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

FORM 3

AMENDED REPORT ☐
(highlight changes)

# APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-4189
6. SURFACE: State

1A. TYPE OF WORK: DRILL ☒ REENTER ☐ DEEPEN ☐

7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

B. TYPE OF WELL: OIL ☐ GAS ☒ OTHER _____ SINGLE ZONE ☒ MULTIPLE ZONE ☐

8. UNIT or CA AGREEMENT NAME: 14-08-0001-7474

2. NAME OF OPERATOR: Lone Mountain Production Company

9. WELL NAME and NUMBER: Hancock State No. 2-5

3. ADDRESS OF OPERATOR: P.O. Box 80965 CITY Billings STATE MT ZIP 59108
PHONE NUMBER: 970-250-9770

10. FIELD AND POOL, OR WILDCAT: Bar X

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1900' FNL 800' FWL Sec. 2, T17S, R25E 6th p.m. 661712 Y 39.
AT PROPOSED PRODUCING ZONE: same 4358190 Y 109. 123042

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW Sec. 2, T17S, R25E 6th p.m.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 23 Miles Northwest of Mack, Colorado

12. COUNTY: Grand
13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 800' FWL
16. NUMBER OF ACRES IN LEASE: 504.44
17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 2200' Northwest of State #7
19. PROPOSED DEPTH: 4107'
20. BOND DESCRIPTION: UT-0719

21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5564' GR
22. APPROXIMATE DATE WORK WILL START: May 15, 2006
23. ESTIMATED DURATION: 8 days

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 |
|---|---|---|---|
| 12 1/4" | 9 5/8" H40 32.3 lb | 300' | 200 sacks 'G' + 2% CaCl + 1/4 #/sk Celloflake |
| | | | 1.17 cuft/sk, 15.8 pps |
| | | | |
| 8 3/4" | 4 1/2" K-55 11.6 lb | 4107' | 250 sacks 10-0 Thixotropic 1.4 cuft/sk 14.1 ppg |
| | | | Volume adjusted to cover bottom 1000' of well with |
| | | | cement. Caliper log will be run to verify volume. |
| | | | |

25. **ATTACHMENTS** 8 Pt. Drilling Plan; 13 Pt Surface Use Pla

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

☐ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☐ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Joe Dyk TITLE Petroleum Engineer

SIGNATURE _____ DATE 3/23/06

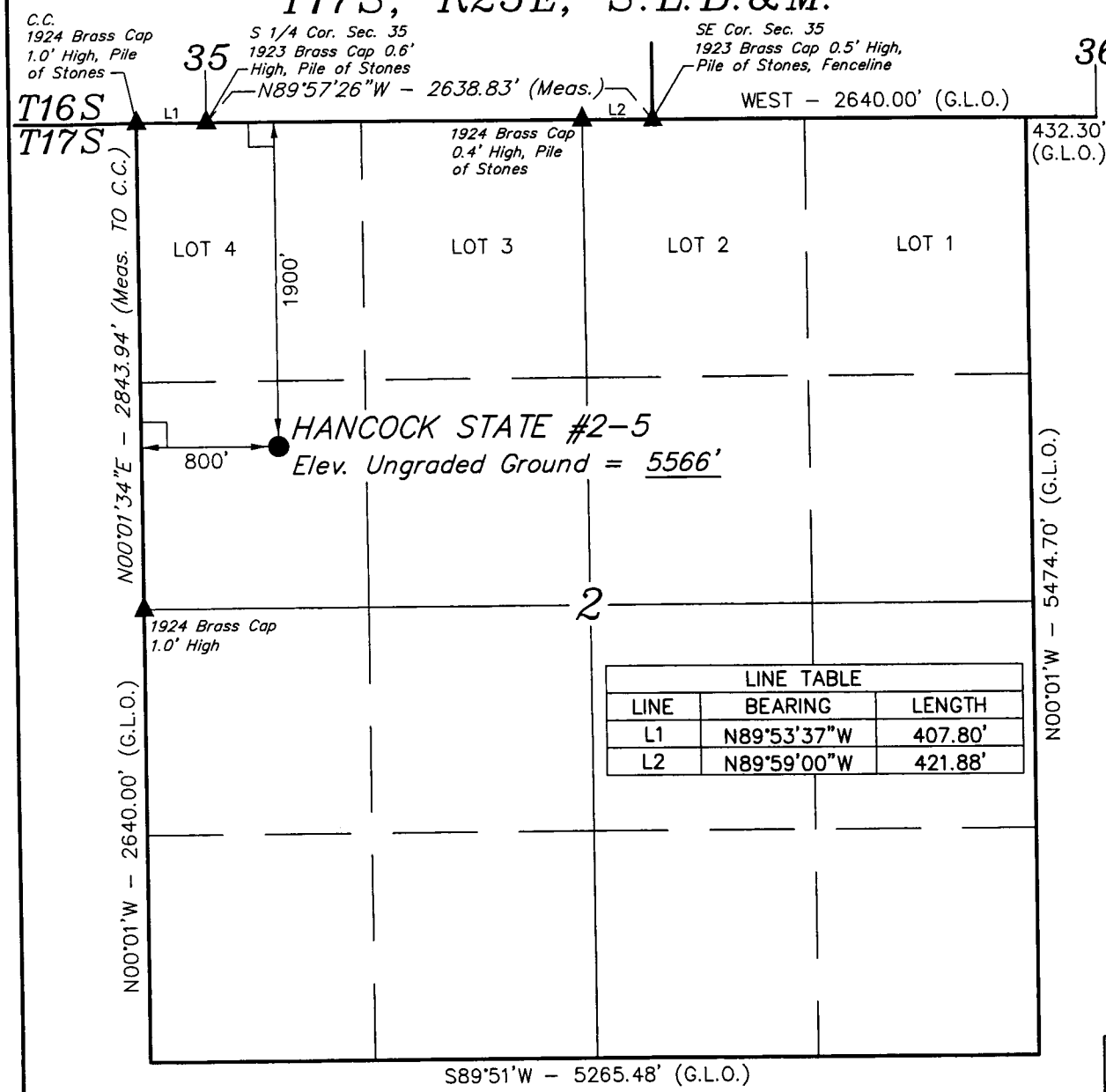
(This space for State use only)

API NUMBER ASSIGNED: 43-019-31472 APPROVAL:

MAR 27 2006

(11/2001) (See Instructions on Reverse Side)

# T17S, R25E, S.L.B.&M.




| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N89°53'37"W | 407.80' |
| L2 | N89°59'00"W | 421.88' |

## LONE MOUNTAIN PRODUCTION

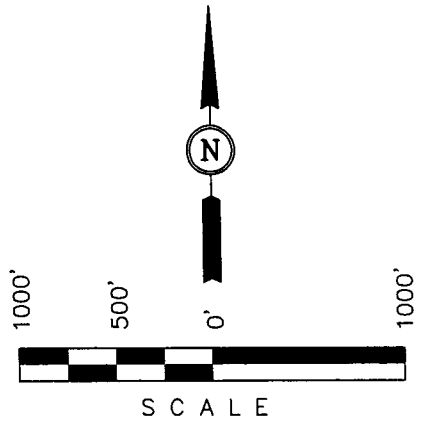
Well location, HANCOCK STATE #2-5, located as shown in the SW 1/4 NW 1/4 of Section 2, T17S, R25E, S.L.B.&M. GRAND County, Utah.

### BASIS OF ELEVATION

SPOT ELEVATION LOCATED IN THE NW 1/4 OF SECTION 2, T17S, R25E, S.L.B.&M. TAKEN FROM THE BAR X WASH QUADRANGLE, UTAH–COLORADO, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5604 FEET.

### BASIS OF BEARINGS

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




### 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.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)
LATITUDE = 39°21'35.67" (39.359908)
LONGITUDE = 109°07'25.36" (109.123711)
(AUTONOMOUS NAD 27)
LATITUDE = 39°21'35.75" (39.359931
LONGITUDE = 109°07'22.95" (109.123042)


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


| | | |
|---|---|---|
| SCALE 1" = 1000' | DATE SURVEYED: 02-09-06 | DATE DRAWN: 02-27-06 |
| PARTY J.W. J.K. P.M. | REFERENCES G.L.O. PLAT | |
| WEATHER COLD | FILE LONE MOUNTAIN PRODUCTION | |

# LONE MOUNTAIN PRODUCTION COMPANY

1360 Highway 6 & 50
Loma, CO 81524

Phone (970) 858-7546
Fax (970) 858-4163

March 23, 2006

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1594 West North Temple, Ste 1210
P. O. Box 145801
Salt Lake City, UT 84114-5801

Dear Sirs:

Enclosed please find Application for Permit to Drill for the Hancock State #2-5. At your earliest convenience please call Joe Dyk at 970-250-9770 to set up an onsite inspection.

Should you have any further questions, please feel free to contact us at 970-858-7546 or my cell phone at 970-250-9770.

Sincerely,

Joe Dyk

Enc

MAR 2 7 2006

# EIGHT POINT DRILLING PLAN

Attached To Form 3: Application for Permit to Drill:
Lone Mountain Production Company
Hancock State No. 2-5
1900' FNL & 800' FWL Sec. 2-T17S-R25E 6th PM
Grand County, Utah

## 1. ESTIMATED TOPS: IMPORTANT GEOLOGIC MARKERS:

| | |
|---|---|
| Mancos Shale: | surface |
| Dakota silt: | 3507' |
| Dakota sand | 3587' |
| Morrison | 3737' |
| TD | 4107' |

## 2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

| | |
|---|---|
| Water: | No water is anticipated during the drilling of this well. |
| Oil: | No oil is anticipated during the drilling of this well. |
| Gas: | Gas is anticipated in the Dakota and Morrison. |

## 3. MINIMUM SPECS FOR PRESSURE CONTROL:

a. A diagram of the Blowout Preventer Stack and Choke Manifold is presented in Exhibit #1.

b. The BOP Equipment will be a 2M (2,000 psi min. Working Pressure) system consisting of:

i. The Blow-Out Preventer Stack Description and Specifications:

- An 9 5/8" X 11" Threaded 2,000 psi WP casing head will be installed as the starting head.
- A 9" 3,000 psi X 11" 3,000 psi WP drilling spool will be installed on the starting head.
- A 9" X 3,000 psi WP (min) double gate hydraulic type ram preventer with Pipe rams over Blind rams will be installed above the drilling spool.
- A 9" rotating head will be installed above an optional annular preventer while air drilling

ii. The Choke and Kill Manifolds:

- A 2" X 2,000 psi (min) choke manifold and kill line will be tied into opposite sides of the 9" X 3,000 psi WP (min) drilling spool.
- A 2" X 2,000 psi (min) WP FO gate valve will be up-stream of the choke manifold assembly. This valve will be in the open position during normal drilling operations.
- The choke manifold will consist of 2" X 2,000 psi (min) WP pipe and 2 – 2" X 2,000 psi (min) WP FO adjustable chokes with 2" X 2,000 psi (min) WP FO valves upstream. These valves will be closed during normal air and mud drilling operations. A single 2" X 2,000 psi (min) WP FO gate valve will be

between the flow tee and the 2" (min) bleed line. This valve will be open during normal air and mud drilling operations. In-board of the gate valves in the manifold assembly there will be a 2" X 2,000 (min) psi WP flow tee with bull plug, needle valve, and gauge for well control operations.

- The bleed line will be appropriately staked and chained down to the flare pit.
- The kill line will be 2" X 2,000 psi (min) WP line pipe.
- A 2" X 2,000 psi (min) WP FO gate valve will be up-stream of the choke manifold.

iii. Surface Drill String Valves:

- A 2,000 psi WP (min) FO safety valve with subs to fit all drill strings in use will be kept on the drill floor after surface casing is set.
- A 2,000 psi (min) WP Upper Kelly valve with handle will be used throughout drilling operations.

iv. The Accumulator System:

- An accumulator with sufficient capacity to operate the BOPE against a 2,000 psi well pressure (min)will be used to operate the BOP system. It shall contain enough fluid capacity to close all BOP equipment and retain accumulator pressure at 200 psig over the pre-charge pressure. A nitrogen bottle system may be used to provide independent (reserve) power to operate the system in the event rig motors must be shut down.

c. Testing Procedures and Test Frequency:

- All of the pressure side BOP Equipment specified in Part b. above will be nippled-up on the surface casing. A test plug will then be set in the starting head profile.
- All pressure side components will be hydraulically tested for fifteen (15) minutes (min) to 2,000 psi and five (5) minutes (min) to 300 psi prior to drilling out cement. Surface casing will be pressure tested to 1,000 psi before drilling out the surface casing shoe. These components will be re-tested each 30 days after drill-out at an appropriate time with a test plug set in the starting head profile.
- Pipe rams will be operationally checked each 24-hour period, and the blind rams operationally checked each time pipe is pulled from the hole.
- All pressure tests and function tests will be noted on the daily drilling report.

d. Air Drilling Equipment For Air Operations:

- A 6" blooie line will be rigged up to carry air returns from the rotating head flow line to the flare pit at least 100 feet away from the well head. A down hole fire stop and a string float will be installed in the drill string to prevent a down hole fire during air drilling operations.

e. Tripping Procedures for Well Control:

- The well will be mudded-up only if hole conditions dictate a cessation of air drilling operations. **At mud-up the fire stops and string float will be removed from the drill string.** If mud-up is required the following fill procedures on trips will be implemented.
- The anticipated maximum bottom-hole formation pressure is 1027 psig in the Dakota/Morrison. The anticipated mud weight at T.D. is 8.5 PPG. This will provide an anticipated hydrostatic pressure of 1,815 psig. This provides a minimum over-balance pressure of 788 psig at TD.
- The well will be drilled by a triple, double, or lay-down singles derrick rig with 4-1/2" drill pipe and 6" (minimum) drill collars.
- The well will be monitored each 9-10 joints on trips out of the hole to insure that the BHA is not swabbing the well in. The well will be filled after each 30 joints of drill pipe and as each drill collar is pulled from the hole. Pits will be monitored in order to insure that the well is taking fluid on the trip.
- The fill-up line will be used to fill the well on trips. The kill line **WILL NOT** be used to fill the well on trips.
- **In the event that the bit is plugged on a trip, the well will be filled after each 15 joints of drill pipe are pulled from the well and as each drill collar is pulled from the well. Swabbing will be checked each 6 joints.**

## 4. CASING AND CEMENTING PROGRAM:

a. General Casing and Cementing Design Specifications:

| Hole Size, In. | Depth, Ft. | Casing OD, In. | Wt/GD/Jt/Cond | Cement |
|---|---|---|---|---|
| 12 ¼" | 300' | 9-5/8" | 32.3 LB/Ft; H-40; STC; New/Used (Inspected) | 200 sks Class "G" + 2% CaCl + ¼ #/sk Celloflake 1.17 cuft/sk, 15.8 #/gal |
| 8 ¾" | 4107' | 4-1/2" | 11.6 LB/Ft; J or K-55; STC or LTC; New/Used (Inspected) | Lead: 250 sks 10-0 Thixotropic Cement + 0.25% Cello Flake 1.4 cuft/sk, 14.1 #/gal Note: Actual cement volume to be based upon caliper log. |

b. Casing Centralization Equipment:

i. Surface Casing:

- A total of 3 centralizers will be run on the 9 5/8" OD Surface Casing: 1 at 10 ft. above the shoe, 1 at the 1st collar, and 1 at the 4th collar above the shoe.

ii. Production Casing:

- Centralizers will be placed 10' above the shoe and no further apart than every other collar through Dakota silt Fm. interval.

## 5. PROPOSED DRILLING FLUIDS:

| DEPTH | TYPE | MUD WT., LB/GAL | VISCOSITY | WATER LOSS |
|---|---|---|---|---|
| 0' – 300' (Min)<br>300' – 4107'<br>4107' (TD) | Spud Mud<br>Air/mist<br>LSND mud | 8.4 – 9.5<br>air/mist<br>8.5 | 28 – 40 Sec/Qt<br>n/a<br>45- 50 Sec/Qt | No Control<br>n/a<br>Less than 10 cc |

## 6. LOGGING, TESTING, AND CORING PROGRAM:

a. The logging program will consist of:
   i. MSFL-DLL w.GR & SP:
      T.D. to Surface Casing.
   ii. FDC – CNL w/ GR & Caliper:
      T.D. to 3107'

b. No cores are planned.

c. No DST's are planned.

d. 30 ft. samples will be obtained from the base of the surface casing to TD or at geologist's discretion.

## 7. ABNORMAL CONDITIONS – PRESSURE – TEMPERATURE – POTENTIAL HAZARDS:

Normal pressures and temperatures are expected IN THE OBJECTIVE FORMATION. A MAXIMUM Dakota/Morrison surface shut-in pressure of 1027 psi is expected. A maximum bottom hole temperature of 120 degrees Fahrenheit is anticipated. Sour gas ($H_2S$) is not anticipated.

## 8. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin as soon as APD approval has been granted by the BLM. The anticipated spud date for this well is currently May 15, 2006 subject to rig availability and permit approval. Once commenced, drilling operations should be finished within 12 to 15 days. Side-tracking operations, if required, will considerably extend the period of operations. Appropriate verbal notification of side-tracking operations shall immediately be made if such operations are required, plugback procedures confirmed, and appropriate Sundry Notices filed as soon as possible. If the well is productive, an additional 8 to 10 days will be required for completion.

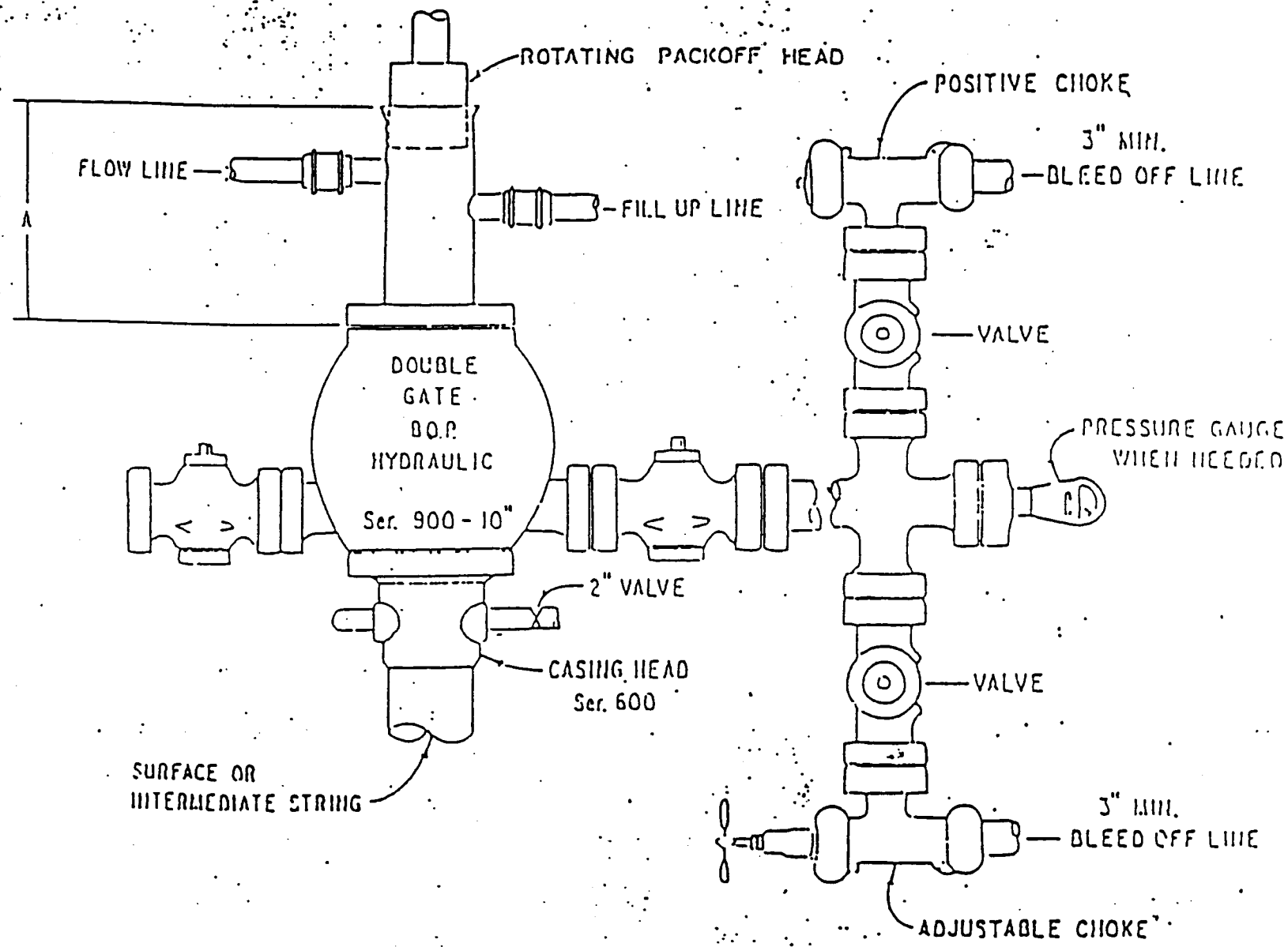



EXHIBIT I

BLOWOUT PREVENTER DIAGRAM

# SURFACE USE PLAN

Lone Mountain production Company
Hancock State No. 2-5
1900' FNL, 800' FWL Section 2, T17S, R25E
Grand County, UtahColorado

1. EXISTING ROADS

This proposed well is located 23 miles northwest of Mack, Colorado. Proceed to 9.1 miles west of Mack on Highway 6 and 50. Turn right and go north west 10.7 miles to the State line. Turn right and go north east 2.2 miles. Turn right and go north west 0.2 miles to location.

2. NEW ROADS

This well is accessed by existing roads. The last 0.2 miles is new road to be built with an 18 foot travel width. A cultural survey has been performed on the road and location area.

3. LOCATION OF EXISTING WELLS

13 producing wells, 1 dry hole are within a one-mile radius.

4. LOCATION OF PRODUCTION FACILITIES

Upon completion of the well as a producing gas well, sufficient facilities to handle gas production will be installed. This includes a heated separator, a meter run and a small water tank or pit. A submittal in accordance with Onshore Order #7 will be completed at that time. All facilities will be painted Pinyon Green to blend in with the natural surroundings.

5. LOCATION AND TYPE OF WATER SUPPLY

Water will be delivered from the Ute water tap in Mack, Colorado.

6. SOURCE OF CONSTRUCTION MATERIALS

All materials are native to the site. No new materials will be brought in.

7. METHODS FOR HANDLING WASTE MATERIALS

Cuttings will be buried in the reserve pit at cleanup. Garbage and other waste material will be contained in a trash cage, which will be dumped at an approved sanitary landfill. Human waste will be contained in chemically treated portable toilets.

Drilling fluids will be contained in a reserve pit. The drilling mud will be left to dry out before reclamation of the pit. Flow back from completion operations will also be contained in the reserve pit. Oil will not be put in the reserve pit.

If the well is productive, produced water will be disposed on site for 30 days or 90 days with the permission of the State Petroleum Engineer. After that time, application will be made for the approval of a permanent disposal method in compliance with the rules and regulations of the State of Utah and Onshore Order No 7.

## 8. ANCILLARY FACILITIES

A 1000 foot, 3-1/2" welded steel pipe line will be lain on the surface next to the access road where it will connect to the Federal No. 3-8 pipeline which dumps into LMPC's Bar-X gathering system. A separator and tank or pit will be set for the Hancock State No. 2-5 well if it is productive.

## 9. WELLSITE LAYOUT

See figure 1 – Pit and pad layout
See figure 2 – Cross sections of pit and pad

This location will be constructed large enough to accommodate the drilling rig and associated equipment for drilling this well with allowance made for future completion and production equipment.

The reserve pit is fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished.

All construction activities will be confined to the minimum area necessary. The exterior boundaries of the construction area will be clearly marked prior to any surface disturbing activities or vegetation removal.

All brush is cleared and stockpiled on the east edge of the location beyond the location edge and will be kept separate from the topsoil stockpiles. The brush will be used for mulch after the disturbed area has been reseeded.

## 10. PLANS FOR RECLAMATION OF THE SURFACE

A biodegradable mulch may be required if soil erosion or vegetation establishment is determined to be a problem by the authorized officer on the access or location reclamation.

All disturbed areas will be seeded with the approved seed mixture. Seed tags will be submitted to the area manager within 30 days of seeding.

Seed bed will be prepared by contour cultivating 4 – 6" deep and drilling seed ½ to 1" deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and then dragged for cover.

Seeding will be completed after September 15, 2006 and prior to October 31, 2006, if feasible, but no later than the fall of 2007.

If the well is a producer:

LMPC will upgrade and maintain access roads as necessary to prevent soil erosion and accommodate year round traffic. Areas unnecessary to production operations will be reshaped, cultivated on the contour, and seeded with the approved seed mixture with a drill ½ to 1" deep. Areas where seed cannot be drilled will be broadcast seeded at 1.5 times the approved application rate and dragged for seed cover. The topsoil will be saved for use during final reclamation unless the site can be re-contoured to blend with the natural topography as required for the final abandonment. Perennial vegetation will be established. Additional work will be required in the case of seeding failures. All permanent facilities will be painted pinyon green to blend with the natural environment.

If the well is abandoned/dry hole:

LMPC will restore the access road and location to blend with the natural topography. During reclamation of the site, fill material will be pushed into cuts and up over the back slope. No depressions will be left that could trap water or form ponds. Top soil will be distributed evenly over the location and seeded according to the approved seed mixture.

The area will be considered to be satisfactorily reclaimed when:

a) Soil erosion resulting from the operations has been stabilized
b) A vegetative cover at least equal to that present prior to disturbance and a plant species composition at least desirable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

## 11. SURFACE OWNERSHIP

All lands involving new construction are federal lands.

## 12. NOTIFICATIONS

LMPC will contact the Utah DOGM office at least 24 hours prior to commencing construction or maintenance of the access road and/or well pad.

LMPC will immediately bring to the attention of the Utah DOGM any and all antiquities or other objects of historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. LMPC will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the area manager. Notice to proceed will be based upon the evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from a federal agency insofar as practical. When not practical, LMPC will follow the mitigation requirements set forth by the area manager concerning protection, preservation, or disposition of any sites or material discovered. In those situations where the area manager determines that data recovery and/or salvage excavations are necessary, LMPC will bear the cost of such data recovery and/or salvage operations.

The Utah DOGM office will be notified at least 24 hours prior to commencing reclamation work.

