/Merger**

The operator of the well(s) listed below has changed, effective:

1/1/2007

|   |  |
|---|--|
| <b>FROM:</b> (Old Operator):<br>N2460-QEP Uinta Basin, Inc.<br>1050 17th St, Suite 500<br>Denver, CO 80265<br><br>Phone: 1 (303) 672-6900 | <b>TO:</b> ( New Operator):<br>N5085-Questar E&P Company<br>1050 17th St, Suite 500<br>Denver, CO 80265<br><br>Phone: 1 (303) 672-6900 |
|---|--|

CA No.

Unit:

| WELL NAME          | SEC | TWN | RNG | API NO | ENTITY NO | LEASE TYPE | WELL TYPE | WELL STATUS |
|--------------------|-----|-----|-----|--------|-----------|------------|-----------|-------------|
| SEE ATTACHED LISTS |     |     |     | *      |           |            |           |             |

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/19/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/16/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/31/2005
- a. Is the new operator registered in the State of Utah: Business Number: 764611-0143
- 5a. (R649-9-2) Waste Management Plan has been received on: IN PLACE
- 5b. Inspections of LA PA state/fee well sites complete on: n/a
- 5c. Reports current for Production/Disposition & Sundries on: n/a
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 4/23/2007 BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 4/23/2007
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: \_\_\_\_\_
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 4/30/2007 and 5/15/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/30/2007 and 5/15/2007
- Bond information entered in RBDMS on: 4/30/2007 and 5/15/2007
- Fee/State wells attached to bond in RBDMS on: 4/30/2007 and 5/15/2007
- Injection Projects to new operator in RBDMS on: 4/30/2007 and 5/15/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 799446
- a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965003033
- b. The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS: THIS IS A COMPANY NAME CHANGE.**

