

(formerly 9-331c)

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

5. LEASE DESIGNATION AND SERIAL NO  
**UTU-76768**

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**na**

1a. TYPE OF WORK

DRILL  DEEPEN  PLUG BACK

7. UNIT AGREEMENT NAME  
**na**

B. TYPE OF WELL

OIL WELL  GAS WELL  OTHER   
SINGLE ZONE  MULTIPLE ZONE

8. FARM OR LEASE NAME  
**na**

2. NAME OF OPERATOR

**The Houston Exploration Company**

9. WELL NO.  
**North Horseshoe 8-18-6-22**

3. ADDRESS OF OPERATORS

**1100 Louisiana, Suite 2000 Houston, TX, 77002**

10. FIELD OR LEASE NAME  
**Undesignated W. idca f**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirement)

at surface **2156' FNL & 860' FEL SENE** 4X  
At proposed prod. Zone **same as above** 8y

11. Sec., T., R., M., OR BLK AND SURVEY OR AREA  
**Sec. 18, T6S, R22E**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

**14.2 miles south of Vernal, UT**

12. COUNTY OR PARISH 13. STATE  
**Uintah Utah**

15. DISTANCE FROM PROPOSED LOC. TO NEAREST PROP. OR LEASE LINE, FT. (Also to nearest drlg. Unit line, if any)

**860'**

16. NO. OF ACRES IN LEASE

**2,040**

17. NO. OF ACRES ASSIGNED TO THIS WELL

**40**

16. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED OR APPLIED FOR, ON THIS LEASE, FT.

**1,500'**

19. PROPOSED DEPTH

**10,500'**

20. ROTARY OR CABLE TOOLS

**Rotary**

21. ELEVATION (SHOW WHETHER DF, RT, GR, etc.)

**4903' GR**

22. APPROX. DATE WORK WILL START

**5/20/2006**

**PROPOSED CASING AND CEMENT PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
<b>11"</b>	<b>8 5/8"</b>	<b>36#</b>	<b>2000'</b>	<b>238 sks</b>
<b>7 7/8"</b>	<b>4 1/2"</b>	<b>11.6#</b>	<b>T.D.</b>	<b>1,077 sks</b>

**The operator requests permission to drill the subject well. Please find the attached 10 point plan and 13 point plan.**

**William A Ryan  
290 S 800 E  
Vernal, UT 84078  
435-789-0968**

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

24. SIGNATURE William A. Ryan TITLE Agent DATE 2/17/2006

(This space for Federal or State Office use)

PERMIT NO. 4304737891 APPROVAL DATE \_\_\_\_\_  
APPROVED BY [Signature] TITLE BRADLEY G. HILL DATE 03-13-06  
CONDITIONS OF APPROVAL, IF ANY: ENVIRONMENTAL MANAGER

**RECEIVED  
MAR 09 2006**

\*See Instructions on Reverse Side

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.

**Federal Approval of this  
Action is Necessary**

DIV. OF OIL, GAS & MINING



**Ten Point Plan**

**The Houston Exploration Company**

**North Horseshoe 8-18-6-22**

**Surface Location SE ¼ NE ¼, Section 18, T. 6S., R. 22E.**

**1. Surface Formation  
Duchesne**

**2. Estimated Formation Tops and Datum:**

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
Duchesne	Surface	4,903' G.L.
Uintah	1,800'	+3,103'
Green River	3,800'	+1,103'
Wasatch	6,900'	-1,997'
Mesaverde	10,000'	-5,097'
TD	10,500'	-5,597'

A 11" hole will be drilled to 2,000' +/- . The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

**3. Producing Formation Depth:**

Formation objective includes the Green River, Wasatch, Mesaverde and its sub-members.

Off set well information  
Permitted/Drilled:

North Horseshoe 16-18-6-22  
North Horseshoe 14-18-6-22  
North Horseshoe 10-18-6-22  
North Horseshoe 2-18-6-22

4. **Proposed Casing:**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/FT</u>	<u>Grade</u>	<u>Coupling &amp; Tread</u>	<u>Casing Depth</u>	<u>New/Used</u>
11	8 5/8	36#	J-55	STC	2000	NEW
7 7/8	4 1/2	11.6#	N-80	LTC	T.D.	NEW

**Cement Program:**

**Cement volume = Gauge hole + 25%**

**The Surface Casing will be cemented from 2000' to the Surface as follows:**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Conductor: 0' - 40'				
14"	Premium "5"	35 sks. +/-	1.18ft <sup>3</sup> /sk	15.6 ppg
Lead: 0' - 1,300'				
8 5/8"	Premium "5"	87 sks. +/-	3.82ft <sup>3</sup> /sk	11.0 ppg
Tail: 1,300' - 2,000'				
8 5/8"	Premium "5"	151 sks. +/-	1.2ft <sup>3</sup> /sk	15.6 ppg

NOTE:

Cement top for tail = Trona + 200'

**Production casing will be cemented to 200' inside surface casing or higher as follows:**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Cement Weight</u>
Lead: 1,800' - 6,700'				
4 1/2"	Premium "5"	421 sks +/-	3.82ft <sup>3</sup> /sk	11.0 ppg
Tail: 6,700' - TD				
4 1/2"	Premium "5"	656 sks +/-	1.18ft <sup>3</sup> /sk	15.6 ppg

NOTE:

Cement top for tail = Wasatch + 200'

**5. BOP and Pressure Containment Data:**

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 8 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

**6. Mud Program:**

<u>Interval</u>	<u>Mud weight lbs./gal.</u>	<u>Viscosity Sec./OT.</u>	<u>Fluid Loss MI/30 Mins.</u>	<u>Mud Type</u>
0-2000	Air/Clear Water	-----	No Control	Water/Gel
2000-T.D.	8.4-12.0	30	8-10	Water/Gel

**7. Auxiliary Equipment**

Upper Kelly cock, full opening stabbing valve, 2 1/2" choke manifold and pit level indicator.

**8. Testing, Coring, Sampling and Logging:**

- a) Test: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.
- c) Sampling: Every 10' from 2000' to T.D.
- d) Logging: 

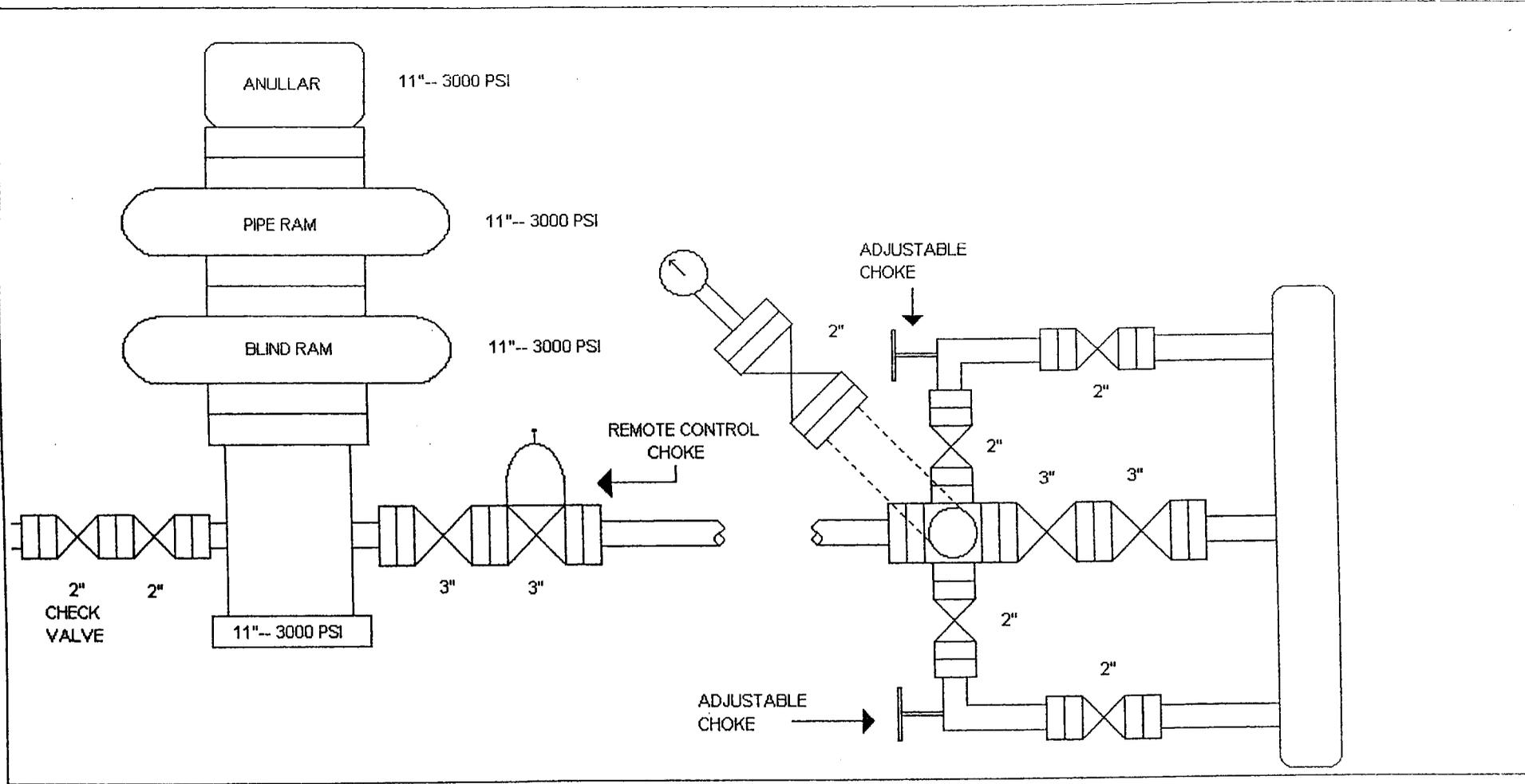
Type	Interval
DLL/SFL W/GR and SP	T.D. to Surf. Csg
FDC/CNL W/GR and CAL	T.D. to Surf. Csg