## 13. LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION


Joel V. Dyk
Petroleum Engineer
1360 Highway 6 & 50
Loma, Colorado 81524
Office Phone: (970) 858-7546
Cell Phone: (970) 250-9770

Jim Routson
Lone Mountain Production Company
P. O. Box 80965
Billings, Montana 59108
Office Phone: (406) 245-5077
Cell Phone: (406) 690-4452


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 that 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 operations proposed herein will be performed by LMPC and it's 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.

3/23/06
Date

Joel V. Dyk, Petroleum Engineer

# LONE MOUNTAIN PRODUCTION

## HANCOCK STATE #2-5

**LOCATED IN GRAND COUNTY, UTAH**
**SECTION 2, T17S, R25E, S.L.B.&M.**


**PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE** **CAMERA ANGLE: NORTHEASTERLY**


**PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS** **CAMERA ANGLE: NORTHEASTSTERLY**


- Since 1964 -

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

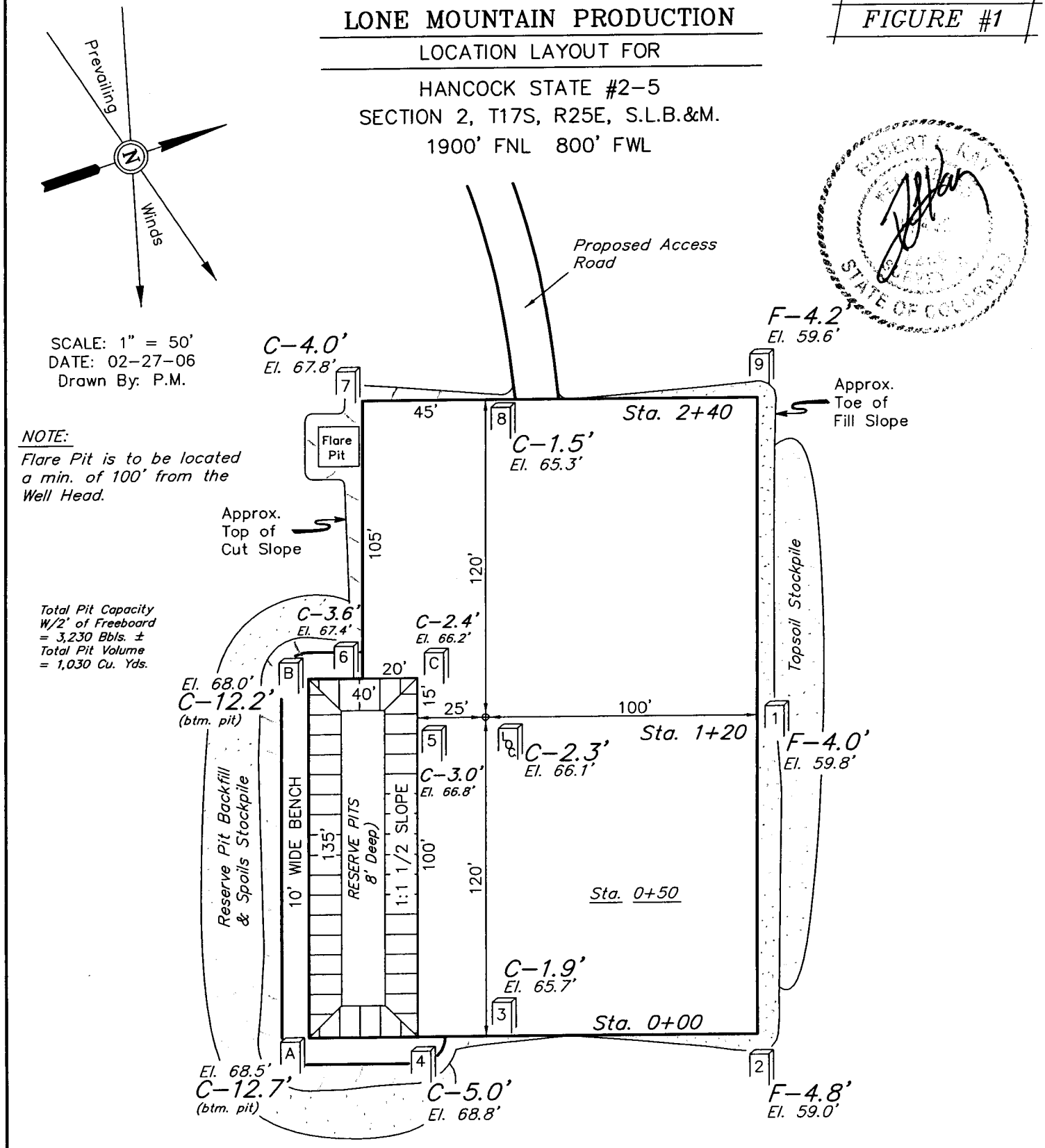

| LOCATION PHOTOS | 02 MONTH | 17 DAY | 06 YEAR | PHOTO |
|---|---|---|---|---|
| TAKEN BY: J.W. | DRAWN BY: C.P. | REVISED: 00-00-00 | | |

# LONE MOUNTAIN PRODUCTION

## LOCATION LAYOUT FOR

HANCOCK STATE #2-5
SECTION 2, T17S, R25E, S.L.B.&M.
1900' FNL 800' FWL

*FIGURE #1*




Elev. Ungraded Ground at Location Stake = 5566.1'
Elev. Graded Ground at Location Stake = 5563.8'


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

# LONE MOUNTAIN PRODUCTION

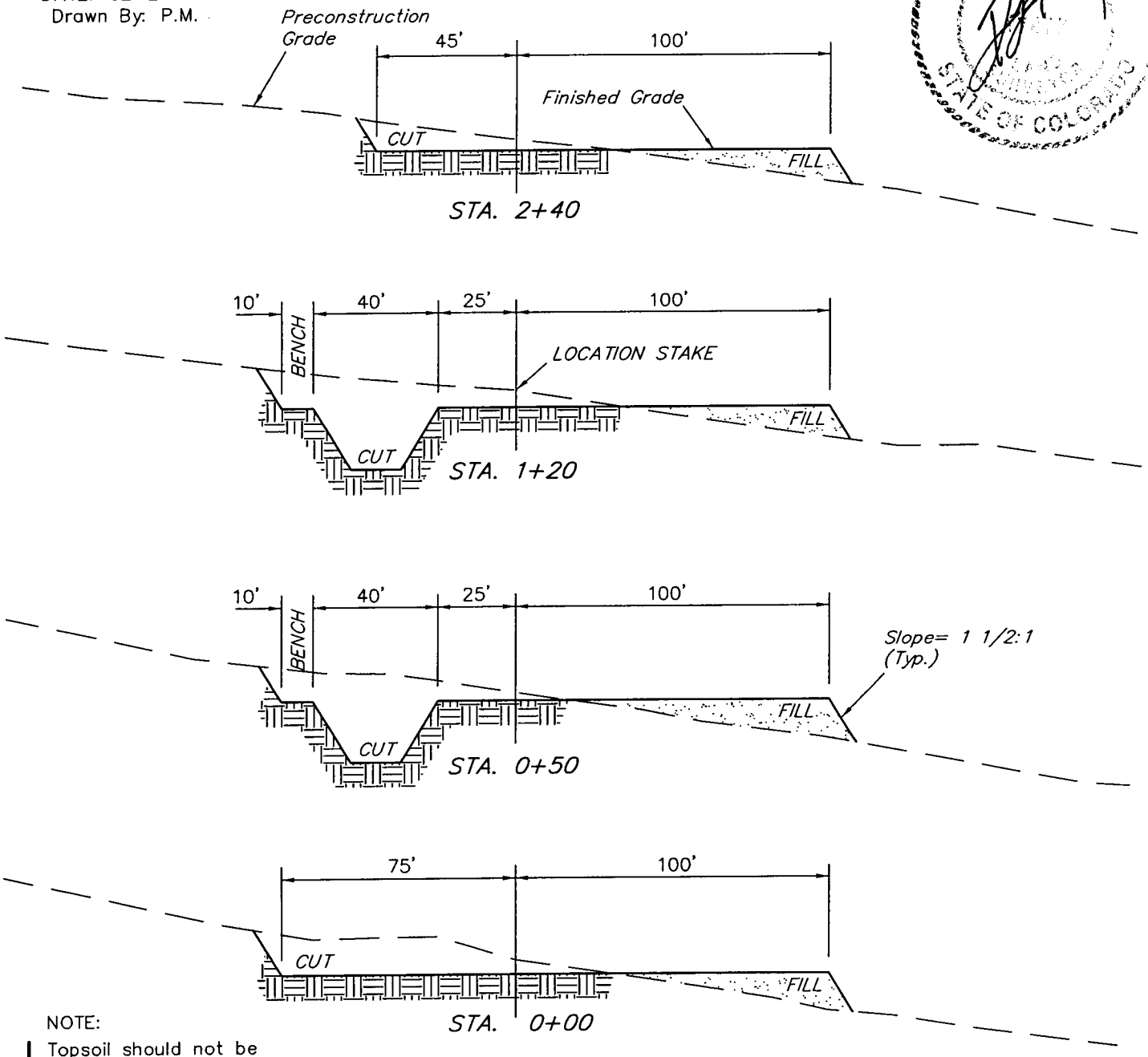
## TYPICAL CROSS SECTIONS FOR

HANCOCK STATE #2-5
SECTION 2, T17S, R25E, S.L.B.&M.
1900' FNL 800' FWL

*FIGURE #2*

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

DATE: 02-27-06
Drawn By: P.M.




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

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

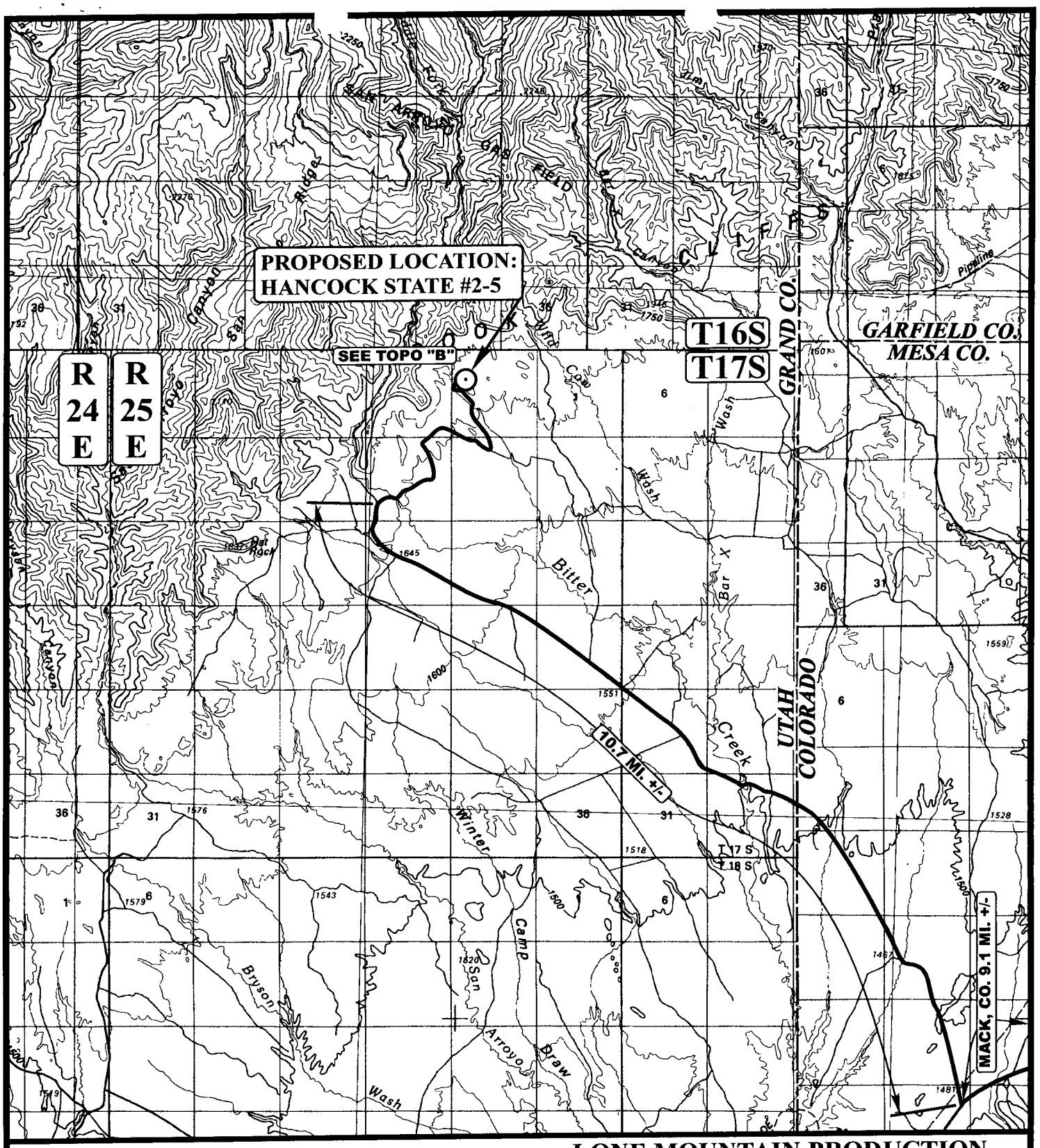
## APPROXIMATE YARDAGES

CUT

| | | |
|---|---|---|
| (6") Topsoil Stripping | = | 860 Cu. Yds. |
| Remaining Location | = | 2,760 Cu. Yds. |
| TOTAL CUT | = | 3,620 CU.YDS. |
| FILL | = | 2,240 CU.YDS. |

| | | |
|---|---|---|
| EXCESS MATERIAL | = | 1,380 Cu. Yds. |
| Topsoil & Pit Backfill (1/2 Pit Vol.) | = | 1,380 Cu. Yds. |
| EXCESS UNBALANCE (After Rehabilitation) | = | 0 Cu. Yds. |