SOME WELL NAMES HAVE BEEN CHANGED AS REQUESTED

| Original Well Name        | Well Name & No.           | Q/Q  | SEC | TWP  | RNG  | API        | Entity | Lease | Well Type | Status |
|---------------------------|---------------------------|------|-----|------|------|------------|--------|-------|-----------|--------|
| GB 6W-25-8-21             | GB 6W-25-8-21             | SENW | 25  | 080S | 210E | 4304734121 | 13440  | fee   | GW        | P      |
| GB 7W-25-8-21             | GB 7W-25-8-21             | SWNE | 25  | 080S | 210E | 4304734122 | 13436  | fee   | GW        | P      |
| GB 11W-30-8-22            | <b>OU GB 11W 30 8 22</b>  | NESW | 30  | 080S | 220E | 4304734392 | 13433  | fee   | GW        | P      |
| UTAH STATE 1              | <b>STATE 1</b>            | NENE | 36  | 070S | 240E | 4304715128 | 5878   | State | GW        | P      |
| KAYE STATE 1-16           | KAYE STATE 1-16           | NWNW | 16  | 100S | 230E | 4304730609 | 5395   | State | GW        | P      |
| TOLL STATION ST 8-36-8-21 | TOLL STATION ST 8-36-8-21 | SENE | 36  | 080S | 210E | 4304732724 | 12361  | State | GW        | S      |
| GLEN BENCH ST 8A-36-8-21  | <b>GB 8A 36 8 21</b>      | SENE | 36  | 080S | 210E | 4304733037 | 12377  | State | GW        | P      |
| GLEN BENCH ST 6-36-8-21   | <b>GB 6 36 8 21</b>       | SENW | 36  | 080S | 210E | 4304733038 | 12378  | State | GW        | P      |
| GLEN BENCH ST 2-36-8-21   | <b>GB 2 36 8 21</b>       | NWNE | 36  | 080S | 210E | 4304733252 | 12527  | State | GW        | P      |
| GH 1W-32-8-21             | GH 1W-32-8-21             | NENE | 32  | 080S | 210E | 4304733570 | 12797  | State | GW        | P      |
| GH 3W-32-8-21             | GH 3W-32-8-21             | NENW | 32  | 080S | 210E | 4304733571 | 12796  | State | GW        | P      |
| GH 5W-32-8-21             | GH 5W-32-8-21             | SWNW | 32  | 080S | 210E | 4304733572 | 12828  | State | GW        | P      |
| GH 7W-32-8-21             | GH 7W-32-8-21             | SWNE | 32  | 080S | 210E | 4304733573 | 12872  | State | GW        | P      |
| GH 2W-32-8-21             | GH 2W-32-8-21             | NWNE | 32  | 080S | 210E | 4304733744 | 13029  | State | GW        | P      |
| GH 4W-32-8-21             | GH 4W-32-8-21             | NWNW | 32  | 080S | 210E | 4304733745 | 13035  | State | GW        | P      |
| GH 8W-32-8-21             | GH 8W-32-8-21             | SENE | 32  | 080S | 210E | 4304733746 | 13030  | State | GW        | P      |
| GB 3W-16-8-22             | <b>OU GB 3W 16 8 22</b>   | NENW | 16  | 080S | 220E | 4304733751 | 13577  | State | GW        | P      |
| GB 5W-16-8-22             | <b>OU GB 5W 16 8 22</b>   | SWNW | 16  | 080S | 220E | 4304733752 | 13570  | State | GW        | P      |
| GH 6W-32-8-21             | GH 6W-32-8-21             | SENW | 32  | 080S | 210E | 4304733753 | 13036  | State | GW        | P      |
| GB 11W-16-8-22            | <b>OU GB 11W 16 8 22</b>  | NESW | 16  | 080S | 220E | 4304733754 | 13582  | State | GW        | P      |
| GH 5G-32-8-21             | GH 5G-32-8-21             | SWNW | 32  | 080S | 210E | 4304733866 | 13037  | State | OW        | P      |
| GB 1W-36-8-21             | GB 1W-36-8-21             | NENE | 36  | 080S | 210E | 4304733944 | 13439  | State | GW        | P      |
| WV 7W-36-7-21             | WV 7W-36-7-21             | SWNE | 36  | 070S | 210E | 4304734065 | 13334  | State | GW        | TA     |
| WV 9W-36-7-21             | WV 9W-36-7-21             | NESE | 36  | 070S | 210E | 4304734066 | 13331  | State | GW        | TA     |
| WV 9W-16-7-21             | WV 9W-16-7-21             | NESE | 16  | 070S | 210E | 4304734324 |        | State | GW        | LA     |
| OU GB 4W-16-8-22          | OU GB 4W-16-8-22          | NWNW | 16  | 080S | 220E | 4304734598 | 13579  | State | GW        | P      |
| OU GB 10W-16-8-22         | OU GB 10W-16-8-22         | NWSE | 16  | 080S | 220E | 4304734616 |        | State | GW        | LA     |
| OU GB 12W-16-8-22         | OU GB 12W-16-8-22         | NWSW | 16  | 080S | 220E | 4304734617 | 13697  | State | GW        | P      |
| OU GB 13W-16-8-22         | OU GB 13W-16-8-22         | SWSW | 16  | 080S | 220E | 4304734618 | 13611  | State | GW        | P      |
| GB 14MU-16-8-22           | GB 14MU-16-8-22           | SESW | 16  | 080S | 220E | 4304734619 | 14196  | State | GW        | P      |
| OU GB 15W-16-8-22         | OU GB 15W-16-8-22         | SWSE | 16  | 080S | 220E | 4304734622 | 13595  | State | GW        | P      |
| OU GB 16W-16-8-22         | OU GB 16W-16-8-22         | SESE | 16  | 080S | 220E | 4304734655 | 13815  | State | GW        | P      |
| OU GB 2W-16-8-22          | OU GB 2W-16-8-22          | NWNE | 16  | 080S | 220E | 4304734657 | 13721  | State | GW        | P      |
| OU GB 6W-16-8-22          | OU GB 6W-16-8-22          | SENW | 16  | 080S | 220E | 4304734658 | 13592  | State | GW        | P      |
| OU GB 8W-16-8-22          | OU GB 8W-16-8-22          | SENE | 16  | 080S | 220E | 4304734660 | 13769  | State | GW        | TA     |
| OU GB 9W-16-8-22          | OU GB 9W-16-8-22          | NESE | 16  | 080S | 220E | 4304734692 |        | State | GW        | LA     |
| OU GB 15G-16-8-22         | OU GB 15G-16-8-22         | SWSE | 16  | 080S | 220E | 4304734829 | 13777  | State | OW        | S      |
| GB 7MU-36-8-21            | GB 7MU-36-8-21            | SWNE | 36  | 080S | 210E | 4304734893 | 14591  | State | GW        | P      |
| GB 3W-36-8-21             | GB 3W-36-8-21             | NENW | 36  | 080S | 210E | 4304734894 | 13791  | State | GW        | P      |
| NC 8M-32-8-22             | NC 8M-32-8-22             | SENE | 32  | 080S | 220E | 4304734897 |        | State | GW        | LA     |
| NC 3M-32-8-22             | NC 3M-32-8-22             | NENW | 32  | 080S | 220E | 4304734899 |        | State | GW        | LA     |