**9. Abnormalities (including sour gas):**

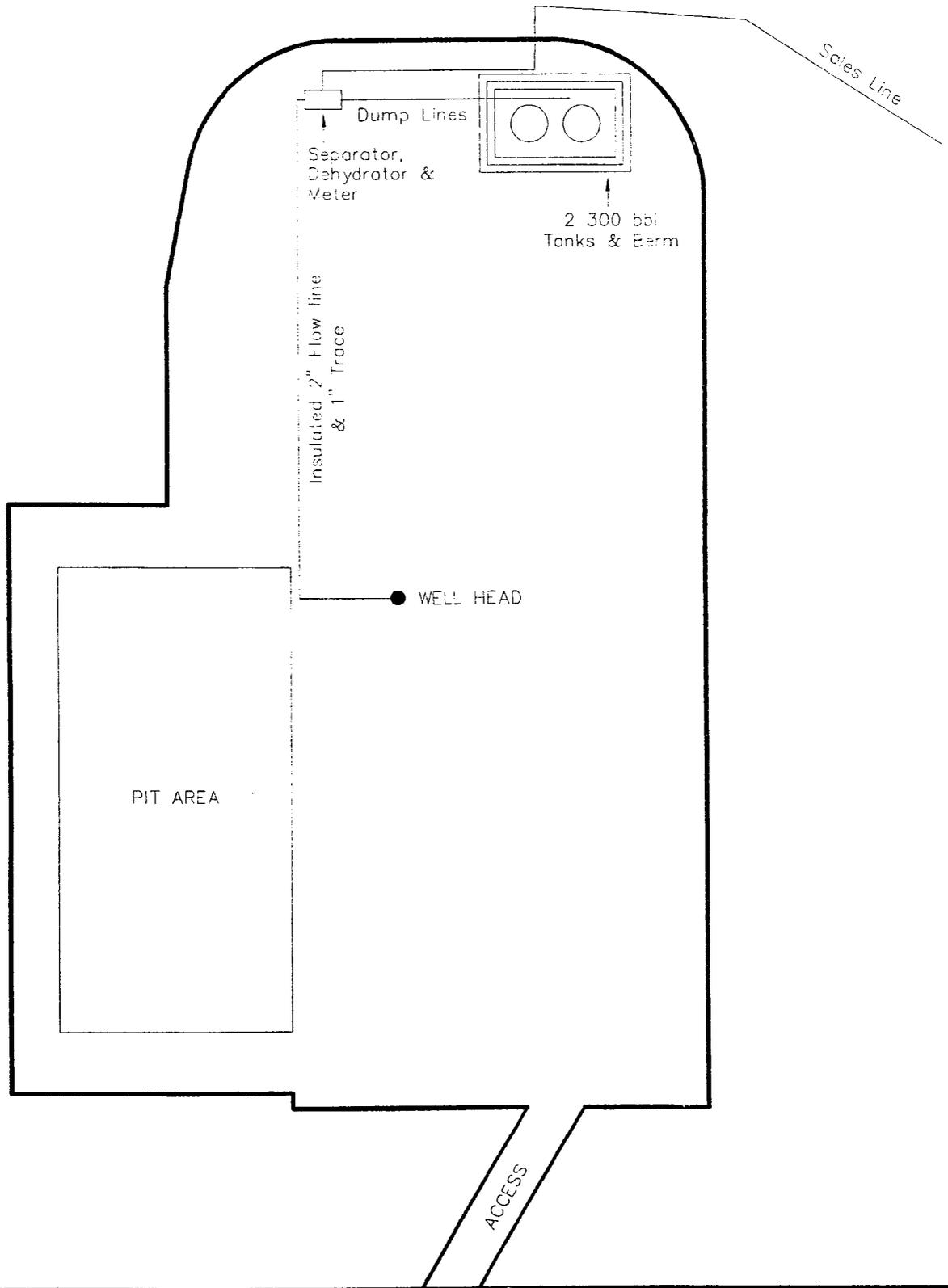
No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H<sub>2</sub>S.

**10. Drilling Schedule:**

The anticipated starting date is 5/20/2006. Duration of operations is expected to be 30 days.



# TYPICAL PRODUCTION LAYOUT



**THE HOUSTON EXPLORATION COMPANY**

**13 POINT SURFACE USE PLAN**

**FOR WELL**

**NORTH HORSESHOE 8-18-6-22**

**LOCATED IN SE ¼ NE ¼**

**SECTION 18, T.6S, R22E, S.L.B.&M.**

**UINTAH COUNTY, UTAH**

**LEASE NUMBER: UTU-76768**

**SURFACE OWNERSHIP: FEDERAL**

1. Existing Roads:

**The Houston Exploration Co.  
North Horseshoe 8-18-6-22  
Section 18, T6S, R 22E**

**Starting in Vernal, Utah: Proceed in an easterly, then southerly direction from Vernal, Utah along U.S. Highway 40 approximately 3.9 miles to the junction of State Highway 45; exit right and proceed in a southerly, then southeasterly direction approximately 9.2 miles on State Highway 45 to the junction of this road and an existing road to the west; turn right and proceed in a westerly direction approximately 0.25 miles to the beginning of the proposed access for the #16-18-6-22 to the northeast; follow road flags in a northeasterly, then northerly direction approximately 0.35 miles to the beginning of the proposed access for the #10-18-6-22 to the north; follow road flags in a northerly then northwesterly direction approximately 0.15 miles to the beginning of the proposed access for the #2-18-6-22 to the north; follow road flags in a northerly, then northwesterly direction approximately 0.35 miles to the beginning of the proposed access to the east; follow road flags in an easterly direction approximately 130' to the proposed location.**

**Total distance from Vernal, Utah to the proposed well location is approximately 14.2 miles.**

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

2. Planned access road

**The proposed access road will be approximately 130' of new construction on lease. The road will be graded once per year minimum and maintained.**

A) Approximate length	130 ft
B) Right of Way width	30 ft
C) Running surface	18 ft
D) Surface material	Native soil
E) Maximum grade	5%
F) Fence crossing	None
G) Culvert	None
H) Turnouts	None
I) Major cuts and fills	None
J) Road Flagged	Yes
K) Access road surface ownership	Federal
L) All new construction on lease	Yes
M) Pipe line crossing	None

Please see the attached location plat for additional details.

**An off lease right-of-way will not be required.**

All surface disturbances for the road and location will be within the lease boundary.

3. Location of existing wells

The following wells are located within a one-mile radius of the location site.

- A) Producing well                      None
- B) Water well                            None
- C) Abandoned well                    None
- D) Temp. abandoned well            None
- E) Disposal well                        None
- F) Drilling /Permitted well
  - North Horseshoe 14-18-6-22
  - North Horseshoe 16-18-6-22
  - North Horseshoe 2-18-6-22
  - North Horseshoe 16-7-6-22
  - North Horseshoe 10-7-6-22
  - North Horseshoe 3-20-6-22
- G) Shut in wells                        None
- H) Injection well                       None
- I) Monitoring or observation well
  - None

Please see the attached map for additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted a **Carlsbad Canyon** color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is **Carlsbad Canyon**.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest

tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulation identified in 43 CFR 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval from the authorized officer.

If the well is capable of economic production a surface gas line will be required.

**Approximately 150' of 3" steel buried gas gathering line would be constructed on Federal Lands. The line will tie into a proposed pipeline in Section 18, T6S, R22E. The pipeline would be buried to the west of the location and adjacent to the access road.**

**An off lease right-of-way will not be required.**

**Please see the attached location diagrams for pipeline location.**

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized

officer will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

5. Location and type of water supply

**Water for drilling and cementing will come from The Green River Permit # T-76073.**

6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

7. Methods for handling waste disposal

A) Pit construction and liners:

The reserve pit will be approximately **12 ft.** deep and most of the depth shall be below the surface of the existing ground. Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. **Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.**

C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

D) Sewage:

A portable chemical toilet will be supplied for human waste.

E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

reinforcement rod is attached to the top of the entire fence.

8. Ancillary facilities

There are no ancillary facilities planned at this time and none are foreseen for the future.

- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.

- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

9. Well-site layout

Location dimensions are as follows:

- A) Pad length                      **345 ft.**
- B) Pad width                       **245 ft.**
- C) Pit depth                        **12 ft.**
- D) Pit length                       **150 ft.**
- E) Pit width                         **75 ft.**
- F) Max cut                         **19.8 ft.**
- G) Max fill                         **9.4 ft.**
- H) Total cut yds.       **10,090 cu yds**
- I) Pit location                      **South end**
- J) Top soil location                      **West end**
- K) Access road location                      **West end**
- L) Flare Pit                         **Corner C**

- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.

- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of

10. Plans for restoration of the surface

Prior to construction of the location, the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately **1,720** cubic yards of material. Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be spread on the pit area. The pit area will be seeded when the soil has

been spread. **The unused portion of the location (the area outside the dead man) will be re-contoured.**

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled.

All disturbed areas will be re-contoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will

be scarified and left with a rough surface.

A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

B) Interim Seed Mix

**4#/acre Indian Rice Grass**

**4#/acre Crested Wheat Grass**

**4#/acre Needle & Thread Grass**

11. Surface ownership:

<b>Access road</b>	<b>Federal</b>
<b>Location</b>	<b>Federal</b>
<b>Pipe line</b>	<b>Federal</b>

12. Other information:

A) Vegetation

The vegetation coverage is slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

B) Dwellings:

There are no dwellings or other facilities within a one-mile radius of the location.

C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported promptly to the surface management agency.

At least twenty-four (24) hours prior to running casing and cementing all casing strings.

- e) BOP and related equipment tests  
At least twenty-four (24) hours prior to initial pressure tests.
- f) First production notice  
Within five (5) business days after the new well begins, or production resumes after well has been off production for more than 90 days.