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




**LEGEND:**

⊙ PROPOSED LOCATION

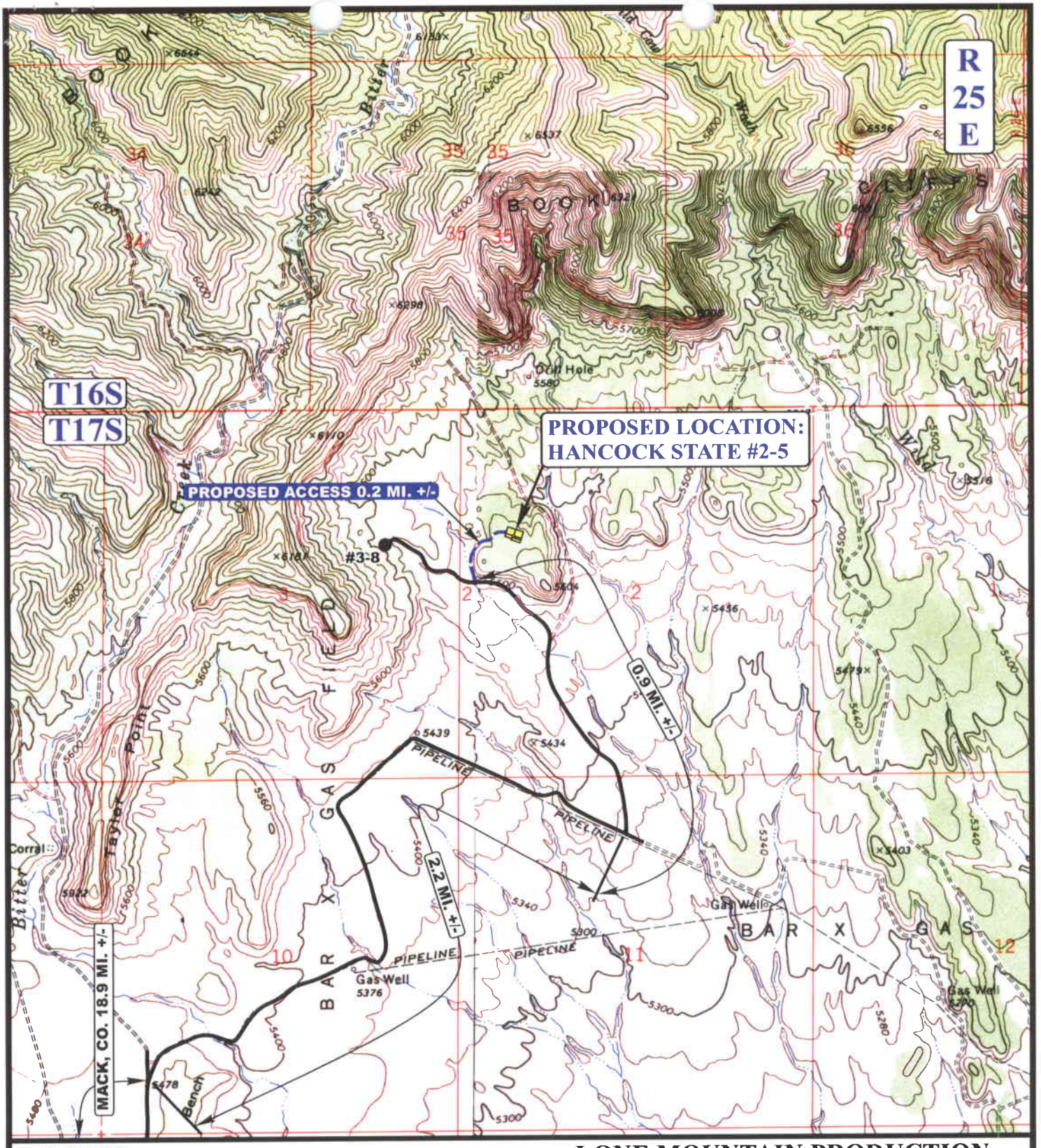
N

# LONE MOUNTAIN PRODUCTION

**HANCOCK STATE #2-5**
**SECTION 2, T17S, R25E, S.LB.&M.**
**1900' FNL 800' FWL**


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


| TOPOGRAPHIC MAP | 02 MONTH | 17 DAY | 06 YEAR | A TOPO |
|---|---|---|---|---|
| SCALE: 1 : 100,000 | DRAWN BY: C.P. | REVISED: 00-00-00 | | |




**LEGEND:**

EXISTING ROAD

PROPOSED ACCESS ROAD

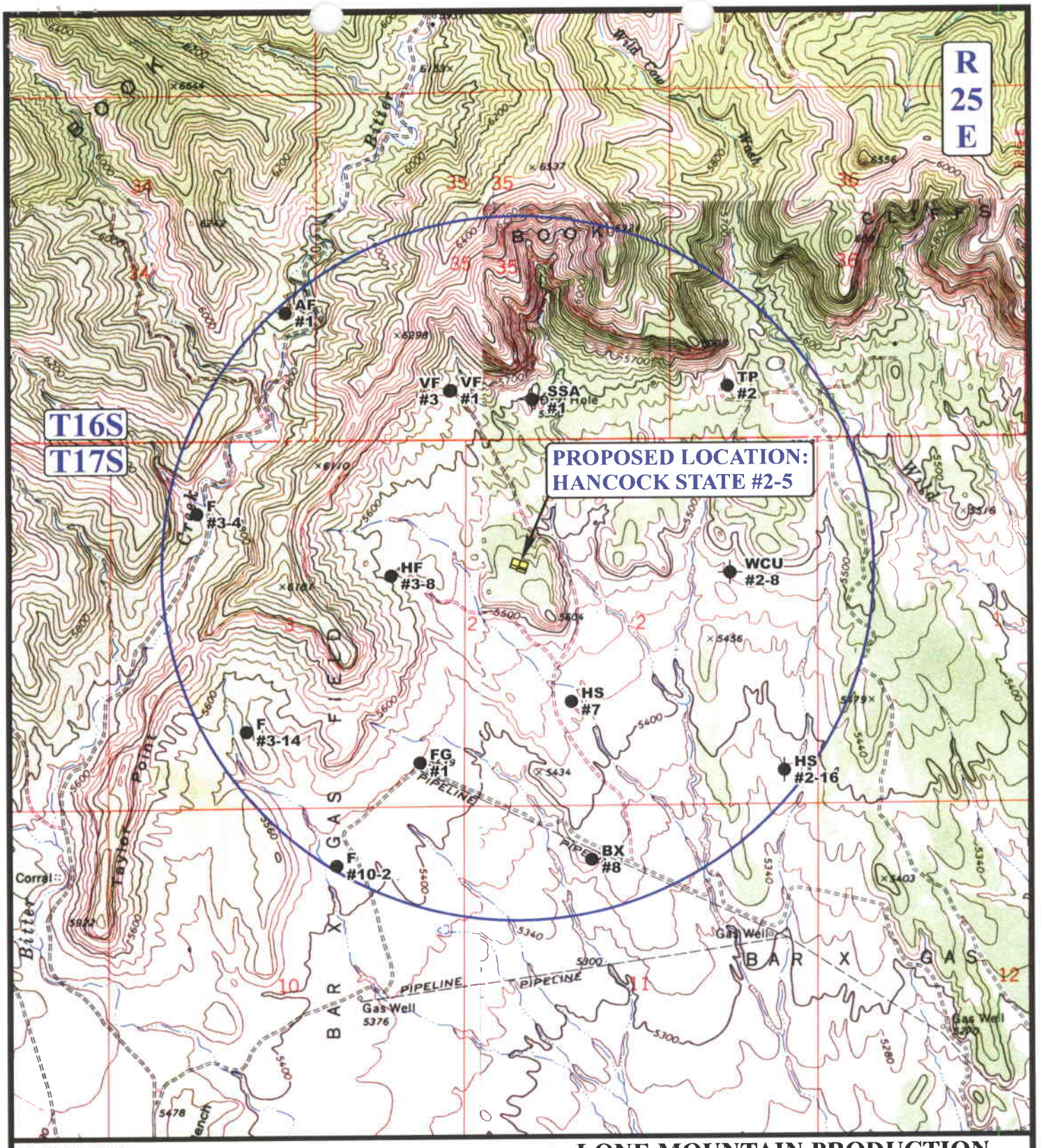
N

# LONE MOUNTAIN PRODUCTION

## HANCOCK STATE #2-5
## SECTION 2, T17S, R25E, S.LB.&M.
## 1900' FNL 800' FWL


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


| TOPOGRAPHIC MAP | 02 MONTH | 17 DAY | 06 YEAR | B TOPO |
|---|---|---|---|---|
| SCALE: 1" = 2000' | DRAWN BY: C.P. | REVISED: 00-00-00 | | |




## LEGEND:

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

N

## LONE MOUNTAIN PRODUCTION

**HANCOCK STATE #2-5**
**SECTION 2, T17S, R25E, S.LB.&M.**
**1900' FNL 800' FWL**


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


| TOPOGRAPHIC MAP | 02 MONTH | 17 DAY | 06 YEAR | C TOPO |
|---|---|---|---|---|
| SCALE: 1" = 2000' | DRAWN BY: C.P. | REVISED: 00-00-00 | | |

**WORKSHEET**
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 03/27/2006

API NO. ASSIGNED: 43-019-31472

WELL NAME: HANCOCK ST 2-5
OPERATOR: LONE MTN PRODUCTION CO ( N7210 )
CONTACT: JOE DYK

PHONE NUMBER: 970-250-9770

PROPOSED LOCATION:
SWNW 02 170S 250E
SURFACE: 1900 FNL 0800 FWL
BOTTOM: 1900 FNL 0800 FWL
COUNTY: GRAND
LATITUDE: 39.35992 LONGITUDE: -109.1230
UTM SURF EASTINGS: 661712 NORTHINGS: 4358190
FIELD NAME: BAR X ( 160 )

INSPECT LOCATN BY: / /

| Tech Review | Initials | Date |
|---|---|---|
| Engineering | DKD | 5/15/06 |
| Geology | | |
| Surface | | |

LEASE TYPE: 3 - State
LEASE NUMBER: ML-4189
SURFACE OWNER: 3 - State

PROPOSED FORMATION: MRSN
COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

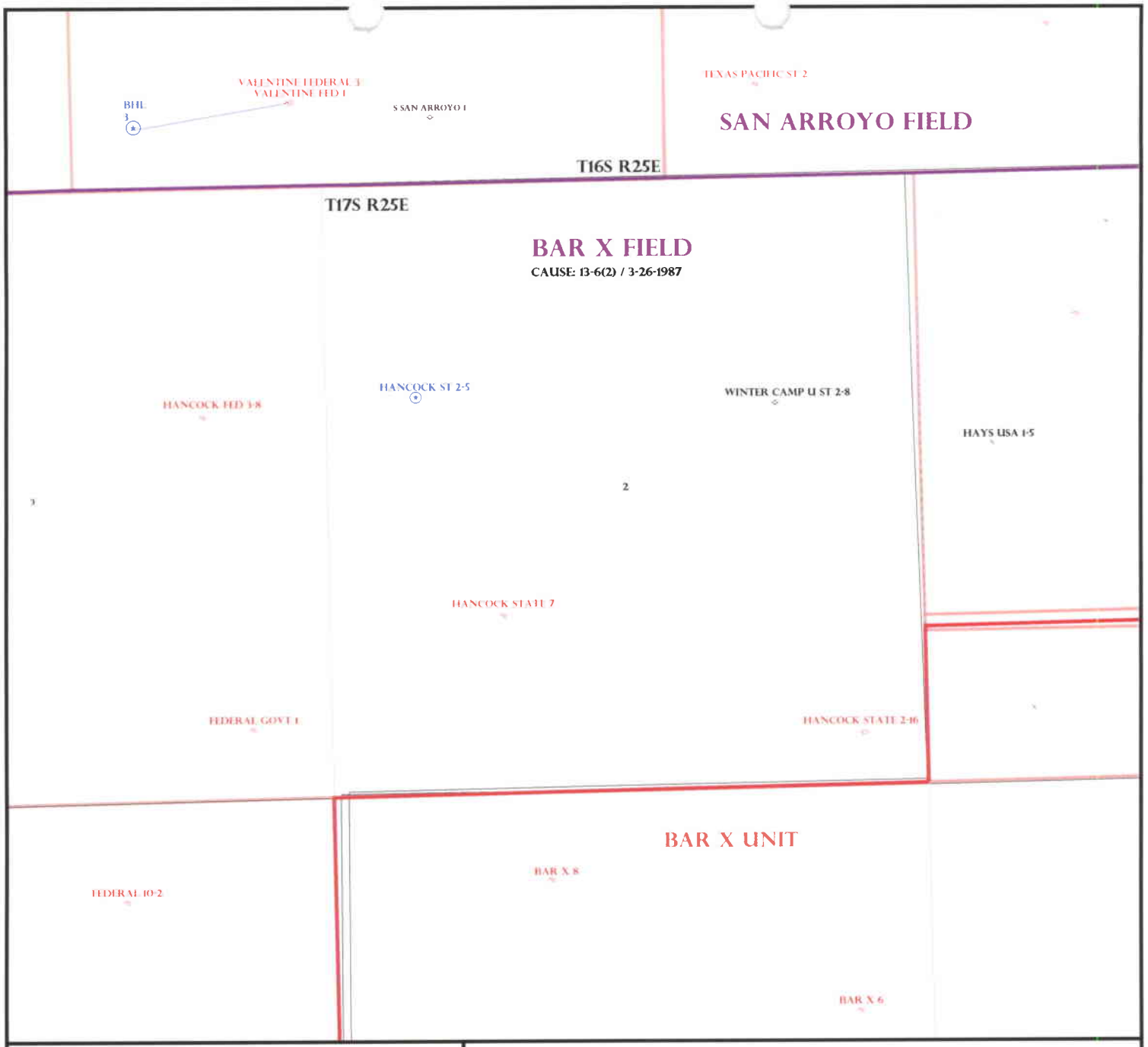
✓ Plat
✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. SLCSSEA01830 )
N Potash (Y/N)
N Oil Shale 190-5 (B) or 190-3 or 190-13
✓ Water Permit
(No. UTE )
N RDCC Review (Y/N)
(Date: )
N/A Fee Surf Agreement (Y/N)
N/A Intent to Commingle (Y/N)