| Original Well Name | Well Name & No.        | Q/Q  | SEC | TWP  | RNG  | API        | Entity | Lease | Well Type | Status |
|--------------------|------------------------|------|-----|------|------|------------|--------|-------|-----------|--------|
| GB 5W-36-8-21      | GB 5W-36-8-21          | SWNW | 36  | 080S | 210E | 4304734925 | 13808  | State | GW        | P      |
| GB 4MU-36-8-21     | GB 4MU-36-8-21         | NWNW | 36  | 080S | 210E | 4304734926 | 14589  | State | GW        | P      |
| NC 11M-32-8-22     | NC 11M-32-8-22         | NESW | 32  | 080S | 220E | 4304735040 |        | State | GW        | LA     |
| GB 5SG-36-8-21     | GB 5SG-36-8-21         | SWNW | 36  | 080S | 210E | 4304735155 | 14015  | State | GW        | P      |
| SC 13ML-16-10-23   | SC 13ML-16-10-23       | SWSW | 16  | 100S | 230E | 4304735281 | 14036  | State | GW        | P      |
| SC 3M-16-10-23     | <b>SC 3ML 16 10 23</b> | NENW | 16  | 100S | 230E | 4304735282 | 14014  | State | GW        | P      |
| SC 11ML-16-10-23   | SC 11ML-16-10-23       | NESW | 16  | 100S | 230E | 4304735311 | 14035  | State | GW        | P      |
| BB E 15G-16-7-21   | <b>BBE 15G 16 7 21</b> | SWSE | 16  | 070S | 210E | 4304735408 | 14070  | State | OW        | P      |
| WH 13G-2-7-24      | WH 13G-2-7-24          | SWSW | 02  | 070S | 240E | 4304735484 | 14176  | State | GW        | TA     |
| FR 9P-36-14-19     | FR 9P-36-14-19         | NWSW | 31  | 140S | 200E | 4304735880 | 14310  | State | GW        | S      |
| CB 13G-36-6-20     | CB 13G-36-6-20         | SWSW | 36  | 060S | 200E | 4304735969 |        | State | OW        | LA     |
| WH 2G-2-7-24       | WH 2G-2-7-24           | NWNE | 02  | 070S | 240E | 4304736259 |        | State | GW        | APD    |
| WH 4G-2-7-24       | WH 4G-2-7-24           | NWNW | 02  | 070S | 240E | 4304736261 |        | State | GW        | APD    |
| FR 1P-36-14-19     | FR 1P-36-14-19         | NWNW | 31  | 140S | 200E | 4304736300 | 14859  | State | GW        | S      |
| WK 3ML-2-9-24      | WK 3ML-2-9-24          | NENW | 02  | 090S | 240E | 4304736723 |        | State | GW        | APD    |
| WK 7ML-2-9-24      | WK 7ML-2-9-24          | SWNE | 02  | 090S | 240E | 4304736724 |        | State | GW        | APD    |
| SC 5ML-16-10-23    | SC 5ML-16-10-23        | SWNW | 16  | 100S | 230E | 4304736877 | 15125  | State | GW        | P      |
| SC 12ML-16-10-23   | SC 12ML-16-10-23       | NWSW | 16  | 100S | 230E | 4304736878 | 15053  | State | GW        | P      |
| SC 14ML-16-10-23   | SC 14ML-16-10-23       | SESW | 16  | 100S | 230E | 4304736908 | 15070  | State | GW        | P      |
| SC 4ML-16-10-23    | SC 4ML-16-10-23        | NWNW | 16  | 100S | 230E | 4304736912 | 15208  | State | GW        | P      |
| FR 3P-36-14-19     | FR 3P-36-14-19         | NWNW | 36  | 140S | 190E | 4304737376 | 15736  | State | GW        | DRL    |
| BBE 9W-16-7-21     | BBE 9W-16-7-21         | NESE | 16  | 070S | 210E | 4304737745 |        | State | GW        | APD    |
| GB 10ML-16-8-22    | GB 10ML-16-8-22        | NWSE | 16  | 080S | 220E | 4304737943 |        | State | GW        | APD    |
| GB 9ML-16-8-22     | GB 9ML-16-8-22         | NESE | 16  | 080S | 220E | 4304737944 | 15851  | State | GW        | DRL    |
| FR 11P-36-14-19    | FR 11P-36-14-19        | NWSW | 36  | 140S | 190E | 4304738349 |        | State | GW        | DRL    |
| GB 4SG-36-8-21     | GB 4SG-36-8-21         | NWNW | 36  | 080S | 210E | 4304738764 |        | State | GW        | APD    |
| GB 7SG-36-8-21     | GB 7SG-36-8-21         | SWNE | 36  | 080S | 210E | 4304738765 |        | State | GW        | APD    |