D) Water:

**The nearest water is the Green River located 2,850' to the Northwest.**

E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

F) Notification:

- a) Location Construction  
At least forty eight (48) hours prior to construction of location and access roads.
- b) Location completion  
prior to moving on the drilling rig.
- c) Spud notice  
At least twenty-four (24) hours prior to spudding the well.
- d) Casing string and cementing

G) Flare pit:

The flare pit will be located in **corner C** of the reserve pit outside the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

13. Lessees or Operator's representative and certification

A) Representative

William A. Ryan  
Rocky Mountain Consulting  
290 S 800 E  
Vernal, UT 84078

Office 435-789-0968  
Fax 435-789-0970  
Cellular 435-828-0968

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 and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

B) Certification:

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 presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston Exploration Company and its contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

**Onsite Dates:** 1/12/06

**Self Certification Statement**

**The following self-certification statement is provided per Federal requirements dated June 15, 1988.**

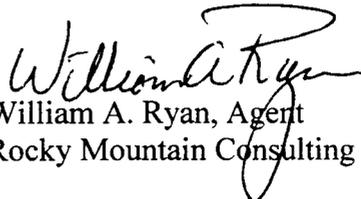
**Please be advised that The Houston Exploration Company is considered to be the operator of the following well:**

**North Horseshoe #8-18-6-22  
Section 18, T. 6S, R. 22E  
SE ¼ of the NE ¼  
Lease UTU-76768  
Uintah County, Utah**

**The Houston Exploration Company is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.**

**Bond UTU-104155044 provides state-wide bond coverage on all Federal Lands.**

Date 2/17/06

  
William A. Ryan, Agent  
Rocky Mountain Consulting

### **Statement of use of Hazardous Materials**

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan  
Agent for The Houston Exploration Company  
Rocky Mountain Consulting  
290 S 800 E  
Vernal, UT 84078

435-789-0968 Office  
435-828-0968 Cell  
435-789-0970 Fax

# THE HOUSTON EXPLORATION COMPANY

## NORTH HORSESHOE #8-18-6-22

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 18, T6S, R22E, S.L.B.&M.

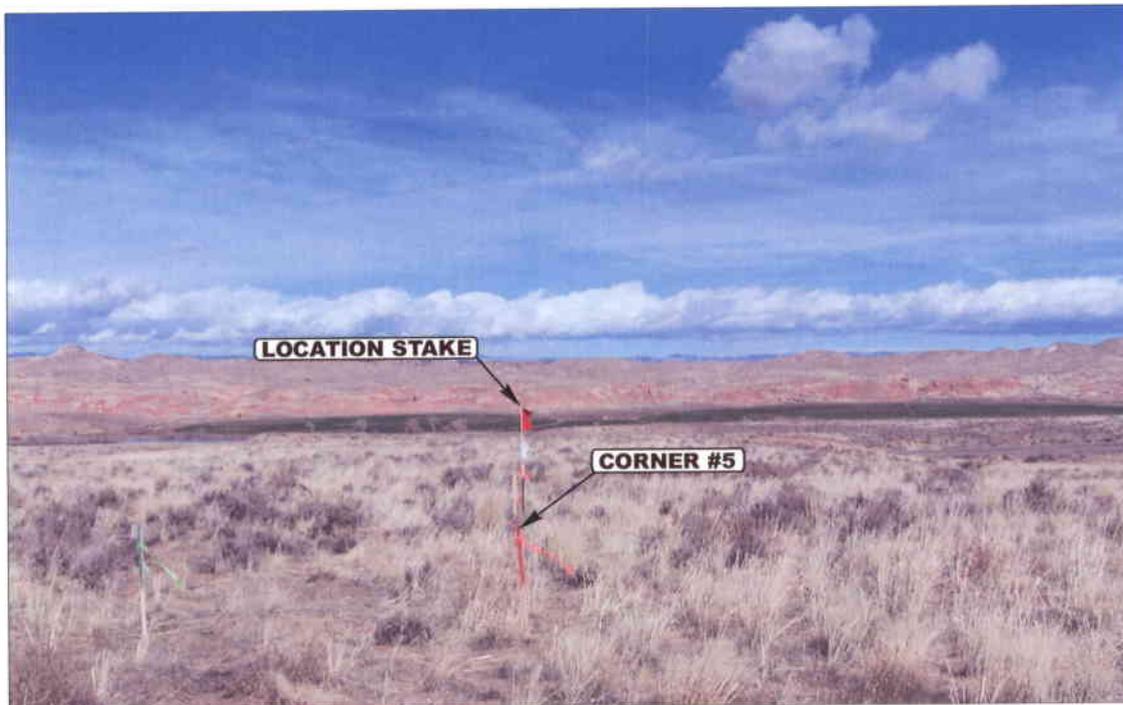


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



- Since 1964 -

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

LOCATION PHOTOS

11 07 05  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

DRAWN BY: C.H.

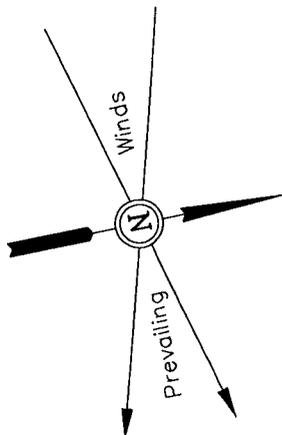
REVISED: 00-00-00

# THE HOUSTON EXPLORATION COMPANY

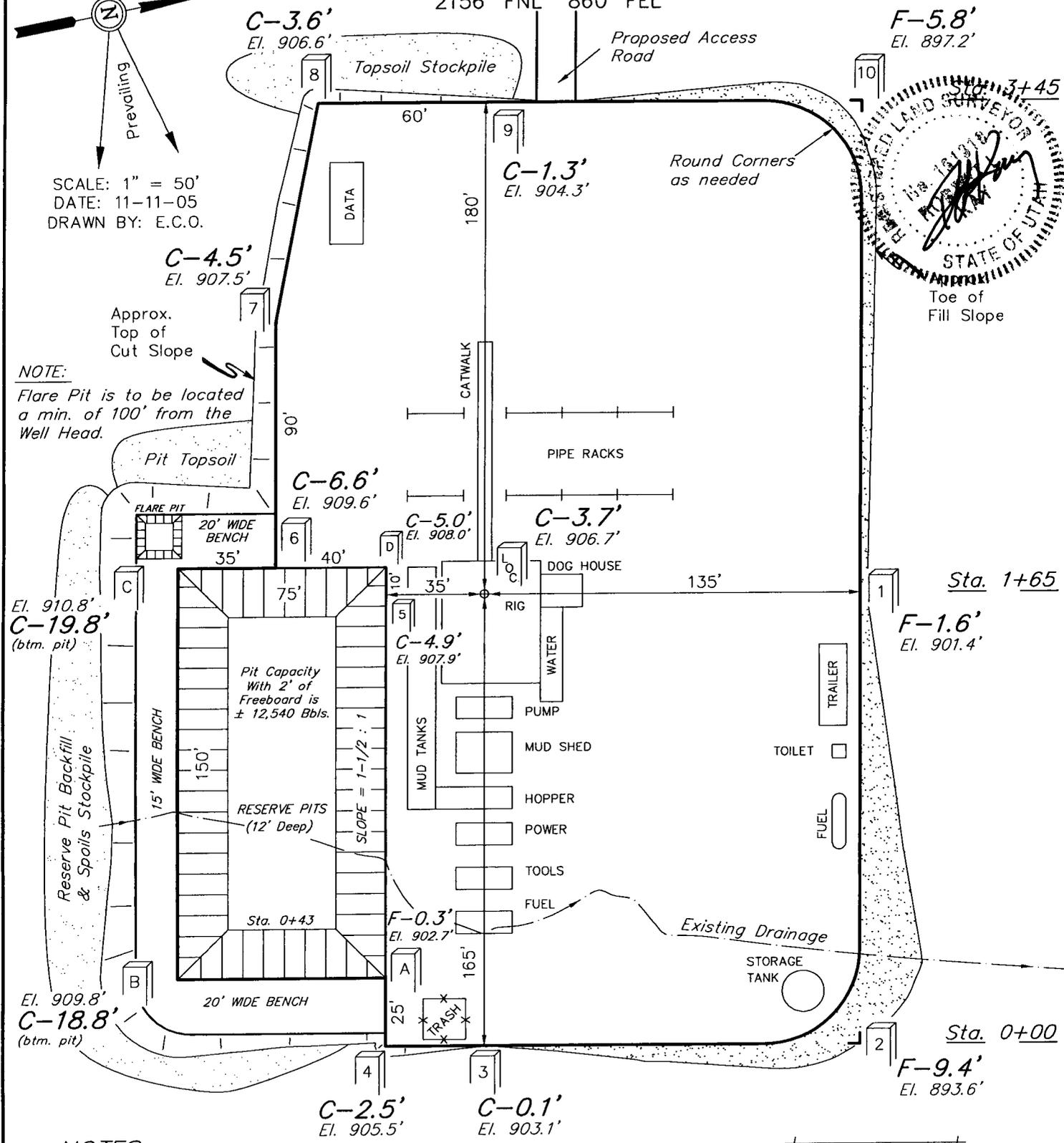
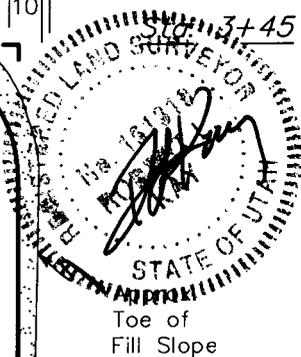
## LOCATION LAYOUT FOR

NORTH HORSESHOE #8-18-6-22  
SECTION 18, T6S, R22E, S.L.B.&M.

2156' FNL 860' FEL



SCALE: 1" = 50'  
DATE: 11-11-05  
DRAWN BY: E.C.O.