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: 136(2)
Eff Date: 3-26-1987
Siting: 560' fr u bdry & 2000' fr other wells.
____ R649-3-11. Directional Drill

COMMENTS: Needs Bond (04-27-06)

STIPULATIONS: 1 - STATEMENT OF BASIS




OPERATOR: LONE MOUNTAIN PROD (N7210)

SEC: 2 T. 17S R. 25E

FIELD: BAR X (160)

COUNTY: GRAND

CAUSE: 13-6(2) / 3-26-1987

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

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

Wells Status
- 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
- DRILLING

Utah Oil Gas and Mining

N
W E
S

PREPARED BY: DIANA WHITNEY
DATE: 4-APRIL-2006

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

**OPERATOR**: Lone Mountain Production Company
**WELL NAME & NUMBER**: Hancock State No. 2-5
**API NUMBER**: 43-019-31472
**LOCATION**: 1/4,1/4 SWNW Sec:2 TWP: 17S RNG: 25E 1900 FNL 800 FWL

**Geology/Ground Water:**
A well at this location would likely spud into a sandy, moderately permeable soil is developed on the Cretaceous age Castlegate Sandstone. Beneath the Castlegate Sandstone is the thick bentonitic shale of the Mancos Shale. The proposed casing and cement will adequately isolate any shallow zones containing water in the unlikely event that such are encountered before the Dakota Sandstone pay zone more than 3,000' below the surface. There are no underground water rights within a mile of the location.

**Reviewer**: Christopher J. Kierst **Date**: 5/8/2006

**Surface:**

On-site conducted April 25, 2006. In attendance: Bart Kettle (DOGM), Nathan Sill (DWR), Jim Davis (SITLA) and Joe Dyk (Lone Mtn).

SITLA recommends Lone Mountain use rolling dills along the access road to drain water from road and prevent excessive erosion. DWR commented that project area is considered crucial deer and elk winter range. Recommend that drilling and construction activities not occur between the dates of November 1 to March 15. DWR recommending that Lone Mountain use a sage seed mixture for reclamation. DOGM recommends Lone Mountain divert drainage on the southwest corner of the well pad to prevent water from entering location. Regardless of recent grazing actively in the area, reserve pits should be fenced on all four sides upon the removal of the drilling rig.

**Reviewer:** Bart Kettle **Date**: April 27, 2006

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

1. Fence Reserve Pit on all four sides upon removal of drilling rig.

# ON-SITE PREDRILL EVALUATION
## Division of Oil, Gas and Mining

**OPERATOR:** Lone Mountain Production Company
**WELL NAME & NUMBER:** Hancock State No. 2-5
**API NUMBER:** 43-019-31472
**LEASE:** State **FIELD/UNIT:** Bar X
**LOCATION: 1/4,1/4** SWNW **Sec:** 2 **TWP:** 17S **RNG:** 25E 1900 FNL 800 FWL
**LEGAL WELL SITING:** 460 F **SEC. LINE;** 460 F **1/4,1/4 LINE;** 920 F **ANOTHER WELL.**
**GPS COORD (UTM):** X =661712 E; Y =4358190 N **SURFACE OWNER:** SITLA

**PARTICIPANTS**

Bart Kettle(DOGM), Jim Davis (SITLA), Nathan Sill (DWR) and Joe Dyk (Lone Mtn).

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Project is located twenty three miles northwest of Mack, Colorado in Grand County Utah. The well pad is located atop of a small mesa at the base of the Bookcliffs mountain range in a 8-10" precept zone. Salt scrub and P/J woodlands rangelands surround the well site. Topography immediately adjacent to the well is a series of small mesas cut by small gullies draining to the south. Within a mile to the north topography becomes very rough as it enters the series of ledges that form the Bookcliffs. Water drainage is to the southwest entering the Colorado River within 25 miles. There were no perennial streams or springs observed in close proximity to the project during the on-site inspection. Drainages in the immediate area are ephemeral in nature, being dry through a majority of the year.

**SURFACE USE PLAN**

CURRENT SURFACE USE: Winter cattle grazing, wildlife habitat, seasonal recreation, oil and gas development.

PROPOSED SURFACE DISTURBANCE: 240' x 175' well pad will be cut to grade. Roughly 0.2 miles of new road with an 18' running surface will be built to access well. The remainder of the access route will be on existing Grand County and BLM ROW.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: 13 producing wells, 1 dry hole are within a one-mile radius.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: Sufficient facilities to handle gas production will be installed on location. This includes a heated separator, a meter run and a small on-site water tank or pit.

SOURCE OF CONSTRUCTION MATERIAL: On-site

ANCILLARY FACILITIES: A 1000 foot, 3 ½" welded steel pipeline will be lain on the surface next to the access road where it will connect to the Federal No. 3-8 pipeline.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): Drilling at this location is not expected to generate significant public concern. Project area sits within the existing Bar-X gas field. Previous drilling activities in this area have generated limited interest from the general public.

**WASTE MANAGEMENT PLAN:**

Human waste will be disposed of in chemical toilets. Garbage and other waste material will be contained in a trash cage, which will be dumped at an approved sanitary landfill.

Drill cuttings will be buried in the reserve pit at cleanup. Produced liquid hydrocarbons will be constrained in test tanks during completion and testing.

**ENVIRONMENTAL PARAMETERS**

AFFECTED FLOODPLAINS AND/OR WETLANDS: No wetlands will be affected by the drilling of this well.

FLORA/FAUNA: Pronghorn antelope, Mule deer, Elk, cottontail and black tail jack rabbits, prairie dogs, songbirds, raptors, rodents, snakes and lizards.
Grasses: Cheatgrass, and Salina wild rye grass. Forbs: Purple mustard, Indian paint brush, and yellow eye cryptanth. Shrubs: Black greasewood, Four wing saltbrush, Wyoming sage, shadscale, Douglas rabbitbrush. Trees: Utah Juniper, and two needle pinyon. None. Other: Cactus and Harrison yucca,

SOIL TYPE AND CHARACTERISTICS: Strych fine sandy loam. Soils are deep and fine in nature formed in alluvium derived from sandstone and conglomerate.

SURFACE FORMATION & CHARACTERISTICS: Mancos-deposited outwash soils. Soils are erosive in nature due to lack of litter/vegetation.

EROSION/SEDIMENTATION/STABILITY: Most of the project area lays in areas of sandy loam soils ranging from high to moderate potential for wind erosion. The project area has high water erosion potential. Soil erosion would increase during the initial construction phase of the project. Removal of vegetation and physical soil crust will reduce surface soil aggregates and therefore reduce soil stability. Loose unstable berms of soil will be left along the roadside and water runoff patterns will be re-directed. These factors will contribute to increased potential for wind and water erosion. As vegetation recovers, and soil crusts recover along the roadway soils will become more stable. Wind and water erosion rates would be partially reduced, but still accelerated from normal rates.

PALEONTOLOGICAL POTENTIAL: None noted

**RESERVE PIT**

CHARACTERISTICS: 135'x40'x8'

LINER REQUIREMENTS (Site Ranking Form attached): Liner Not Required

**SURFACE RESTORATION/RECLAMATION PLAN**

Disturbed areas will be seeded with the approved seed mixture. Seed bed will be prepared by contour cultivating 4-6" deep and drilling seed ½ to 1" deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and then dragged for cover. In the event the well is abandoned/dry hole, Lone Mountain will restore the access road and location to blend with the natural topography. During reclamation of the site, fill material will be pushed into cuts and up over the back slope. No depressions will be left that could trap water of form ponds. Top soil will be distributed evenly over the location and seeded according to the approved seed mixture.

SURFACE AGREEMENT: Per SITLA lease.

CULTURAL RESOURCES/ARCHAEOLOGY: None observed.

**OTHER OBSERVATIONS/COMMENTS**

SITLA commented Lone Mountain would not be required to pay for wood volume that will be removed during the construction of the well pad and access road. Trees should be piled at the edge of the location to be used for reclamation. Mineral lease stipulation requires that well not be inactive for a period of more than 90 days in a one-year period of time. SITLA recommends Lone Mountain use rolling dills along the access road to drain water from road and prevent excessive erosion. DWR commented that project area is considered crucial deer and elk winter range. Recommend that drilling and construction activities not occur between the dates of November 1 to March 15. Recommending that Lone Mountain use a sage seed mixture for reclamation. DOGM recommends Lone Mountain divert drainage on the southwest corner of the well pad to prevent water from entering location.

**ATTACHMENTS**

Photos of this location were taken and placed on file.

| Bart Kettle | April 27, 2006 5:44 p.m. |
|---|---|
| DOGM REPRESENTATIVE | DATE/TIME |

**Evaluation Ranking Criteria and Ranking Score**
**For Reserve and Onsite Pit Liner Requirements**

| Site-Specific Factors | Ranking | Site Ranking |
|---|---|---|
| Distance to Groundwater (feet) | | |
| >200 | 0 | |
| 100 to 200 | 5 | |
| 75 to 100 | 10 | |
| 25 to 75 | 15 | |
| <25 or recharge area | 20 | 0 |
| Distance to Surf. Water (feet) | | |
| >1000 | 0 | |
| 300 to 1000 | 2 | |
| 200 to 300 | 10 | |
| 100 to 200 | 15 | |
| < 100 | 20 | 0 |
| Distance to Nearest Municipal Well (feet) | | |
| >5280 | 0 | |
| 1320 to 5280 | 5 | |
| 500 to 1320 | 10 | |
| <500 | 20 | 0 |
| Distance to Other Wells (feet) | | |
| >1320 | 0 | |
| 300 to 1320 | 10 | |
| <300 | 20 | 0 |
| Native Soil Type | | |
| Low permeability | 0 | |
| Mod. permeability | 10 | |
| High permeability | 20 | 10 |
| Fluid Type | | |
| Air/mist | 0 | |
| Fresh Water | 5 | |
| TDS >5000 and <10000 | 10 | |
| TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents | 20 | 0 |
| Drill Cuttings | | |
| Normal Rock | 0 | |
| Salt or detrimental | 10 | 0 |
| Annual Precipitation (inches) | | |
| <10 | 0 | |
| 10 to 20 | 5 | |
| >20 | 10 | 0 |
| Affected Populations | | |
| <10 | 0 | |
| 10 to 30 | 6 | |
| 30 to 50 | 8 | |
| >50 | 10 | 0 |
| Presence of Nearby Utility Conduits | | |
| Not Present | 0 | |
| Unknown | 10 | |
| Present | 15 | 0 |

**Final Score** 10 (Level III Sensitivity)

Sensitivity Level I = 20 or more; total containment is required, consider criteria for excluding pit use.
Sensitivity Level II = 15-19; lining is discretionary.
Sensitivity Level III = below 15; no specific lining is required.

UTAH DIVISION OF WATER RIGHTS

# Sorry. No diversion points. Try browsing!

# [illegible]-06 Lone Mountain Hancock State 2-5

## Casing Schematic

Manos Shale

Surface

TOC @ 0.

✓ w/ 118% washout

9-5/8"
MW 8.4
Frac 19.3

Surface
300. MD

Bit

(.052)(8.6)(4107) = 1836

Anticipate 1027

Gas

(.10)(4107) = 410.2

MASP = 1374

Burst = 2,000 ✓

Safety = 2200

80% = 1587

Max pressure @ Safety shoe = 999

✓ Test to 1,000 # (as proposed)

✓ Adequate Prev 5/15/06

TOC @ 3107.

3501 Dakota

3707 Morrison ✓ w/ 5% washout

4-1/2"
MW 8.6

Production
4107. MD

| | |
|---|---|
| Well name: | **05-06 Lone Mountain Hancock State 2-5** |
| Operator: | **Lone Mountain Production Comoany** |
| String type: | Surface |
| Project ID: | 43-019-31472 |
| Location: | Grand County |

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 264 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 300 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 buoyed weight.

Neutral point: 263 ft

**Environment:**

| | |
|---|---|
| H2S considered? | No |
| Surface temperature: | 75 °F |
| Bottom hole temperature: | 79 °F |
| Temperature gradient: | 1.40 °F/100ft |
| Minimum section length: | 300 ft |

Cement top: Surface

Non-directional string.