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

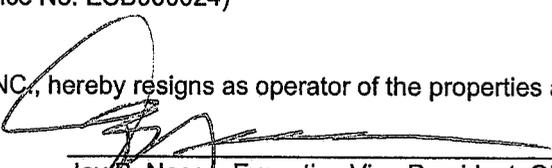
|  |   |
|--|---|
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____ | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>see attached |
| 2. NAME OF OPERATOR:<br><b>QUESTAR EXPLORATION AND PRODUCTION COMPANY</b>                          | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>see attached   |
| 3. ADDRESS OF OPERATOR:<br>1050 17th Street Suite 500    CITY Denver    STATE CO    ZIP 80265      | 7. UNIT or CA AGREEMENT NAME:<br>see attached           |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: <b>attached</b>  | 8. WELL NAME and NUMBER:<br>see attached                |
| 4. LOCATION OF WELL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:                                | 9. API NUMBER:<br>attached                              |
| 4. LOCATION OF WELL<br>COUNTY: <b>Uintah</b>   | 10. FIELD AND POOL, OR WILDCAT:                         |
| 4. LOCATION OF WELL<br>STATE: <b>UTAH</b>  |   |

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

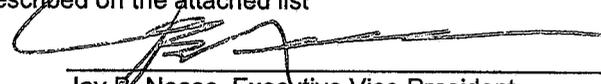
| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |
|---|---|---|--|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br><br>Approximate date work will start:<br><u>1/1/2007</u> | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION                 |
|   | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                      |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br><br>Date of work completion: _____                           | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                           |
|   | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                                 |
|   | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                                 |
|   | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                                |
|   | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                                |
|   | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u> |
|   | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |  |
|   |   |   |  |
|   |   |   |  |
|   |   |   |  |

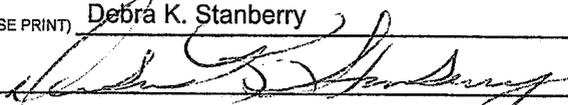
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective January 1, 2007 operator of record, QEP Uinta Basin, Inc., will hereafter be known as QUESTAR EXPLORATION AND PRODUCTION COMPANY. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  
 Federal Bond Number: 965002976 (BLM Reference No. ESB000024)  
 Utah State Bond Number: 965003033  
 Fee Land Bond Number: 965003033  
 Current operator of record, QEP UINTA BASIN, INC., hereby resigns as operator of the properties as described on the attached list.

  
 Jay B. Neese, Executive Vice President, QEP Uinta Basin, Inc.