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

**NOTES:**

Elev. Ungraded Ground At Loc. Stake = 4906.7'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4903.0'

**FIGURE #1**

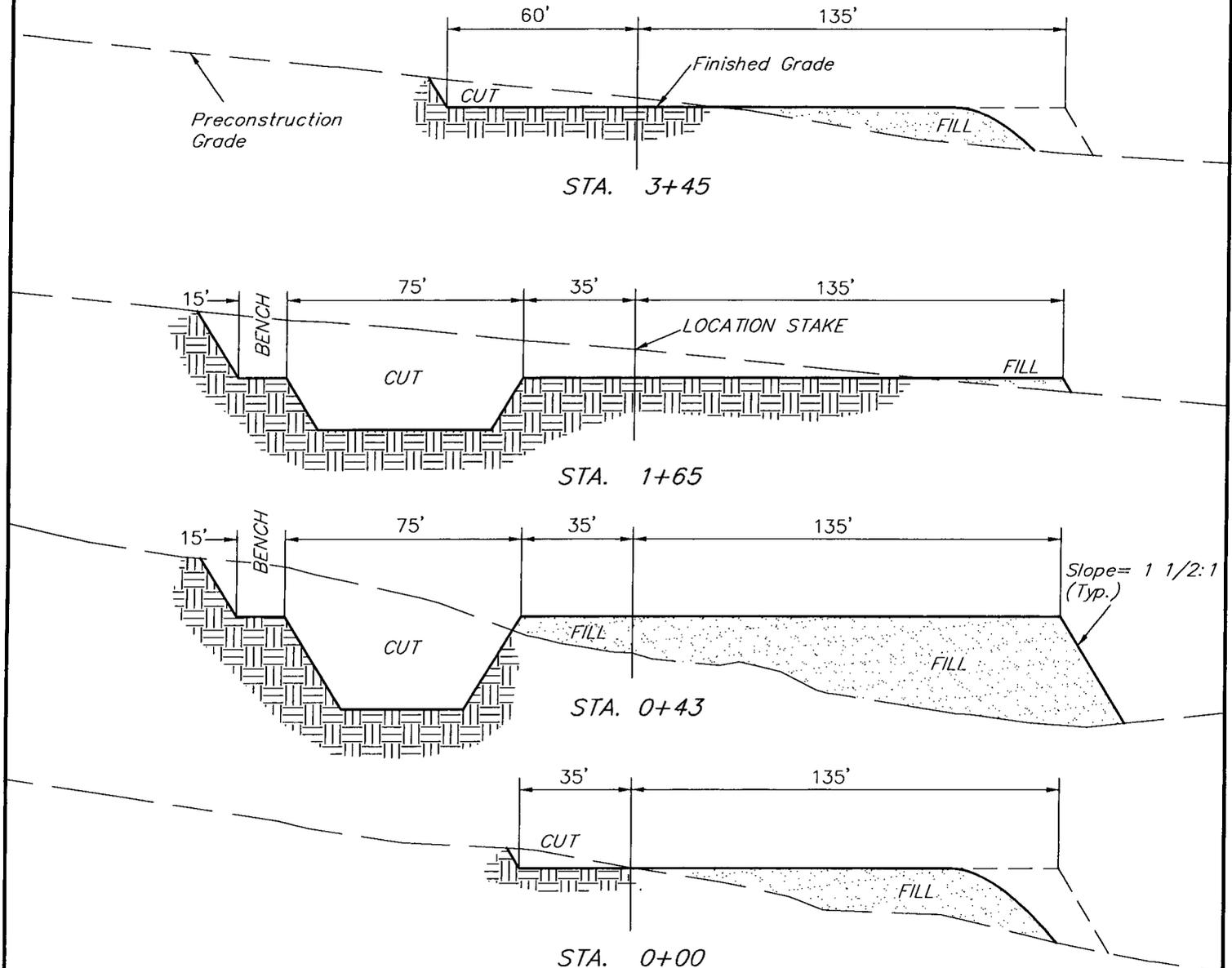
# THE HOUSTON EXPLORATION COMPANY

TYPICAL CROSS SECTIONS FOR  
 NORTH HORSESHOE #8-18-6-22  
 SECTION 18, T6S, R22E, S.L.B.&M.  
 2156' FNL 860' FEL



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

DATE: 11-11-05  
 DRAWN BY: E.C.O.



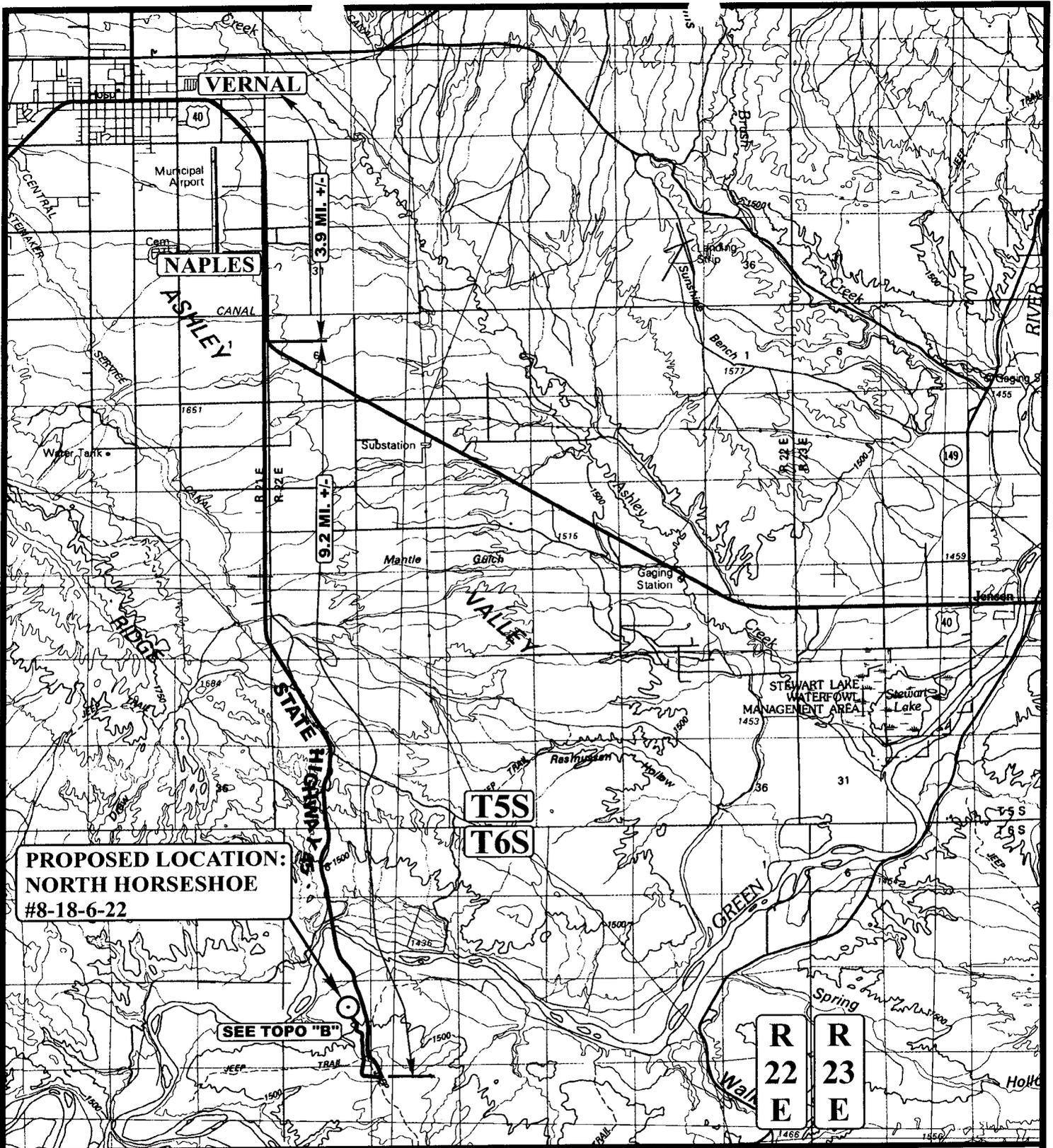
\* NOTE:  
 FILL QUANTITY INCLUDES  
 5% FOR COMPACTION

**FIGURE #2**

APPROXIMATE YARDAGES

CUT		
(6") Topsoil Stripping	=	1,720 Cu. Yds.
Remaining Location	=	8,370 Cu. Yds.
<b>TOTAL CUT</b>	<b>=</b>	<b>10,090 CU.YDS.</b>
<b>FILL</b>	<b>=</b>	<b>6,670 CU.YDS.</b>

EXCESS MATERIAL	=	3,420 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	3,420 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	0 Cu. Yds.



**PROPOSED LOCATION:  
NORTH HORSESHOE  
#8-18-6-22**

SEE TOPO "B"