**Re subsequent strings:**

| | |
|---|---|
| Next setting depth: | 4,107 ft |
| Next mud weight: | 8.600 ppg |
| Next setting BHP: | 1,835 psi |
| Fracture mud wt: | 19.250 ppg |
| Fracture depth: | 300 ft |
| Injection pressure | 300 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 ($ft^3$) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 300 | 9.625 | 32.30 | H-40 | ST&C | 300 | 300 | 8.876 | 19 |

| 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 | 131 | 1370 | 10.469 | 300 | 2270 | 7.57 | 8 | 254 | 29.91 J |

Prepared by: Clinton Dworshak
Utah Div. of Oil & Mining

Phone: 801-538-5280
FAX: 801-359-3940

Date: May 10,2006
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 300 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
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: | **05-06 Lone Mountain Hancock State 2-5** |
| Operator: | **Lone Mountain Production Comoany** |
| String type: | Production |
| Project ID: | 43-019-31472 |
| Location: | Grand County |

## Design parameters:

**Collapse**

Mud weight: 8.600 ppg

Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 412 psi

Internal gradient: 0.346 psi/ft

Calculated BHP 1,835 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 buoyed weight.

Neutral point: 3,579 ft

## Environment:

| | |
|---|---|
| H2S considered? | No |
| Surface temperature: | 75 °F |
| Bottom hole temperature: | 132 °F |
| Temperature gradient: | 1.40 °F/100ft |
| Minimum section length: | 1,500 ft |
| Cement top: | 3,107 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 ($ft^3$) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 4107 | 4.5 | 11.60 | K-55 | ST&C | 4107 | 4107 | 3.875 | 95.2 |

| 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 | 1835 | 4960 | 2.703 | 1835 | 5350 | 2.92 | 42 | 170 | 4.09 J |


Prepared by: Clinton Dworshak
Utah Div. of Oil & Mining

Phone: 801-538-5280
FAX: 801-359-3940


Date: May 10,2006
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4107 ft, a mud weight of 8.6 ppg The casing is considered to be evacuated for collapse purposes.
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**

MICHAEL R. STYLER
*Executive Director*

**Division of Oil, Gas & Mining**

JOHN R. BAZA
*Division Director*

JON M. HUNTSMAN, JR.
*Governor*

GARY R. HERBERT
*Lieutenant Governor*

May 16, 2006

Lone Mountain Production Company
P O Box 80965
Billings, MT 59108

Re: Hancock State 2-5 Well, 1900' FNL, 800' FWL, SW NW, Sec. 2, T. 17 South, R. 25 East, Grand 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.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby 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 43-019-31472.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Grand County Assessor
SITLA

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

**Operator:** Lone Mountain Production Company

**Well Name & Number** Hancock State 2-5

**API Number:** 43-019-31472

**Lease:** ML-4189

**Location:** SW NW **Sec.** 2 **T.** 17 South **R.** 25 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)

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

FORM 3

AMENDED REPORT ☐
(highlight changes)

# APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-4189
6. SURFACE: State

1A. TYPE OF WORK: DRILL ☒ REENTER ☐ DEEPEN ☐

7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

B. TYPE OF WELL: OIL ☐ GAS ☒ OTHER _____ SINGLE ZONE ☒ MULTIPLE ZONE ☐

8. UNIT or CA AGREEMENT NAME: 14-08-0001-7474

2. NAME OF OPERATOR: Lone Mountain Production Company

9. WELL NAME and NUMBER: Hancock State No. 2-5

3. ADDRESS OF OPERATOR: P.O. Box 80965 CITY Billings STATE MT ZIP 59108
PHONE NUMBER: 970-250-9770

10. FIELD AND POOL, OR WILDCAT: Bar X

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1900' FNL 800' FWL Sec. 2, T17S, R25E 6th p.m.
AT PROPOSED PRODUCING ZONE: same

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW Sec. 2, T17S, R25E 6th p.m.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 23 Miles Northwest of Mack, Colorado

12. COUNTY: Grand
13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 800' FWL
16. NUMBER OF ACRES IN LEASE: 504.44
17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): 2200' Northwest of State #7
19. PROPOSED DEPTH: 4107'
20. BOND DESCRIPTION: UT-0719

21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5564' GR
22. APPROXIMATE DATE WORK WILL START: May 15, 2006
23. ESTIMATED DURATION: 8 days

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 |
|---|---|---|---|
| 12 1/4" | 9 5/8" H40 32.3 lb | 300' | 200 sacks 'G' + 2% CaCl + 1/4 #/sk Celloflake |
| | | | 1.17 cuft/sk, 15.8 pps |
| | | | |
| 8 3/4" | 4 1/2" K-55 11.6 lb | 4107' | 250 sacks 10-0 Thixotropic 1.4 cuft/sk 14.1 ppg |
| | | | Volume adjusted to cover bottom 1000' of well with |
| | | | cement. Caliper log will be run to verify volume. |
| | | | |

25. **ATTACHMENTS** 8 Pt. Drilling Plan; 13 Pt Surface Use Plan

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

☐ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
☐ COMPLETE DRILLING PLAN
☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Joe Dyk TITLE Petroleum Engineer

SIGNATURE _____ DATE 3/23/06

(This space for State use only)

API NUMBER ASSIGNED: 43-019-31472

APPROVAL:

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

**Date:** 05-16-06

**By:** _____

(See Instructions on Reverse Side)

MAR 27 2006

(11/2001)

# LONE MOUNTAIN PRODUCTION

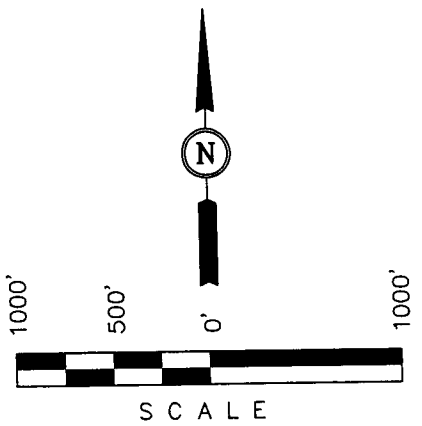
Well location, HANCOCK STATE #2-5, located as shown in the SW 1/4 NW 1/4 of Section 2, T17S, R25E, S.L.B.&M. GRAND County, Utah.

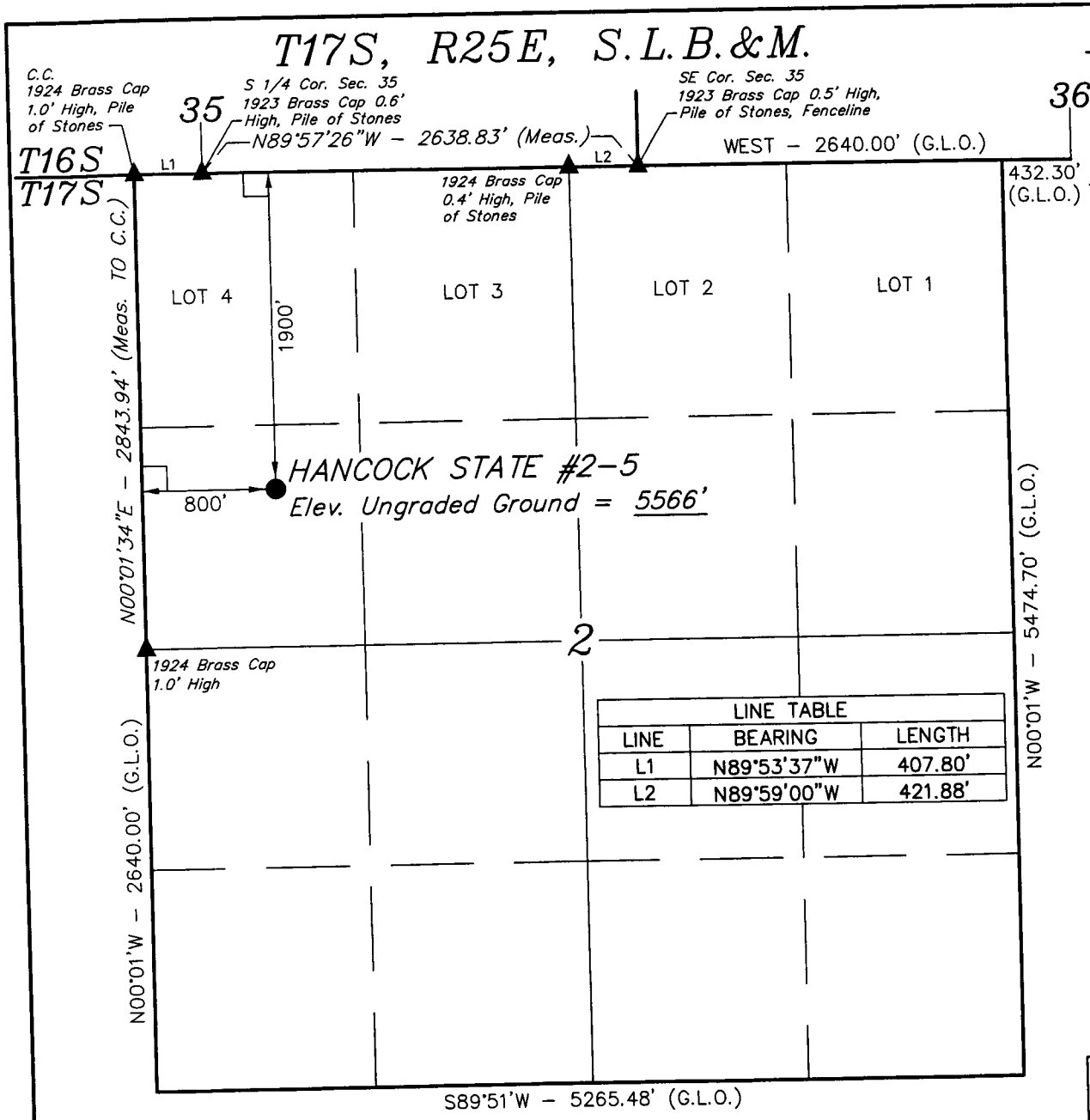
## BASIS OF ELEVATION

SPOT ELEVATION LOCATED IN THE NW 1/4 OF SECTION 2, T17S, R25E, S.L.B.&M. TAKEN FROM THE BAR X WASH QUADRANGLE, UTAH-COLORADO, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5604 FEET.

## BASIS OF BEARINGS

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




| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N89°53'37"W | 407.80' |
| L2 | N89°59'00"W | 421.88' |

## 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.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(AUTONOMOUS NAD 83)
LATITUDE = 39°21'35.67" (39.359908)
LONGITUDE = 109°07'25.36" (109.123711)
(AUTONOMOUS NAD 27)
LATITUDE = 39°21'35.75" (39.359931
LONGITUDE = 109°07'22.95" (109.123042)

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

| | | |
|---|---|---|
| SCALE 1" = 1000' | DATE SURVEYED: 02-09-06 | DATE DRAWN: 02-27-06 |
| PARTY J.W. J.K. P.M. | REFERENCES G.L.O. PLAT | |
| WEATHER COLD | FILE LONE MOUNTAIN PRODUCTION | |

**From:** Ed Bonner
**To:** Whitney, Diana
**Date:** 5/8/2006 3:48:33 PM
**Subject:** Well Clearance

The following wells have been given cultural resource clearance by the Trust Lands Cultural Resources Group:

ConocoPhillips Company
Utah 17-1174
Utah 17-1175
Utah 13-1169
Utah 19-1181
Utah 20-1183
Utah 24-1189
Utah 30-1062
Utah 30-1088
Utah 30-1090

Lone Mountain Production Company
Hancock State 2-5

Pendragon Energy Partners, Inc
State 9-16-10-18

QEP Uinta Basin, Inc
GB 9ML-16-8-22
GB 10ML-16-8-22
RW 12-32BG

Westport Oil & Gas Company
NBU 921-34J
NBU 922-31N
NBU 1021-4B
NBU 1021-4G
NBU 1021-4H
NBU 922-31O
NBU 921-32N (1 significant site which must be avoided per arc consultant survey in relocating well pad)
NBU 921-32O

XTO Energy, Inc
State of Utah 17-8-28-12
State of Utah 17-8-21-33
State of Utah 17-8-22-14
State of Utah 17-8-18-24
State of Utah 17-8-5-42R

If you have any questions regarding this matter please give me a call.

**CC:** Davis, Jim; Garrison, LaVonne; Hill, Brad; Hunt, Gil

# LONE MOUNTAIN PRODUCTION COMPANY

1360 Highway 6 & 50
Loma, CO 81524

Phone (970) 858-7546
Fax (970) 858-4163

April 5, 2006

Diana Whitney
State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1594 West North Temple, Ste 1210
P. O. Box 145801
Salt Lake City, UT 84114-5801

Re: Hancock State 2-5

Dear Ms. Whitney:

Lone Mountain Production Company hereby requests administrative approval for this well for geologic and topographic reasons. It is located 1895' from the No. 3-8 well, and 1972' from the Hancock No. 7 well, both distances which are within the 200' tolerance. It is in the same communitized area as the No. 3-8 well and has the same ownership. Also, it is on the same lease as the No. 7 well and has much the same ownership as that well.

Should you have any further questions, please feel free to contact us at 970-858-7546 or my cell phone at 970-250-9770.