Successor operator of record, QUESTAR EXPLORATION AND PRODUCTION COMPANY, hereby assumes all rights, duties and obligations as operator of the properties as described on the attached list

  
 Jay B. Neese, Executive Vice President  
 Questar Exploration and Production Company

|   |   |
|---|---|
| NAME (PLEASE PRINT) <u>Debra K. Stanberry</u>   | TITLE <u>Supervisor, Regulatory Affairs</u> |
| SIGNATURE  | DATE <u>3/16/2007</u>                       |

(This space for State use only)

RECEIVED  
APR 15 2007

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

|  |  |  |
|--|--|--|
| <b>1. TYPE OF WELL</b><br>OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____                                |  | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>see attached |
| <b>2. NAME OF OPERATOR:</b><br>QUESTAR EXPLORATION AND PRODUCTION COMPANY  |  | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br>see attached   |
| <b>3. ADDRESS OF OPERATOR:</b><br>1050 17th Street Suite 500 <small>CITY</small> Denver <small>STATE</small> CO <small>ZIP</small> 80265 |  | <b>7. UNIT or CA AGREEMENT NAME:</b><br>see attached           |
| <b>4. LOCATION OF WELL</b><br>FOOTAGES AT SURFACE: attached  |  | <b>8. WELL NAME and NUMBER:</b><br>see attached                |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:   |  | <b>9. API NUMBER:</b><br>attached                              |
| COUNTY: Uintah   |  | <b>10. FIELD AND POOL, OR WILDCAT:</b>                         |
| STATE: UTAH  |  |  |

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

| TYPE OF SUBMISSION   | TYPE OF ACTION  |   |   |
|--|---|---|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>(Submit in Duplicate)<br>Approximate date work will start:<br><u>1/1/2007</u> | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION              |
|  | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                   |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>(Submit Original Form Only)<br>Date of work completion:                                 | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                        |
|  | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                              |
|  | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                              |
|  | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                             |
|  | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                             |
|  | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: <u>Well Name Changes</u> |
|  | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |   |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

PER THE ATTACHED LIST OF WELLS, QUESTAR EXPLORATION AND PRODUCTION COMPANY REQUESTS THAT THE INDIVIDUAL WELL NAMES BE UPDATED IN YOUR RECORDS.

|   |   |
|---|---|
| NAME (PLEASE PRINT) <u>Debra K. Stanberry</u> | TITLE <u>Supervisor, Regulatory Affairs</u> |
| SIGNATURE                                     | DATE <u>4/17/2007</u>                       |

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**RECEIVED**  
**APR 19 2007**  
DIV. OF OIL, GAS & MINING

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET** (for state use only)

ROUTING  
 CDW

Change of Operator (Well Sold)

**X - Operator Name Change**

The operator of the well(s) listed below has changed, effective:

**6/14/2010**

|  |   |
|--|---|
| <b>FROM:</b> (Old Operator):<br>N5085-Questar Exploration and Production Company<br>1050 17th St, Suite 500<br>Denver, CO 80265<br><br>Phone: 1 (303) 308-3048 | <b>TO:</b> ( New Operator):<br>N3700-QEP Energy Company<br>1050 17th St, Suite 500<br>Denver, CO 80265<br><br>Phone: 1 (303) 308-3048 |
|--|---|

CA No.

Unit:

| WELL NAME    | SEC | TWN | RNG | API NO | ENTITY NO | LEASE TYPE | WELL TYPE | WELL STATUS |
|--------------|-----|-----|-----|--------|-----------|------------|-----------|-------------|
| SEE ATTACHED |     |     |     |        |           |            |           |             |
|              |     |     |     |        |           |            |           |             |

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: Requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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|   |
|---|
| 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>See attached |
| 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>See attached   |
| 7. UNIT or CA AGREEMENT NAME:<br>See attached           |
| 8. WELL NAME and NUMBER:<br>See attached                |
| 9. API NUMBER:<br>Attached                              |
| 10. FIELD AND POOL, OR WILDCAT:<br>See attached         |