**LEGEND:**

⊙ PROPOSED LOCATION

**THE HOUSTON EXPLORATION COMPANY**

**NORTH HORSESHOE #8-18-6-22  
SECTION 18, T6S, R22E, S.L.B.&M.  
2156' FNL 860' FEL**



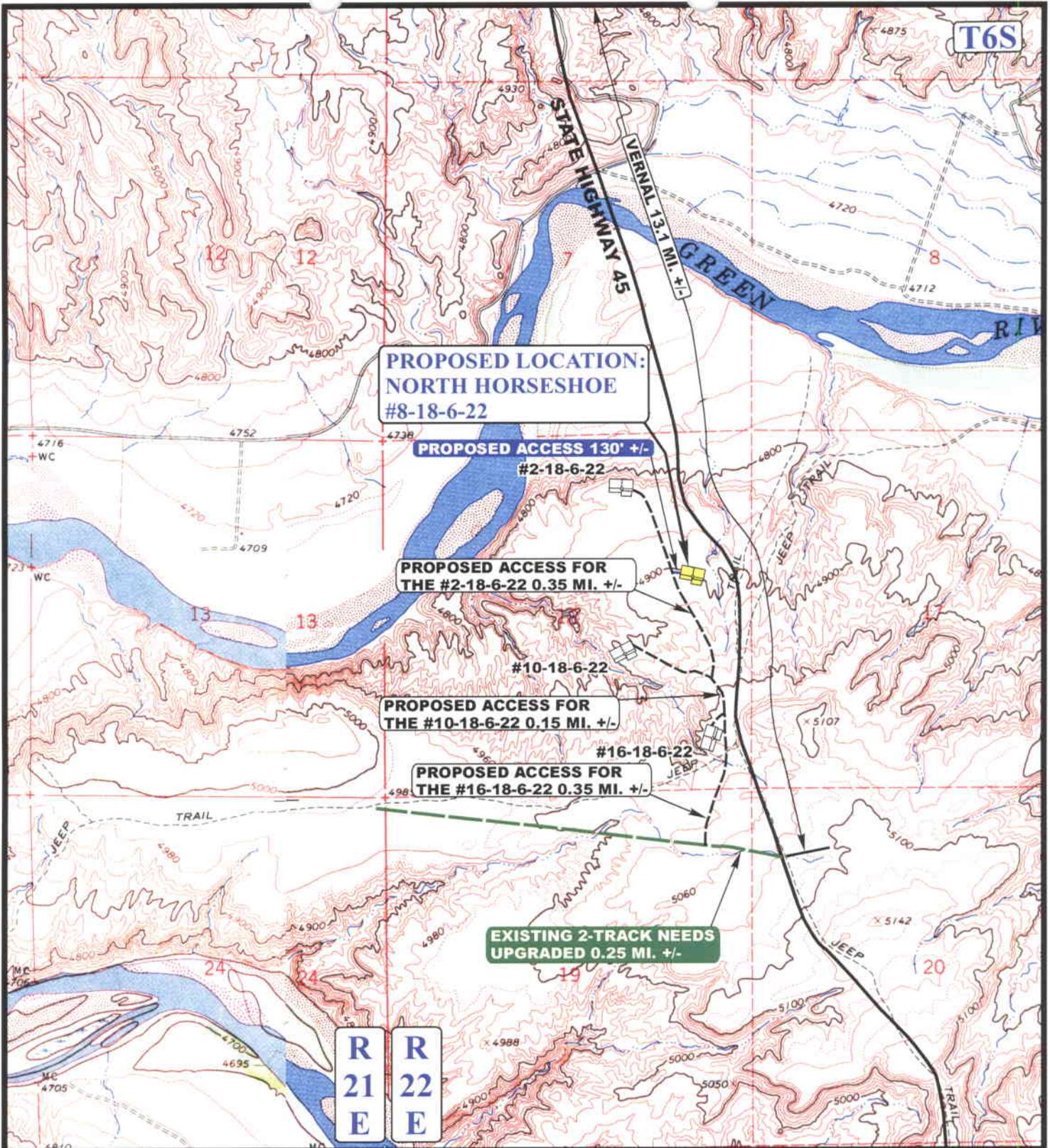
**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

<b>11</b>	<b>07</b>	<b>05</b>
MONTH	DAY	YEAR

SCALE: 1:100,000 DRAWN BY: C.H. REVISED: 00-00-00





**PROPOSED LOCATION:  
NORTH HORSESHOE  
#8-18-6-22**

**PROPOSED ACCESS 130' +/-  
#2-18-6-22**

**PROPOSED ACCESS FOR  
THE #2-18-6-22 0.35 MI. +/-**

**PROPOSED ACCESS FOR  
THE #10-18-6-22 0.15 MI. +/-**

**PROPOSED ACCESS FOR  
THE #16-18-6-22 0.35 MI. +/-**

**EXISTING 2-TRACK NEEDS  
UPGRADED 0.25 MI. +/-**

**R  
21  
E**    **R  
22  
E**

**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED

**THE HOUSTON EXPLORATION COMPANY**

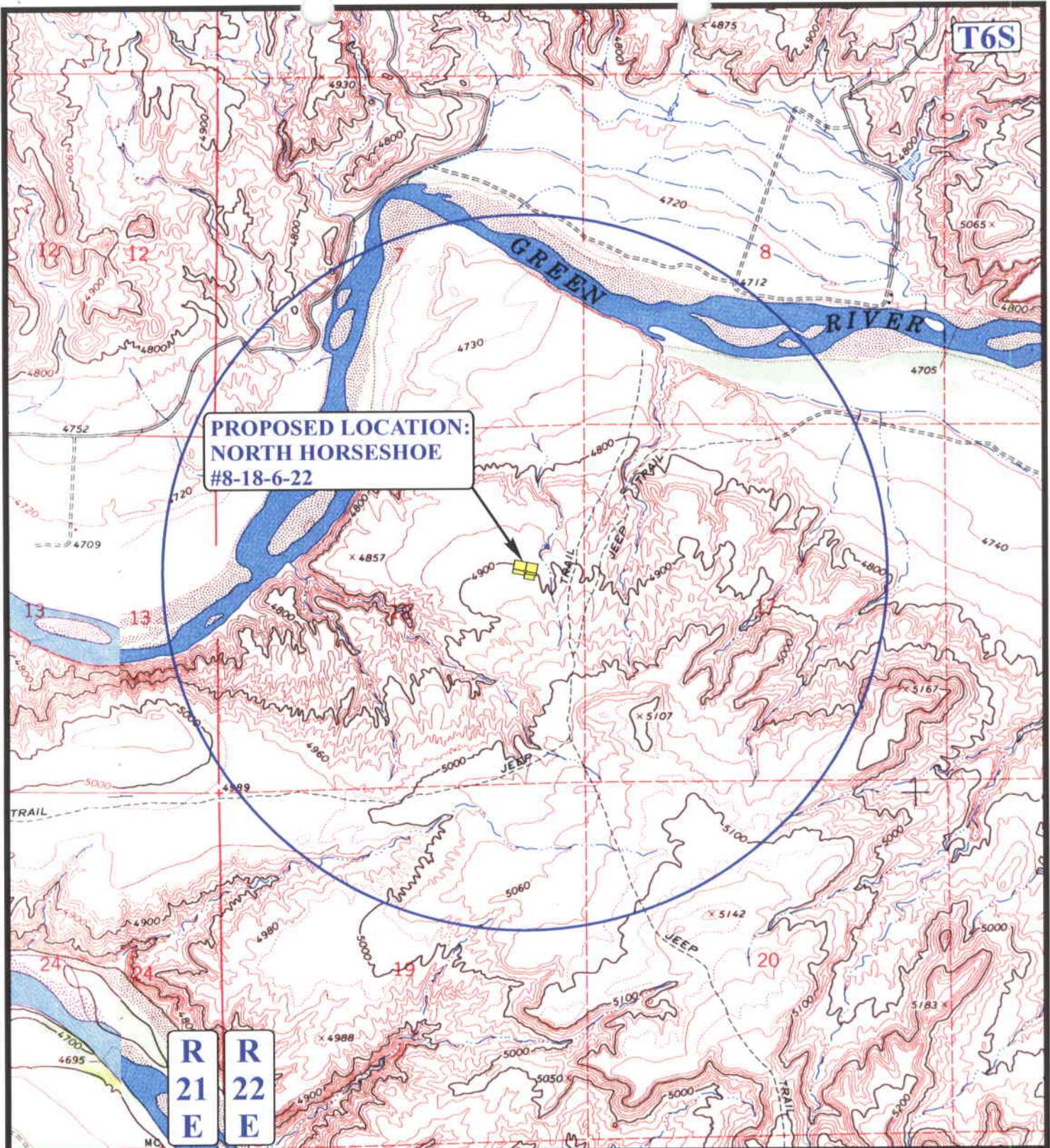
**NORTH HORSESHOE #8-18-6-22  
SECTION 18, T6S, R22E, S.L.B.&M.  
2156' FNL 860' FEL**



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

**TOPOGRAPHIC MAP**    **11 07 05**  
MONTH DAY YEAR  
SCALE: 1" = 2000'    DRAWN BY: S.L.    REVISED: 01-13-06





**PROPOSED LOCATION:  
NORTH HORSESHOE  
#8-18-6-22**

**LEGEND:**

- |   |                 |   |                       |
|---|-----------------|---|-----------------------|
| ∅ | DISPOSAL WELLS  | ♂ | WATER WELLS           |
| ● | PRODUCING WELLS | ● | ABANDONED WELLS       |
| ● | SHUT IN WELLS   | ● | TEMPORARILY ABANDONED |