Sincerely,

Joe Dyk

Enc

RECEIVED
APR 1 0 2006
DIV. OF OIL, GAS & MINING

# LONE MOUNTAIN PRODUCTION COMPANY

1360 Highway 6 & 50
Loma, CO 81524

Phone (970) 858-7546
Fax (970) 858-4163

March 30, 2006

Diana Whitney
State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
1594 West North Temple, Ste 1210
P. O. Box 145801
Salt Lake City, UT 84114-5801

Dear Ms. Whitney:

Lone Mountain Production Company is submitting 2 new copies of the Surface Use Plan for the Hancock State No. 2-5 with Item 11 corrected.

Should you have any further questions, please feel free to contact us at 970-858-7546 or my cell phone at 970-250-9770.

Sincerely,

Joe Dyk

Enc

RECEIVED
APR 0 3 2006
DIV. OF OIL, GAS & MINING

# SURFACE USE PLAN

Lone Mountain production Company
Hancock State No. 2-5
1900' FNL, 800' FWL Section 2, T17S, R25E
Grand County, UtahColorado

1. EXISTING ROADS

This proposed well is located 23 miles northwest of Mack, Colorado. Proceed to 9.1 miles west of Mack on Highway 6 and 50. Turn right and go north west 10.7 miles to the State line. Turn right and go north east 2.2 miles. Turn right and go north west 0.2 miles to location.

2. NEW ROADS

This well is accessed by existing roads. The last 0.2 miles is new road to be built with an 18 foot travel width. A cultural survey has been performed on the road and location area.

3. LOCATION OF EXISTING WELLS

13 producing wells, 1 dry hole are within a one-mile radius.

4. LOCATION OF PRODUCTION FACILITIES

Upon completion of the well as a producing gas well, sufficient facilities to handle gas production will be installed. This includes a heated separator, a meter run and a small water tank or pit. A submittal in accordance with Onshore Order #7 will be completed at that time. All facilities will be painted Pinyon Green to blend in with the natural surroundings.

5. LOCATION AND TYPE OF WATER SUPPLY

Water will be delivered from the Ute water tap in Mack, Colorado.

6. SOURCE OF CONSTRUCTION MATERIALS

All materials are native to the site. No new materials will be brought in.

7. METHODS FOR HANDLING WASTE MATERIALS

Cuttings will be buried in the reserve pit at cleanup. Garbage and other waste material will be contained in a trash cage, which will be dumped at an approved sanitary landfill. Human waste will be contained in chemically treated portable toilets.

Drilling fluids will be contained in a reserve pit. The drilling mud will be left to dry out before reclamation of the pit. Flow back from completion operations will also be contained in the reserve pit. Oil will not be put in the reserve pit.

If the well is productive, produced water will be disposed on site for 30 days or 90 days with the permission of the State Petroleum Engineer. After that time, application will be made for the approval of a permanent disposal method in compliance with the rules and regulations of the State of Utah and Onshore Order No 7.

## 8. ANCILLARY FACILITIES

A 1000 foot, 3-1/2" welded steel pipe line will be lain on the surface next to the access road where it will connect to the Federal No. 3-8 pipeline which dumps into LMPC's Bar-X gathering system. A separator and tank or pit will be set for the Hancock State No. 2-5 well if it is productive.

## 9. WELLSITE LAYOUT

See figure 1 – Pit and pad layout
See figure 2 – Cross sections of pit and pad

This location will be constructed large enough to accommodate the drilling rig and associated equipment for drilling this well with allowance made for future completion and production equipment.

The reserve pit is fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished.

All construction activities will be confined to the minimum area necessary. The exterior boundaries of the construction area will be clearly marked prior to any surface disturbing activities or vegetation removal.

All brush is cleared and stockpiled on the east edge of the location beyond the location edge and will be kept separate from the topsoil stockpiles. The brush will be used for mulch after the disturbed area has been reseeded.

## 10. PLANS FOR RECLAMATION OF THE SURFACE

A biodegradable mulch may be required if soil erosion or vegetation establishment is determined to be a problem by the authorized officer on the access or location reclamation.

All disturbed areas will be seeded with the approved seed mixture. Seed tags will be submitted to the area manager within 30 days of seeding.

Seed bed will be prepared by contour cultivating 4 – 6" deep and drilling seed ½ to 1" deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and then dragged for cover.

Seeding will be completed after September 15, 2006 and prior to October 31, 2006, if feasible, but no later than the fall of 2007.

If the well is a producer:

LMPC will upgrade and maintain access roads as necessary to prevent soil erosion and accommodate year round traffic. Areas unnecessary to production operations will be reshaped, cultivated on the contour, and seeded with the approved seed mixture with a drill ½ to 1" deep. Areas where seed cannot be drilled will be broadcast seeded at 1.5 times the approved application rate and dragged for seed cover. The topsoil will be saved for use during final reclamation unless the site can be re-contoured to blend with the natural topography as required for the final abandonment. Perennial vegetation will be established. Additional work will be required in the case of seeding failures. All permanent facilities will be painted pinyon green to blend with the natural environment.

If the well is abandoned/dry hole:

LMPC will restore the access road and location to blend with the natural topography. During reclamation of the site, fill material will be pushed into cuts and up over the back slope. No depressions will be left that could trap water or form ponds. Top soil will be distributed evenly over the location and seeded according to the approved seed mixture.

The area will be considered to be satisfactorily reclaimed when:

a) Soil erosion resulting from the operations has been stabilized
b) A vegetative cover at least equal to that present prior to disturbance and a plant species composition at least desirable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

## 11. SURFACE OWNERSHIP

All lands involving new construction are state lands.

## 12. NOTIFICATIONS

LMPC will contact the Utah DOGM office at least 24 hours prior to commencing construction or maintenance of the access road and/or well pad.

LMPC will immediately bring to the attention of the Utah DOGM any and all antiquities or other objects of historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. LMPC will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the area manager. Notice to proceed will be based upon the evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from a federal agency insofar as practical. When not practical, LMPC will follow the mitigation requirements set forth by the area manager concerning protection, preservation, or disposition of any sites or material discovered. In those situations where the area manager determines that data recovery and/or salvage excavations are necessary, LMPC will bear the cost of such data recovery and/or salvage operations.

The Utah DOGM office will be notified at least 24 hours prior to commencing reclamation work.

## 13. LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION


Joel V. Dyk
Petroleum Engineer
1360 Highway 6 & 50
Loma, Colorado 81524
Office Phone: (970) 858-7546
Cell Phone: (970) 250-9770

Jim Routson
Lone Mountain Production Company
P. O. Box 80965
Billings, Montana 59108
Office Phone: (406) 245-5077
Cell Phone: (406) 690-4452


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 that 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 operations proposed herein will be performed by LMPC and it's 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.

3/30/06
Date

Joel V. Dyk, Petroleum Engineer

# DIVISION OF OIL, GAS AND MINING

## *SPUDDING INFORMATION*

Name of Company: **LONE MTN PRODUCTION COMPANY**

Well Name: **HANCOCK ST 2-5**

Api No: **43-019-31472** Lease Type: **STATE**

Section **02** Township **17S** Range **25E** County **GRAND**

Drilling Contractor **ELENBURG** RIG # **12**

## SPUDDED:

Date **09/02/06**

Time _____

How **DRY**

***Drilling will Commence:*** _____

Reported by **JOE DYKE**

Telephone # **(970) 250-9770**

**Date** **09/06/06** **Signed** **CHD**

FORM 9

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

# SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill 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.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-4189
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME:
8. WELL NAME and NUMBER: Hancock State No. 2-5
9. API NUMBER: 43-019-31472
10. FIELD AND POOL, OR WILDCAT: Bar-X

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER
2. NAME OF OPERATOR: Lone Mountain Production Company
3. ADDRESS OF OPERATOR: P. O. Box 80965 CITY Billings STATE MT ZIP 59108 PHONE NUMBER: (406) 245-5077
4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1900' FNL, 800' FWL COUNTY: Grand
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 2 17S 25E S STATE: UTAH

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| ☐ NOTICE OF INTENT (Submit in Duplicate) | ☐ ACIDIZE | ☐ DEEPEN | ☐ REPERFORATE CURRENT FORMATION |
| Approximate date work will start: | ☐ ALTER CASING | ☐ FRACTURE TREAT | ☐ SIDETRACK TO REPAIR WELL |
| | ☐ CASING REPAIR | ☐ NEW CONSTRUCTION | ☐ TEMPORARILY ABANDON |
| | ☐ CHANGE TO PREVIOUS PLANS | ☐ OPERATOR CHANGE | ☐ TUBING REPAIR |
| | ☐ CHANGE TUBING | ☐ PLUG AND ABANDON | ☐ VENT OR FLARE |
| ☑ SUBSEQUENT REPORT (Submit Original Form Only) | ☐ CHANGE WELL NAME | ☐ PLUG BACK | ☐ WATER DISPOSAL |
| Date of work completion: | ☐ CHANGE WELL STATUS | ☐ PRODUCTION (START/RESUME) | ☐ WATER SHUT-OFF |
| | ☐ COMMINGLE PRODUCING FORMATIONS | ☐ RECLAMATION OF WELL SITE | ☑ OTHER: Notice of Spud |
| | ☐ CONVERT WELL TYPE | ☐ RECOMPLETE - DIFFERENT FORMATION | |

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

Please be advised that the Hancock State No. 2-5 well was spud on Saturday, September 2, 2006 at 10:30 pm. A verbal notice of intent to spud was given by Joe Dyk on Friday, 9/1/06. A verbal notice of spud was attempted on 9/2/06 at 10:30 pm, but the voice mail box of Carol Daniels was full.

NAME (PLEASE PRINT): James G. Routson TITLE: President
SIGNATURE: Jas. Routson DATE: 9/5/2006

(This space for State use only)

RECEIVED
SEP 07 2006
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

**LONE MOUNTAIN PRODUCTION COMPANY**

Mailing Address:
P.O. Box 80965
Billings, MT 59108-0965

(406) 245-5077
FAX 248-6321

Shipping Address:
2590 Holman Avenue, Suite B-1
Billings, MT 59102

September 5, 2006

State of Utah
Division of Oil, Gas & Mining
1594 W. Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn: Carol Daniels

RE: HANCOCK STATE NO. 2-5
SW¼NW¼ SECTION 2: T17S-R25E
GRAND COUNTY, UTAH

Dear Carol:

Enclosed is one sundry notice, in duplicate, notifying your office that the referenced well was spud on September 2, 2006 at 10:30 p.m.

Also enclosed is one entity action form so your office can assign a new number for well reporting purposes.

If you have any questions or need further information please contact our office at (406) 245-5077 or Joe Dyk at (970) 858-7546 (office) or (970) 250-9770 (cell).

Sincerely,

LONE MOUNTAIN PRODUCTION COMPANY

Carolyn Farmer

Carolyn Farmer
Office Manager

enclosures

cc: Joe Dyk

RECEIVED
SEP 07 2006
DIV. OF OIL, GAS & MINING

FORM 6

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

# ENTITY ACTION FORM

Operator: Lone Mountain Production Company
Operator Account Number: N 7210
Address: P. O. Box 80965
city Billings
state MT zip 59108
Phone Number: (406) 245-5077

**Well 1**

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|---|---|---|---|---|---|---|---|
| 019-31472 | Hancock State No. 2-5 | | SWNW | 2 | 17S | 25E | Grand |
| **Action Code** | **Current Entity Number** | **New Entity Number** | **Spud Date** | | | **Entity Assignment Effective Date** | |
| A | 99999 | 15622 | 9/2/2006 | | | 9/7/06 | |

Comments: MRSN

**Well 2**

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Action Code** | **Current Entity Number** | **New Entity Number** | **Spud Date** | | | **Entity Assignment Effective Date** | |
| | | | | | | | |

Comments:

**Well 3**

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Action Code** | **Current Entity Number** | **New Entity Number** | **Spud Date** | | | **Entity Assignment Effective Date** | |
| | | | | | | | |

Comments:

**ACTION CODES:**

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

James G. Routson
Name (Please Print)

Signature

President
Title

9/5/2006
Date

RECEIVED
SEP 07 2006
DIV. OF OIL, GAS & MINING

(5/2000)

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-4189

# SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

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: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Hancock State No. 2-5

2. NAME OF OPERATOR: Lone Mountain Production Company

9. API NUMBER: 019-31472

3. ADDRESS OF OPERATOR: P. O. Box 80965 CITY Billings STATE MT ZIP 59108

PHONE NUMBER: (406) 245-5077

10. FIELD AND POOL, OR WILDCAT: Bar-X

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1900' FNL, 800' FWL

COUNTY: Grand

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 2 17S 25E S

STATE: UTAH

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| ☐ NOTICE OF INTENT (Submit in Duplicate) | ☐ ACIDIZE | ☐ DEEPEN | ☐ REPERFORATE CURRENT FORMATION |
| Approximate date work will start: | ☐ ALTER CASING | ☐ FRACTURE TREAT | ☐ SIDETRACK TO REPAIR WELL |
| | ☐ CASING REPAIR | ☐ NEW CONSTRUCTION | ☐ TEMPORARILY ABANDON |
| | ☐ CHANGE TO PREVIOUS PLANS | ☐ OPERATOR CHANGE | ☐ TUBING REPAIR |
| | ☐ CHANGE TUBING | ☐ PLUG AND ABANDON | ☐ VENT OR FLARE |
| ☑ SUBSEQUENT REPORT (Submit Original Form Only) | ☐ CHANGE WELL NAME | ☐ PLUG BACK | ☐ WATER DISPOSAL |
| | ☐ CHANGE WELL STATUS | ☐ PRODUCTION (START/RESUME) | ☐ WATER SHUT-OFF |
| Date of work completion: | ☐ COMMINGLE PRODUCING FORMATIONS | ☐ RECLAMATION OF WELL SITE | ☑ OTHER: Status Report |
| | ☐ CONVERT WELL TYPE | ☐ RECOMPLETE - DIFFERENT FORMATION | |

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

Drilled 12-1/4" hole to 328'. Ran 8-5/8", 24#, J-55 csg to 319'. Cemented to surface with 150 sx. Class G, 2% $CaCl_2$, 1/4# Flocele/sx. Drilled 7-7/8" hole to 4506'. Ran Logs. Log Tops: Dakota Silt 3544' (+2301'), Dakota Sand 3614' (+1961'), Morrison 3744' (+1831). Ran 4-1/2", 10.5#, J-55 csg to 4097'. Cemented with 225 sx. Thixotropic, 10% gypsum, 1/4# Flocele/sx. Present operation: WOCT.