1 TYPE OF WELL      OIL WELL       GAS WELL       OTHER \_\_\_\_\_

2 NAME OF OPERATOR:  
Questar Exploration and Production Company      *N5085*

3. ADDRESS OF OPERATOR:  
1050 17th Street, Suite 500      Denver      STATE CO      ZIP 80265      PHONE NUMBER: (303) 672-6900

4. LOCATION OF WELL  
FOOTAGES AT SURFACE: See attached  
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

COUNTY: Attached  
STATE: UTAH

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

| TYPE OF SUBMISSION   | TYPE OF ACTION  |   |  |
|--|---|---|--|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br><u>6/14/2010</u> | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION                 |
|  | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL                      |
|  | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON                           |
|  | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                                 |
|  | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                                 |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:                                  | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                                |
|  | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                                |
|  | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u> |
|  | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  
Federal Bond Number: 965002976 (BLM Reference No. ESB000024)      *N3700*  
Utah State Bond Number: ~~965003033~~ } *965010695*  
Fee Land Bond Number: ~~965003033~~ }  
BIA Bond Number: ~~799446~~ } *965010693*

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) Morgan Anderson      TITLE Regulatory Affairs Analyst  
SIGNATURE *Morgan Anderson*      DATE 6/23/2010

(This space for State use only)