**THE HOUSTON EXPLORATION COMPANY**

**NORTH HORSESHOE #8-18-6-22  
SECTION 18, T6S, R22E, S.L.B.&M.  
2156' FNL 860' FEL**



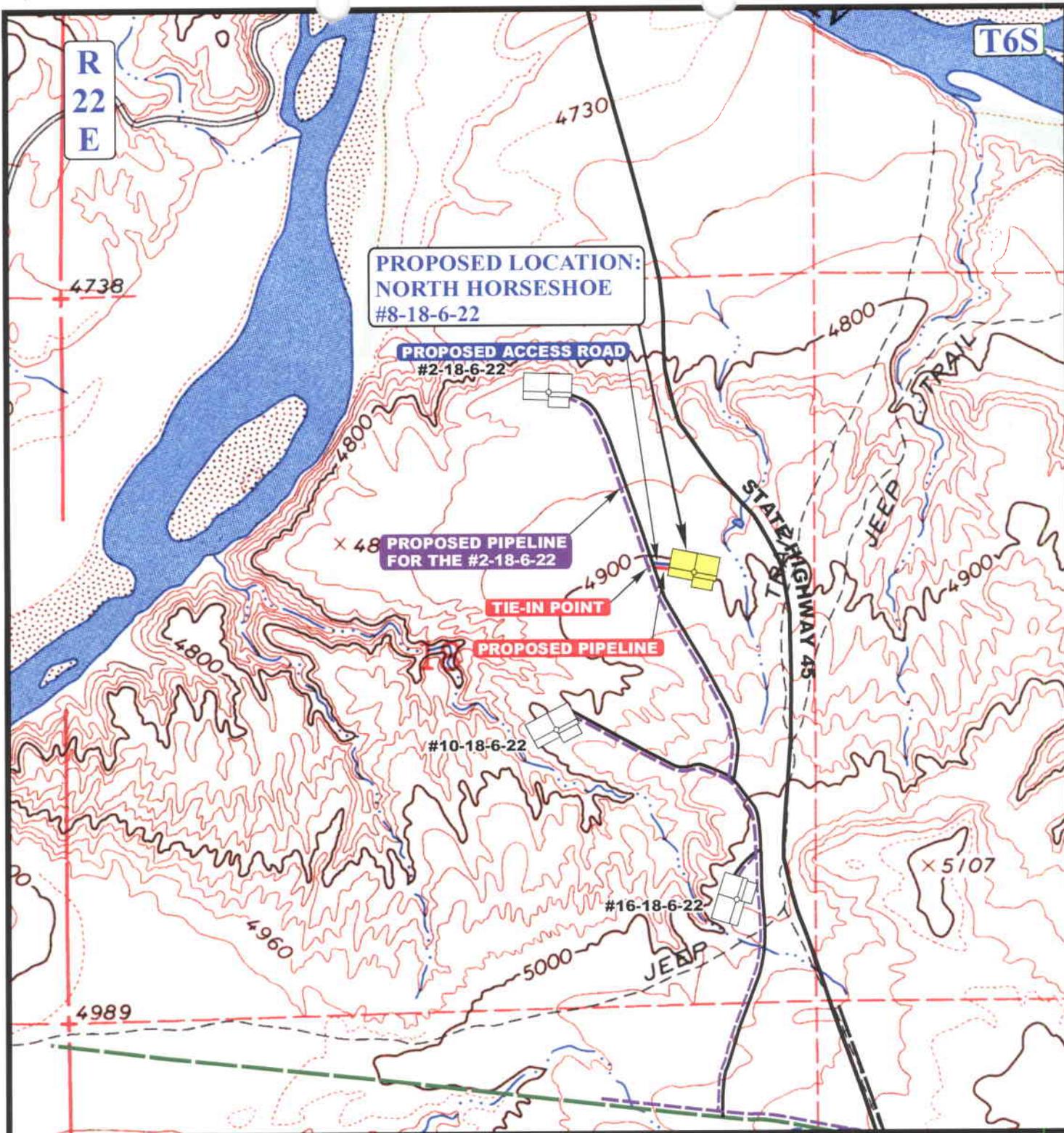
**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
MAP**

**11 07 05**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.H. REVISED: 00-00-00





**APPROXIMATE TOTAL PIPELINE DISTANCE = 150' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

**THE HOUSTON EXPLORATION COMPANY**

**NORTH HORSESHOE #8-18-6-22**  
**SECTION 18, T6S, R22E, S.L.B.&M.**  
**2156' FNL 860' FEL**



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

**TOPOGRAPHIC MAP**

<b>11</b>	<b>07</b>	<b>05</b>
MONTH	DAY	YEAR

SCALE: 1" = 1000' DRAWN BY: C.H. REVISED: 01-13-06



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 03/09/2006

API NO. ASSIGNED: 43-047-37891

WELL NAME: N HORSESHOE 8-18-6-22  
 OPERATOR: HOUSTON EXPLORATION CO, ( N2525 )  
 CONTACT: WILLIAM RYAN

PHONE NUMBER: 435-789-0968

PROPOSED LOCATION:

SENE 18 060S 220E  
 SURFACE: 2156 FNL 0860 FEL  
 BOTTOM: 2156 FNL 0860 FEL  
 COUNTY: UINTAH  
 LATITUDE: 40.30057 LONGITUDE: -109.4787  
 UTM SURF EASTINGS: 629294 NORTHINGS: 4462018  
 FIELD NAME: WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal  
 LEASE NUMBER: UTU-76768  
 SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MVRD  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. UTU-104155044 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. T-76073 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- 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: \_\_\_\_\_
- Eff Date: \_\_\_\_\_
- Siting: \_\_\_\_\_
- R649-3-11. Directional Drill

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

STIPULATIONS: 1- Federal Approval

2- Spacing SRP

N HORSESHOE 12-7-6-22

T6S R21E T6S R22E

N HORSESHOE 2-18-6-22

N HORSESHOE 8-18-6-22

N HORSESHOE 10-18-6-22

N HORSESHOE 16-18-6-22

N HORSESHOE 14-18-6-22

18

17

OPERATOR: THE HOUSTON EXPL (N2525)

SEC: 18 T. 6S R. 22E

FIELD: WILDCAT (001)

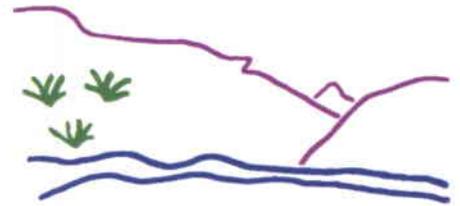
COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING

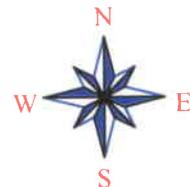
- Field Status**
- ABANDONED
  - ACTIVE
  - COMBINED
  - INACTIVE
  - PROPOSED
  - STORAGE
  - TERMINATED

- 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



PREPARED BY: DIANA WHITNEY  
DATE: 13-MARCH-2006



**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*

March 13, 2006

Houston Exploration Company  
1100 Louisiana, Suite 2000  
Houston, TX 77002

Re: North Horseshoe 8-18-6-22 Well, 2156' FNL, 860' FEL, SE NE, Sec. 18,  
T. 6 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 43-047-37891.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Houston Exploration Company  
**Well Name & Number** North Horseshoe 8-18-6-22  
**API Number:** 43-047-37891  
**Lease:** UTU-76768

**Location:** SE NE                      **Sec. 18**                      **T. 6 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

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

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. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

# **Ten Point Plan**

**The Houston Exploration Company**

**North Horseshoe 8-18-6-22**

**Surface Location SE  $\frac{1}{4}$  NE  $\frac{1}{4}$ ,**

**Section 18, T. 6S., R. 22E.**

43-047-37891

RECEIVED

AUG 16 2006

DIV. OF OIL, GAS & MINING

1. **Surface Formation**  
**Uintah**

2. **Estimated Formation Tops and Datum:**

Formation	Depth	Datum
Uintah	Surface	4,903' G.R.
Green River	3,800'	1,103'
Birds Nest      Water	4,000'	903'
Wasatch      Oil/Gas	6,900'	-1,997'
Mesaverde      Oil/Gas	9,400'	-4,497'
TD	10,500'	-5,597'

A 17 1/2" hole will be drilled to 4,000' +/- . The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest. All fresh water and oil and gas bearing zones shall be protected by casing and cement program.

3. **Producing Formation Depth:**

Formation objective includes the Wasatch, Mesaverde and their sub-members.

4. **Proposed Casing:**

Hole Size	Casing Size	Weight/FT	Grade	Coupling & Tread	Casing Depth	New/Used
30	26	68.75#	A430		40'	NEW
24	20	94#	H-40	ST&C	350'	NEW
17 1/2	13 3/8	72#	N-80	ST&C	4,000'	NEW
12 1/4	9 5/8	53.5#	N-80	LT&C	6,900'	NEW
7 7/8	4 1/2	11.6#	P-110	LT&C	9,400'	NEW
7 7/8	4 1/2	13.5#	P-110	LT&C	10,500'	NEW

**Cement Program:**

**Conductor casing #1 will be cemented as follows from 0'-40':**

**Note: Cement Volume = Gauge hole + 50%**

Casing Size	Cement Type	Cement Amounts	Cement Yield	Water Mix	Cement Weight
Lead: 26	Portland CMT Class IA 4 Integral Air-entraining Agent	42 sks +/-	1.15ft <sup>3</sup> /sk	5	15.8 ppg

**Conductor casing #2 will be cemented as follows from 0'- 350':**

**Cement volume = Gauge hole + 50%**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead: 20	Portland CMT Class "G" 2% Calcium Chloride ¼#/sk Flocele	247 sks +/-	1.5ft³/sk	5	15.8 ppg

**The Surface Casing will be cemented as follows from 0'- 4,000':**

**Cement volume = Gauge hole + 25%**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead: 13 3/8"	Premium "5" 16% Gel 10#/sk Gilsonite 3% Salt 3#/sk GB3	855 sks. +/-	3.82ft³/sk	23	11.0 ppg
Tail: 13 3/8"	Class "G" 2% Calcium Chloride 0.25#/sk Flocele	294 sks. +/-	1.18ft³/sk	5	15.6 ppg
Top Job:	Class "G" 4% Calcium Chloride 0.25#/sk Flocele	10-200 sks. +/-	1.15ft³/sk	5	15.8 ppg

**Intermediate casing will be cemented as follows from 3,800'- 6,900':**

**Cement volume = Gauge hole + 25%**

<u>Casing Size</u>	<u>Cement Type</u>	<u>Cement Amounts</u>	<u>Cement Yield</u>	<u>Water Mix</u>	<u>Cement Weight</u>
Lead: 9 5/8"	50/50 POZ'G 5% Salt (BWOW) 0.6% HALAD 322 0.25#/sk Flowcele 0.2% Super CBL 2% Micro Bond	955 sks +/-	1.25ft³/sk	5.26	14.35 ppg

**Production casing will be cemented as follows from 6,700' - 10,500':**

**Note: Lead should be 200' above the Wasatch.**

**Cement volume = Gauge hole + 25%**

<u>Casing</u> <u>Depth</u>	<u>Casing</u> <u>Size</u>	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Amounts</u>	<u>Cement</u> <u>Yield</u>	<u>Water</u> <u>Mix</u>	<u>Cement</u> <u>Weight</u>
-------------------------------	------------------------------	------------------------------	---------------------------------	-------------------------------	----------------------------	--------------------------------

Lead:

4 ½	PREM.AG300 50/50 POZ "G" CMT 2% Gel 0.4% Halad 344 0.25% HR-12 0.2% CFR-3 5#/sk Sillicalite 20% SSA-1 0.25#/sk Flowcele 0.2% Super CBL	634 sks +/-	1.73ft <sup>3</sup> /sk	8.17	13.5 ppg
-----	---	-------------	-------------------------	------	----------

**5. BOP and Pressure Containment Data:**

A 5000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 13 3/8" surface casing. An upper kelly cock to the required pressure rating with a handle available shall be employed.