NAME (PLEASE PRINT): James G. Routson TITLE: President

SIGNATURE: James Routson DATE: 9/8/2006

(This space for State use only)

RECEIVED
SEP 11 2006
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

**LONE MOUNTAIN PRODUCTION COMPANY**

Mailing Address:
P.O. Box 80965
Billings, MT 59108-0965

(406) 245-5077
FAX 248-6321

Shipping Address:
2590 Holman Avenue, Suite B-1
Billings, MT 59102

September 8, 2006

State of Utah
Division of Oil, Gas & Mining
1594 W. Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn: Carol Daniels

RE: HANCOCK STATE NO. 2-5
SW¼NW¼ SECTION 2: T17S-R25E
GRAND COUNTY, UTAH

Dear Carol:

Enclosed is one sundry notice, in duplicate, notifying your office that production casing was run on the referenced well and its current status.

If you have any questions or need further information please contact our office at (406) 245-5077 or Joe Dyk at (970) 858-7546 (office) or (970) 250-9770 (cell).

Sincerely,

LONE MOUNTAIN PRODUCTION COMPANY

Carolyn Farmer

Carolyn Farmer
Office Manager

enclosure

cc: Joe Dyk

RECEIVED
SEP 1 1 2006
DIV. OF OIL, GAS & MINING

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

AMENDED REPORT ☐ (highlight changes)

FORM 8

# WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-1489

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: 14-08-001-7474

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Hancock State No. 2-5

2. NAME OF OPERATOR: Lone Mountain Production Company

9. API NUMBER: 019-31472

3. ADDRESS OF OPERATOR: P. O. Box 80965 CITY Billings STATE MT ZIP 59108

PHONE NUMBER: (406) 245-5077

10 FIELD AND POOL, OR WILDCAT: Bar-X

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: 1900' FNL, 800' FWL
AT TOP PRODUCING INTERVAL REPORTED BELOW: same
AT TOTAL DEPTH: same

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 2 17S 25E S

12. COUNTY:

13. STATE: UTAH

14. DATE SPUDDED: 9/12/2006

15. DATE T.D. REACHED: 9/18/2006

16. DATE COMPLETED: 1/3/2007 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5556' GL, 5575' KB

18. TOTAL DEPTH: MD 4,506 TVD

19. PLUG BACK T.D.: MD 4,055 TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
GR-FDC-CNL, SP-DIL, CBL

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☑ YES ☐ (Submit copy)

**24. CASING AND LINER RECORD (Report all strings set in well)**

| HOLE SIZE | SIZE/GRADE | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|---|---|---|---|---|---|---|---|---|---|
| 12-1/4" | 8.625 J-55 | 24# | 0 | 319 | | GlassG 150 | | sfc | none |
| 7-7/8" | 4.5 M-80 | 11.6# | 0 | 4,097 | | Thixotr 225 | | 3300 | none |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**25. TUBING RECORD**

| SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|---|---|---|---|---|---|---|---|---|
| 2-3/8" | 3,735 | | | | | | | |

**26. PRODUCING INTERVALS**

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) |
|---|---|---|---|---|
| (A) Dakota Sand | 3,703 | 3,742 | | |
| (B) | | | | |
| (C) | | | | |
| (D) | | | | |

**27. PERFORATION RECORD**

| INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS |
|---|---|---|---|
| 3,706 3,739 | .31 | 7 | Open ☑ Squeezed ☐ |
| | | | Open ☐ Squeezed ☐ |
| | | | Open ☐ Squeezed ☐ |
| | | | Open ☐ Squeezed ☐ |

**28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL |
|---|---|
| 3706'-3739' | Acidized with 750 gallons 7-1/2% HCl |
| 3736'-3739' | Fract with 75,000# 20/40 sand, 928 bbls gelled water |
| | |

**29. ENCLOSED ATTACHMENTS:**

☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

**30. WELL STATUS:** producing

RECEIVED
JAN 16 2007
DIV. OF OIL, GAS & MINING

(5/2000)

(CONTINUED ON BACK)

**31. INITIAL PRODUCTION**

**INTERVAL A (As shown in item #26)**

| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/8/2007 | | 1/9/2007 | | 24 | | | 0 | 144 | 1 | flowing |
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |
| 1/2" | 90 | 280 | | 1,068 | | | 0 | 144 | 1 | producing |

**INTERVAL B (As shown in item #26)**

| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
|---|---|---|---|---|---|---|---|---|---|---|
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

**INTERVAL C (As shown in item #26)**

| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
|---|---|---|---|---|---|---|---|---|---|---|
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

**INTERVAL D (As shown in item #26)**

| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
|---|---|---|---|---|---|---|---|---|---|---|
| CHOKE SIZE: | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

**32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**

sold

**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

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

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. |
|---|---|---|---|
| Dakota Sand | 3,703 | 3,742 | tight gas |

**34. FORMATION (Log) MARKERS:**

| Name | Top (Measured Depth) |
|---|---|
| Mancos | 0 |
| Dakota Silt | 3,544 |
| Dakota Sand | 3,614 |
| Morrison | 3,744 |

**35. ADDITIONAL REMARKS (Include plugging procedure)**

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

NAME (PLEASE PRINT) James G. Routson TITLE President

SIGNATURE DATE 1/12/2007

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

FORM 7

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

# REPORT OF WATER ENCOUNTERED DURING DRILLING

Well name and number: Hancock State No. 2-5

API number: 019-31472

Well Location: QQ SWNW Section 2 Township 17S Range 25E County Grand

Well operator: Lone Mountain Production Company

Address: P. O. Box 80965

city Billings state MT zip 59108 Phone: (406) 245-5077

Drilling contractor: Elenburg Exploration Inc.

Address: P. O. Box 2440

city Casper state WY zip 82602 Phone: (307) 235-8609

Water encountered (attach additional pages as needed):

| DEPTH | | VOLUME | QUALITY |
|---|---|---|---|
| FROM | TO | (FLOW RATE OR HEAD) | (FRESH OR SALTY) |
| 0 | 4,506 | 0 | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Formation tops:
(Top to Bottom)

| | | | | | |
|---|---|---|---|---|---|
| 1 | Dakota Silt | 2 | 3544' | 3 | |
| 4 | Dakota Sand | 5 | 3614' | 6 | |
| 7 | Morrison | 8 | 3744' | 9 | |
| 10 | | 11 | | 12 | |

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

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

NAME (PLEASE PRINT) James G. Routson TITLE President

SIGNATURE James G. Routson DATE 1/12/2007

RECEIVED
JAN 16 2007
DIV. OF OIL, GAS & MINING

(5/2000)

# LONE MOUNTAIN PRODUCTION COMPANY

Mailing Address:
P.O. Box 80965
Billings, MT 59108-0965

(406) 245-5077
FAX 248-6321

Shipping Address:
2590 Holman Avenue, Suite B-1
Billings, MT 59102

January 12, 2007

State of Utah
Division of Oil, Gas & Mining
1594 W. Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn: Carol Daniels

RE: HANCOCK STATE NO. 2-5
SWNW SECTION 2: T17S-R25E
GRAND COUNTY, UTAH

Dear Carol:

Enclosed is one Well Completion Report and one Report of Water Encountered During Drilling for the Hancock State No. 2-5 well.

If you have any questions or need further information please contact our office at (406) 245-5077 or Joe Dyk at (970) 858-7546 (office) or (970) 250-9770 (cell).

Sincerely,

LONE MOUNTAIN PRODUCTION COMPANY

Carolyn Farmer

Carolyn Farmer
Office Manager

enclosure

cc: Joe Dyk

RECEIVED
JAN 1 6 2007
DIV. OF OIL, GAS & MINING

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-4189

# SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

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: OIL WELL ☐ GAS WELL ☑ OTHER _____

8. WELL NAME and NUMBER: Hancock State No. 2-5

2. NAME OF OPERATOR: Lone Mountain Production Company

9. API NUMBER: 43-019-31472

3. ADDRESS OF OPERATOR: P. O. Box 80965 CITY Billings STATE MT ZIP 59108

PHONE NUMBER: (406) 245-5077

10. FIELD AND POOL, OR WILDCAT: Bar-X

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 1900' FNL, 800' FWL

COUNTY: Grand

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 2 17S 25E S

STATE: UTAH

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| ☐ NOTICE OF INTENT (Submit in Duplicate) | ☐ ACIDIZE | ☐ DEEPEN | ☐ REPERFORATE CURRENT FORMATION |
| Approximate date work will start: _____ | ☐ ALTER CASING | ☐ FRACTURE TREAT | ☐ SIDETRACK TO REPAIR WELL |
| | ☐ CASING REPAIR | ☐ NEW CONSTRUCTION | ☐ TEMPORARILY ABANDON |
| | ☐ CHANGE TO PREVIOUS PLANS | ☐ OPERATOR CHANGE | ☐ TUBING REPAIR |
| | ☐ CHANGE TUBING | ☐ PLUG AND ABANDON | ☐ VENT OR FLARE |
| ☑ SUBSEQUENT REPORT (Submit Original Form Only) | ☐ CHANGE WELL NAME | ☐ PLUG BACK | ☐ WATER DISPOSAL |
| Date of work completion: _____ | ☐ CHANGE WELL STATUS | ☐ PRODUCTION (START/RESUME) | ☐ WATER SHUT-OFF |
| | ☐ COMMINGLE PRODUCING FORMATIONS | ☐ RECLAMATION OF WELL SITE | ☑ OTHER: Notice of First Production |
| | ☐ CONVERT WELL TYPE | ☐ RECOMPLETE - DIFFERENT FORMATION | |

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

Please be advised that the Hancock State No. 2-5 well was turned on for first production on January 8, 2007 at 12:30 p.m. The gas gatherer is Canyon Gas Resources.

NAME (PLEASE PRINT) James G. Routson TITLE President

SIGNATURE James G. Routson DATE 1/11/2007

(This space for State use only)

RECEIVED
JAN 16 2007
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

# LONE MOUNTAIN PRODUCTION COMPANY

Mailing Address:
P.O. Box 80965
Billings, MT 59108-0965

(406) 245-5077
FAX 248-6321

Shipping Address:
2590 Holman Avenue, Suite B-1
Billings, MT 59102

January 11, 2007

State of Utah
Division of Oil, Gas & Mining
1594 W. Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn: Carol Daniels

RE: NOTICE OF FIRST PRODUCTION
HANCOCK STATE NO. 2-5
SWNW SECTION 2: T17S-R25E
GRAND COUNTY, UTAH

Dear Carol:

Enclosed is one Sundry Notice advising your office that the referenced well was turned on for first production on January, 8, 2007 at 12:30 p.m. The well completion and the water encountered reports will be submitted in by the end of the week.

If you have any questions or need further information please contact our office at (406) 245-5077 or Joe Dyk at (970) 858-7546 (office) or (970) 250-9770 (cell).

Sincerely,

LONE MOUNTAIN PRODUCTION COMPANY

Carolyn Farmer

Carolyn Farmer
Office Manager

enclosure

cc: Joe Dyk

RECEIVED
JAN 1 6 2007
DIV. OF OIL, GAS & MINING

# LONE MOUNTAIN PRODUCTION COMPANY

Mailing Address:
P.O. Box 80965
Billings, MT 59108-0965

(406) 245-5077
FAX 248-6321

Shipping Address:
2590 Holman Avenue, Suite B-1
Billings, MT 59102

June 4, 2007

State of Utah
Division of Oil, Gas & Mining
1594 W. Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

43-019-31472
17S 25E 2

RE: SITE SECURITY DIAGRAMS
VARIOUS WELLS
GRAND COUNTY, UTAH

Ladies and Gentlemen:

Enclosed are site security diagrams for new wells recently drilled in Grand County, Utah.

If you have any questions or need further information please contact our office at (406) 245-5077.

Sincerely,

LONE MOUNTAIN PRODUCTION COMPANY

Carolyn Farmer

Carolyn Farmer
Office Manager

enclosures

RECEIVED
JUN 06 2007
DIV. OF OIL, GAS & MINING

LONE MOUNTAIN PRODUCTION COMPANY
SITE SECURITY DIAGRAM
STATE NO. 2-5
SW¼ NW¼ SEC 2, T17S-R25E
GRAND COUNTY, UTAH
LEASE NO. ML-1489