**RECEIVED**  
**JUN 28 2010**

**APPROVED** 6/30/2009  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
effective June 14, 2010

| well_name                 | sec | tpw  | rng  | api        | entity | mineral<br>lease | type | stat | C |
|---------------------------|-----|------|------|------------|--------|------------------|------|------|---|
| Wr 16G-32-10-17           | 32  | 100S | 170E | 4301350370 |        | State            | OW   | NEW  | C |
| STATE 1                   | 36  | 070S | 240E | 4304715128 | 5878   | State            | GW   | P    |   |
| KAYE STATE 1-16           | 16  | 100S | 230E | 4304730609 | 5395   | State            | GW   | P    |   |
| TOLL STATION ST 8-36-8-21 | 36  | 080S | 210E | 4304732724 | 12361  | State            | GW   | S    |   |
| GB 8A-36-8-21             | 36  | 080S | 210E | 4304733037 | 12377  | State            | GW   | P    |   |
| GB 6-36-8-21              | 36  | 080S | 210E | 4304733038 | 12378  | State            | GW   | P    |   |
| GB 2-36-8-21              | 36  | 080S | 210E | 4304733252 | 12527  | State            | GW   | P    |   |
| GH 1W-32-8-21             | 32  | 080S | 210E | 4304733570 | 12797  | State            | GW   | P    |   |
| GH 3W-32-8-21             | 32  | 080S | 210E | 4304733571 | 12796  | State            | GW   | P    |   |
| GH 5W-32-8-21             | 32  | 080S | 210E | 4304733572 | 12828  | State            | GW   | P    |   |
| GH 7W-32-8-21             | 32  | 080S | 210E | 4304733573 | 12872  | State            | GW   | P    |   |
| GH 2W-32-8-21             | 32  | 080S | 210E | 4304733744 | 13029  | State            | GW   | P    |   |
| GH 4W-32-8-21             | 32  | 080S | 210E | 4304733745 | 13035  | State            | GW   | P    |   |
| GH 8W-32-8-21             | 32  | 080S | 210E | 4304733746 | 13030  | State            | GW   | P    |   |
| OU GB 3W-16-8-22          | 16  | 080S | 220E | 4304733751 | 13577  | State            | GW   | P    |   |
| OU GB 5W-16-8-22          | 16  | 080S | 220E | 4304733752 | 13570  | State            | GW   | P    |   |
| GH 6W-32-8-21             | 32  | 080S | 210E | 4304733753 | 13036  | State            | GW   | P    |   |
| OU GB 11W-16-8-22         | 16  | 080S | 220E | 4304733754 | 13582  | State            | GW   | P    |   |
| GH 5G-32-8-21             | 32  | 080S | 210E | 4304733866 | 13037  | State            | OW   | P    |   |
| GB 1W-36-8-21             | 36  | 080S | 210E | 4304733944 | 13439  | State            | GW   | P    |   |
| WV 2W-2-8-21              | 02  | 080S | 210E | 4304734034 | 13678  | State            | GW   | P    |   |
| GB 6W-25-8-21             | 25  | 080S | 210E | 4304734121 | 13440  | Fee              | GW   | P    |   |
| GB 7W-25-8-21             | 25  | 080S | 210E | 4304734122 | 13436  | Fee              | GW   | P    |   |
| WV 9W-16-7-21             | 16  | 070S | 210E | 4304734324 |        | State            | GW   | LA   |   |
| OU GB 11W-30-8-22         | 30  | 080S | 220E | 4304734392 | 13433  | Fee              | GW   | P    |   |
| OU GB 4W-16-8-22          | 16  | 080S | 220E | 4304734598 | 13579  | State            | GW   | P    |   |
| OU GB 10W-16-8-22         | 16  | 080S | 220E | 4304734616 |        | State            | GW   | LA   |   |
| OU GB 12W-16-8-22         | 16  | 080S | 220E | 4304734617 | 13697  | State            | GW   | P    |   |
| OU GB 13W-16-8-22         | 16  | 080S | 220E | 4304734618 | 13611  | State            | GW   | P    |   |
| GB 14MU-16-8-22           | 16  | 080S | 220E | 4304734619 | 14196  | State            | GW   | P    |   |
| OU GB 15W-16-8-22         | 16  | 080S | 220E | 4304734622 | 13595  | State            | GW   | P    |   |
| OU GB 16W-16-8-22         | 16  | 080S | 220E | 4304734655 | 13815  | State            | GW   | P    |   |
| OU GB 2W-16-8-22          | 16  | 080S | 220E | 4304734657 | 13721  | State            | GW   | P    |   |
| OU GB 6W-16-8-22          | 16  | 080S | 220E | 4304734658 | 13592  | State            | GW   | P    |   |
| OU GB 8W-16-8-22          | 16  | 080S | 220E | 4304734660 | 13769  | State            | GW   | TA   |   |
| OU GB 9W-16-8-22          | 16  | 080S | 220E | 4304734692 |        | State            | GW   | LA   |   |
| OU GB 15G-16-8-22         | 16  | 080S | 220E | 4304734829 | 13777  | State            | OW   | S    |   |
| GB 7MU-36-8-21            | 36  | 080S | 210E | 4304734893 | 14591  | State            | GW   | P    |   |
| GB 3W-36-8-21             | 36  | 080S | 210E | 4304734894 | 13791  | State            | GW   | P    |   |
| NC 8M-32-8-22             | 32  | 080S | 220E | 4304734897 |        | State            | GW   | LA   |   |
| NC 3M-32-8-22             | 32  | 080S | 220E | 4304734899 |        | State            | GW   | LA   |   |
| GB 5W-36-8-21             | 36  | 080S | 210E | 4304734925 | 13808  | State            | GW   | P    |   |
| GB 4MU-36-8-21            | 36  | 080S | 210E | 4304734926 | 14589  | State            | GW   | P    |   |
| NC 11M-32-8-22            | 32  | 080S | 220E | 4304735040 |        | State            | GW   | LA   |   |
| GB 5SG-36-8-21            | 36  | 080S | 210E | 4304735155 | 14015  | State            | GW   | P    |   |
| SC 13ML-16-10-23          | 16  | 100S | 230E | 4304735281 | 14036  | State            | GW   | P    |   |
| SC 3ML-16-10-23           | 16  | 100S | 230E | 4304735282 | 14014  | State            | GW   | P    |   |
| SC 11ML-16-10-23          | 16  | 100S | 230E | 4304735311 | 14035  | State            | GW   | P    |   |
| WH 13G-2-7-24             | 02  | 070S | 240E | 4304735484 | 14176  | State            | D    | PA   |   |
| FR 9P-36-14-19            | 31  | 140S | 200E | 4304735880 | 14310  | State            | GW   | P    |   |
| CB 13G-36-6-20            | 36  | 060S | 200E | 4304735969 |        | State            | OW   | LA   |   |