The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

**6. Mud Program:**

<u>Interval</u>	<u>Mud weight</u> <u>lbs./gal.</u>	<u>Viscosity</u> <u>Sec./OT.</u>	<u>Fluid Loss</u> <u>Ml/30 Mins.</u>	<u>Mud Type</u>
0-2000	Air/Clear Water	-----	No Control	Water/Gel
4,000-T.D.	8.4-12.0	30-45	8-10	LSND

water based mud system

**Note:** Mud weights may exceed 12.0 due to solids increasing at or near T.D. Increased weights are not required to control formation pressure. Operator will have on location sufficient mud and weight material to increase mud weight to 12.0 at any time while drilling the subject well. Visual mud monitoring incorporating pit level indicators shall be used.

**7. Testing, Coring, Sampling and Logging:**

- a) DST: None are anticipated.
- b) Coring: There is the possibility of sidewall coring.
- c) Mud Sampling: Every 10' from 4,000' to T.D.
- d) Logging: 

Type	Interval
DLL/SFL W/GR and SP	T.D. to Surf. Csg
FDC/CNL W/GR and CAL	T.D. to Surf. Csg

**8. Abnormalities (including sour gas)**

Anticipated bottom hole pressure will be less than 5000 psi. No abnormal pressures, temperatures or other hazards are anticipated. Other wells drilled in the area have not encountered over pressured zones or H2S.

**9. Other facets of the proposed operation:**

**Off set well information**  
**None**

**10. Drilling Schedule:**

The anticipated starting date is 5/20/2006. Duration of operations is expected to be 30 days.

**CONFIDENTIAL**

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**UTU-76768**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

**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 OIL WELL  GAS WELL  OTHER \_\_\_\_\_

8. WELL NAME and NUMBER:  
**North Horseshoe 8-18-6-22**

2. NAME OF OPERATOR:  
**The Houston Exploration Company**

9. API NUMBER:  
**4304737891**

3. ADDRESS OF OPERATOR:  
**1100 Louisiana, Suite 2000** CITY **Houston** STATE **TX** ZIP **77002**

PHONE NUMBER:  
**(713) 830-6800**

10. FIELD AND POOL, OR WILDCAT:  
**Undesignated**

4. LOCATION OF WELL  
FOOTAGES AT SURFACE: **2156' FNL & 860 FEL**

COUNTY: **Uintah**

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SENE 18 6S 22E**

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> (Submit in Duplicate) Approximate date work will start: _____  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only) Date of work completion: _____	<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"/> 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: <b>Extension</b>
	<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.

Operator respectfully requests to extend approval for the subject location for one year.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: **02-28-07**  
By: *[Signature]*

3-1-07  
RM

NAME (PLEASE PRINT) **Ginger Stringham**

TITLE **Regulatory Agent**

SIGNATURE *[Signature]*

DATE **2/26/2007**

(This space for State use only)

**RECEIVED  
FEB 28 2007**

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

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

**API:** 430473891  
**Well Name:** North Horseshoe 8-18-6-22  
**Location:** Section 18, Township 6 South, Range 22 East SENE  
**Company Permit Issued to:** The Houston Exploration Company  
**Date Original Permit Issued:** 3/13/2006

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

  
Signature

2/26/2007

Date

**Title:** Regulatory Agent

**Representing:** The Houston Exploration Company

**RECEIVED**  
**FEB 28 2007**  
DIV. OF OIL, GAS & MINING

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

**ROUTING**

1. DJJ
2. CDW

Change of Operator (Well Sold)

**X - Operator Merger**

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

**6/1/2007**

<b>FROM:</b> (Old Operator): N2525 - The Houston Exploration Company 1100 Louisiana, Suite 2000 Houston, TX 77002 Phone: 1-(713) 830-6800	<b>TO:</b> (New Operator): N6965-Forest Oil Corporation 707 17th St, Suite 3600 Denver, CO 80202 Phone: 1 (303) 812-1755
---	--

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

**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: 7/30/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 7/30/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 7/31/2007
- a. Is the new operator registered in the State of Utah: Business Number: 571171-0143
- b. If **NO**, the operator was contacted on: \_\_\_\_\_
- a. (R649-9-2) Waste Management Plan has been received on: IN PLACE
- b. Inspections of LA PA state/fee well sites complete on: \_\_\_\_\_
- c. Reports current for Production/Disposition & Sundries on: YES
- 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 7/31/2007 BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a
- 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")** 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:**

- Changes entered in the **Oil and Gas Database** on: 8/27/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 8/27/2007
- Bond information entered in RBDMS on: 8/27/2007
- Fee/State wells attached to bond in RBDMS on: 8/27/2007
- Injection Projects to new operator in RBDMS on: n/a
- Receipt of Acceptance of Drilling Procedures for APD/New on: 7/30/2007

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: 6236351
- Indian well(s) covered by Bond Number: n/a
- a. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 6218963
- b. The **FORMER** operator has requested a release of liability from their bond on: not yet

**LEASE INTEREST OWNER NOTIFICATION:**

- (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: 8/1/2007

**COMMENTS:**

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>See Attached List</b>
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.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: <b>Forest Oil Corporation</b> <span style="margin-left: 100px;"><i>N6965</i></span>		8. WELL NAME and NUMBER: <b>See Attached List</b>
3. ADDRESS OF OPERATOR: 707 17th Street, #3600 CITY <u>Denver,</u> STATE <u>CO</u> ZIP <u>80202</u>		9. API NUMBER: <b>various</b>
PHONE NUMBER: <u>(303) 812-1755</u>		10. FIELD AND POOL, OR WILDCAT:
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>See attached list</b>		COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		STATE: <b>UTAH</b>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____  <input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<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"/> 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>Change of Operator</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. *N2525*  
 Effective 6/1/2007 please change the operator for the attached list of Utah wells from The Houston Exploration Company N-2525) to Forest Oil Corporation (N-6965). Forest merged with The Houston Exploration Company, a copy of the merger document is attached.. The contract operated wells will continue to be contract operated by Enduring.

Forest Oil Corporation as new operator, accepts all applicable terms, conditions, stipulations and restrictions concerning approved operations conducted on the lease or portion of the lease described.

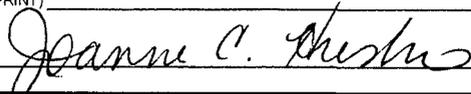
Forest Oil Corporation meets the State of Utah bonding requirements under Safeco bond #6218963.

Please send all future correspondence to Forest Oil Corporation at the above listed address.

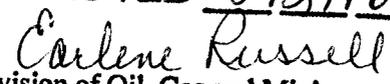
Forest Oil Corporation, 707 17th Street, Suite #3600, Denver, CO 80202

  
 J. C. Ridens, Senior Vice President - Western Region

7-5-07  
Date

NAME (PLEASE PRINT) <u>Joanne C. Hresko</u>	TITLE <u>Vice President &amp; General Mgr. - Northern Division</u>
SIGNATURE 	DATE <u>7-5-07</u>

(This space for State use only)

**APPROVED** 8/27/07  
  
 (5/2000) **Earlene Russell**  
 Division of Oil, Gas and Mining  
 Earlene Russell, Engineering Technician

*All wells with APD or New status*

(See Instructions on Reverse Side)