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
effective June 14, 2010

| well_name        | sec | twp  | rng  | api        | entity | mineral<br>lease | type | stat | C |
|------------------|-----|------|------|------------|--------|------------------|------|------|---|
| WH 2G-2-7-24     | 02  | 070S | 240E | 4304736259 |        | State            | GW   | LA   |   |
| WH 4G-2-7-24     | 02  | 070S | 240E | 4304736261 |        | State            | GW   | LA   |   |
| FR 1P-36-14-19   | 31  | 140S | 200E | 4304736300 | 14859  | State            | GW   | P    |   |
| WK 3ML-2-9-24    | 02  | 090S | 240E | 4304736723 |        | State            | GW   | LA   |   |
| WK 7ML-2-9-24    | 02  | 090S | 240E | 4304736724 |        | State            | GW   | LA   |   |
| SC 5ML-16-10-23  | 16  | 100S | 230E | 4304736877 | 15125  | State            | GW   | P    |   |
| SC 12ML-16-10-23 | 16  | 100S | 230E | 4304736878 | 15053  | State            | GW   | P    |   |
| SC 14ML-16-10-23 | 16  | 100S | 230E | 4304736908 | 15070  | State            | GW   | P    |   |
| SC 4ML-16-10-23  | 16  | 100S | 230E | 4304736912 | 15208  | State            | GW   | P    |   |
| FR 3P-36-14-19   | 36  | 140S | 190E | 4304737376 | 15736  | State            | GW   | P    |   |
| BZ 12ML-16-8-24  | 16  | 080S | 240E | 4304737670 |        | State            | GW   | LA   |   |
| BZ 10D-16-8-24   | 16  | 080S | 240E | 4304737671 | 15979  | State            | GW   | S    |   |
| BZ 14ML-16-8-24  | 16  | 080S | 240E | 4304737672 |        | State            | GW   | LA   |   |
| BBE 9W-16-7-21   | 16  | 070S | 210E | 4304737745 |        | State            | GW   | LA   |   |
| GB 10ML-16-8-22  | 16  | 080S | 220E | 4304737943 |        | State            | GW   | LA   |   |
| GB 9ML-16-8-22   | 16  | 080S | 220E | 4304737944 | 15851  | State            | GW   | P    |   |
| HR 2MU-2-12-23   | 02  | 120S | 230E | 4304738052 |        | State            | GW   | LA   |   |
| HR 3MU-2-12-23   | 02  | 120S | 230E | 4304738053 |        | State            | GW   | LA   |   |
| HR 6MU-2-12-23   | 02  | 120S | 230E | 4304738054 |        | State            | GW   | LA   |   |
| HR 10MU-2-12-23  | 02  | 120S | 230E | 4304738055 | 15737  | State            | GW   | S    |   |
| HR 12MU-2-12-23  | 02  | 120S | 230E | 4304738056 |        | State            | GW   | LA   |   |
| HR 14MU-2-12-23  | 02  | 120S | 230E | 4304738057 |        | State            | GW   | LA   |   |
| HR 16MU-2-12-23  | 02  | 120S | 230E | 4304738058 |        | State            | GW   | LA   |   |
| FR 11P-36-14-19  | 36  | 140S | 190E | 4304738349 | 15899  | State            | GW   | P    |   |
| GB 4SG-36-8-21   | 36  | 080S | 210E | 4304738764 | 16142  | State            | GW   | P    |   |
| GB 7SG-36-8-21   | 36  | 080S | 210E | 4304738765 | 16144  | State            | GW   | P    |   |
| WF 3D-32-15-19   | 32  | 150S | 190E | 4304738877 |        | State            | GW   | APD  | C |
| SCS 5C-32-14-19  | 32  | 140S | 190E | 4304738963 | 16759  | State            | GW   | P    |   |
| FR 7P-36-14-19   | 31  | 140S | 200E | 4304738992 | 15955  | State            | GW   | P    |   |
| SCS 10C-16-15-19 | 16  | 150S | 190E | 4304739683 | 16633  | State            | GW   | P    |   |
| FR 6P-16-14-19   | 16  | 140S | 190E | 4304740350 |        | State            | GW   | APD  | C |

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695