**RECEIVED**  
**JUL 30 2007**  
 DIV OF OIL, GAS & MINING *WMP*

well_name	sec	twp	rng	api	entity	lease	well	stat	flag
HORSESHOE BEND 16-33	33	060S	210E	4304736214		Federal	OW	APD	
HORSESHOE BEND 3-33	33	060S	210E	4304736215		Federal	OW	APD	
N HORSESHOE 7-16-6-21	16	060S	210E	4304737438		State	GW	APD	C
N HORSESHOE 9-16-6-21	16	060S	210E	4304737439		State	GW	APD	C
N HORSESHOE 15-16-6-21	16	060S	210E	4304737440		State	GW	APD	C
N HORSESHOE 11-16-6-21	16	060S	210E	4304737441		State	GW	APD	C
N HORSESHOE 1-16-6-21	16	060S	210E	4304737442		State	GW	APD	C
N HORSESHOE 13-2-6-21	02	060S	210E	4304737476		State	GW	APD	C
N HORSESHOE 15-2-6-21	02	060S	210E	4304737477		State	GW	APD	C
GUSHER 2-2-6-19	02	060S	190E	4304737561		State	OW	APD	C
GUSHER 16-2-6-19	02	060S	190E	4304737562		State	OW	APD	C
GUSHER 1-2-6-19	02	060S	190E	4304737563		State	OW	APD	C
GUSHER 3-2-6-19	02	060S	190E	4304737568		State	OW	APD	C
E COYOTE 6-2-8-25	02	080S	250E	4304737572		State	GW	APD	C
E COYOTE 3-2-8-25	02	080S	250E	4304737573		State	GW	APD	C
E COYOTE 8-2-8-25	02	080S	250E	4304737574		State	GW	APD	C
N HORSESHOE 13-16-6-21	16	060S	210E	4304737575		State	GW	APD	C
E COYOTE 4-2-8-25	02	080S	250E	4304737882		State	GW	APD	C
E COYOTE 14-2-8-25	02	080S	250E	4304737883		State	GW	APD	C
E COYOTE 10-2-8-25	02	080S	250E	4304737884		State	GW	APD	C
E COYOTE 16-2-8-25	02	080S	250E	4304737885		State	GW	APD	C
E COYOTE 12-2-8-25	02	080S	250E	4304737886		State	GW	APD	C
N HORSESHOE 16-18-6-22	18	060S	220E	4304737887		Federal	GW	APD	C
N HORSESHOE 14-18-6-22	18	060S	220E	4304737888		Federal	GW	APD	C
N HORSESHOE 2-18-6-22	18	060S	220E	4304737889		Federal	GW	APD	C
N HORSESHOE 10-18-6-22	18	060S	220E	4304737890		Federal	GW	APD	C
N HORSESHOE 8-18-6-22	18	060S	220E	4304737891		Federal	GW	APD	C
N HORSESHOE 13-15-6-21	15	060S	210E	4304738013		Federal	GW	APD	C
N HORSESHOE 15-15-6-21	15	060S	210E	4304738014		Federal	GW	APD	C
N HORSESHOE 11-15-6-21	15	060S	210E	4304738015		Federal	GW	APD	C
N HORSESHOE 9-15-6-21	15	060S	210E	4304738016		Federal	GW	APD	C
N HORSESHOE 5-15-6-21	15	060S	210E	4304738017		Federal	GW	APD	C
N HORSESHOE 3-15-6-21	15	060S	210E	4304738018		Federal	GW	APD	C
N HORSESHOE 5-20-6-22	20	060S	220E	4304738019		Federal	GW	APD	C
N HORSESHOE 13-20-6-22	20	060S	220E	4304738020		Federal	GW	APD	C
N HORSESHOE 3-20-6-22	20	060S	220E	4304738021		Federal	GW	APD	C
N HORSESHOE 7-20-6-22	20	060S	220E	4304738022		Federal	GW	APD	C
N HORSESHOE 11-20-6-22	20	060S	220E	4304738023		Federal	GW	APD	C
N HORSESHOE 2-12-6-21	12	060S	210E	4304738198		Federal	GW	APD	C
N HORSESHOE 14-12-6-21	12	060S	210E	4304738199		Federal	GW	APD	C
N HORSESHOE 10-12-6-21	12	060S	210E	4304738200		Federal	GW	APD	C
N HORSESHOE 8-12-6-21	12	060S	210E	4304738201		Federal	GW	APD	C
N HORSESHOE 16-13-6-21	13	060S	210E	4304738202		Federal	GW	APD	C
N HORSESHOE 15-17-6-22	17	060S	220E	4304738203		Federal	GW	APD	C
N HORSESHOE 5-19-6-22	19	060S	220E	4304738204		Federal	GW	APD	C
N HORSESHOE 15-19-6-22	19	060S	220E	4304738205		Federal	GW	APD	C
N HORSESHOE 3-21-6-22	21	060S	220E	4304738206		Federal	GW	APD	C
N HORSESHOE 11-21-6-22	21	060S	220E	4304738207		Federal	GW	APD	C
N HORSESHOE 15-21-6-22	21	060S	220E	4304738208		Federal	GW	APD	C
N HORSESHOE 13-21-6-22	21	060S	220E	4304738209		Federal	GW	APD	C
N HORSESHOE 5-21-6-22	21	060S	220E	4304738210		Federal	GW	APD	C
N HORSESHOE 7-19-6-22	19	060S	220E	4304738271		Federal	GW	APD	C
N HORSESHOE 5-16-6-22	16	060S	220E	4304738406		State	GW	APD	

well_name	sec	twp	rng	api	entity	lease	well	stat	flag
TWELVEMILE WASH 11-13-5-20	13	050S	200E	4304738437		Federal	GW	APD	C
TWELVEMILE WASH 1-15-5-20	15	050S	200E	4304738438		Federal	GW	APD	C
N HORSESHOE 4-33-5-21	33	050S	210E	4304738439		Federal	GW	APD	C
GUSHER 6-15-6-19	15	060S	190E	4304738440		Federal	GW	APD	C
HORSESHOE BEND W 9-34-6-20	34	060S	200E	4304738441		Federal	GW	APD	C
N HORSESHOE 16-12-6-21	12	060S	210E	4304738442		Federal	GW	APD	C
N WALKER HOLLOW 12-29-6-23	29	060S	230E	4304738443		Federal	GW	APD	C
N WALKER HOLLOW 10-30-6-23	30	060S	230E	4304738444		Federal	GW	APD	C
PELICAN LAKE 11-3-8-20	03	080S	200E	4304738445		Federal	GW	APD	C
PELICAN LAKE 8-4-8-20	04	080S	200E	4304738446		Federal	GW	APD	C
E COYOTE 10-3-8-25	03	080S	250E	4304738447		Federal	GW	APD	C
BORDER 10-9-8-25	09	080S	250E	4304738448		Federal	GW	APD	C
N WALKER HOLLOW 14-33-6-23	33	060S	230E	4304738455		Federal	GW	APD	C
SNAKE JOHN WASH 14-11-7-25	11	070S	250E	4304738456		Federal	GW	APD	C
SNAKE JOHN WASH 4-24-7-25	24	070S	250E	4304738457		Federal	GW	APD	C
SQUAW RIDGE 1-26-7-25	26	070S	250E	4304738458		Federal	GW	APD	C
SQUAW RIDGE 13-28-7-25	28	070S	250E	4304738459		Federal	GW	APD	C
SQUAW RIDGE 16-30-7-25	30	070S	250E	4304738460		Federal	GW	APD	C
SQUAW RIDGE 14-16-7-25	16	070S	250E	4304738461		State	GW	APD	C
GUSHER 13-11-5-19	11	050S	190E	4304738462		State	GW	APD	C
N HORSESHOE 1-15-6-21	15	060S	210E	4304738831		Federal	GW	APD	C
N HORSESHOE 16-9-6-22	09	060S	220E	4304739083		State	GW	APD	
N HORSESHOE 12-7-6-22	07	060S	220E	4304739084		State	GW	APD	
N HORSESHOE 14-10-6-22	10	060S	220E	4304739085		State	GW	APD	
N HORSESHOE 2-15-6-22	15	060S	220E	4304739086		State	GW	APD	
N WALKER HOLLOW 12-32-6-23	32	060S	230E	4304739087		State	GW	APD	
N WALKER HOLLOW 10-32-6-23	32	060S	230E	4304739088		State	GW	APD	
N WALKER HOLLOW 16-32-6-23	32	060S	230E	4304739089		State	GW	APD	
N WALKER HOLLOW 8-32-6-23	32	060S	230E	4304739090		State	GW	APD	
N WALKER HOLLOW 11-36-6-23	36	060S	230E	4304739091		State	GW	APD	
N WALKER HOLLOW 13-36-6-23	36	060S	230E	4304739092		State	GW	APD	
N WALKER HOLLOW 14-32-6-23	32	060S	230E	4304739093		State	GW	APD	
N WALKER HOLLOW 15-36-6-23	36	060S	230E	4304739094		State	GW	APD	
N HORSESHOE 4-15-6-22	15	060S	220E	4304739095		State	GW	APD	
N HORSESHOE 9-10-6-21	10	060S	210E	4304739284		Federal	GW	APD	C
N HORSESHOE 12-13-6-21	13	060S	210E	4304739285		Federal	GW	APD	
N HORSESHOE 7-15-6-21	15	060S	210E	4304739286		Federal	GW	APD	
N HORSESHOE 9-19-6-22	19	060S	220E	4304739287		Federal	GW	APD	
N HORSESHOE 13-19-6-22	19	060S	220E	4304739288		Federal	GW	APD	
N HORSESHOE 11-19-6-22	19	060S	220E	4304739289		Federal	GW	APD	
SQUAW RIDGE 16-13-7-24	13	070S	240E	4304739319		Federal	GW	APD	C
N HORSESHOE 16-7-6-22	07	060S	220E	4304739320		Federal	GW	APD	C
SQUAW RIDGE 8-16-7-25	16	070S	250E	4304738024		State	GW	NEW	C

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

**Request to Transfer Application or Permit to Drill**

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	N Horseshoe 8-18-6-22
<b>API number:</b>	4304737891
<b>Location:</b>	Qtr-Qtr: SENE    Section: 18    Township: 6S    Range: 22E
<b>Company that filed original application:</b>	The Houston Exploration Company
<b>Date original permit was issued:</b>	03/13/2006
<b>Company that permit was issued to:</b>	The Houston Exploration Company

Check one	Desired Action:
<input type="checkbox"/>	<b>Transfer pending (unapproved) Application for Permit to Drill to new operator</b>
<input type="checkbox"/>	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	<b>Transfer approved Application for Permit to Drill to new operator</b>
<input type="checkbox"/>	The undersigned as owner with legal rights to drill on the property as permitted, 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.	Yes	No
If located on private land, has the ownership changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> If so, has the surface agreement been updated?	<input type="checkbox"/>	<input type="checkbox"/>
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. <u>6218963</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Tami Hofmann                      Title Regulatory Specialist  
 Signature *Tami Hofmann*                                      Date 08/02/2007  
 Representing (company name) Forest Oil Corporation

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

April 29, 2008

Ginger Bowden  
The Houston Exploration Co.  
1100 Louisiana, Suite 2000  
Houston, TX 77002

Re: APD Rescinded – North Horseshoe 8-18-6-22 Sec. 18, T. 6S, R. 22E  
Uintah County, Utah API No. 43-047-37891

Dear Ms. Bowden:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (the Division) on March 13, 2006. On February 28, 2007, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill this well is hereby rescinded, effective April 29, 2008.

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

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

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
Bureau of Land Management, Vernal





# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Green River District-Vernal Field Office  
170 South 500 East  
Vernal, UT 84078  
(435) 781-4400 Fax: (435) 781-4410  
<http://www.blm.gov/ut/st/en/fo/vernal.html>

IN REPLY REFER TO:  
3160  
UTG011

October 1, 2009

43-047-37891

Charles A. Rasey  
Forest Oil Corporation  
707 17<sup>th</sup> Street, Suite 3600  
Denver, CO 80202

Re: Notice of Lease Expiration  
Well No. North Horseshoe 8-18-6-22  
SENE, Sec. 18, T6S, R22E  
Uintah County, Utah  
Lease No. UTU-76768  
(North Horseshoe Bend Unit Invalidated,  
effective August 3, 2009.)

Dear Mr. Rasey:

The Application for Permit to Drill for the above-referenced well received in this office on March 8, 2006 is being returned unapproved. According to our records, Federal Lease UTU-76768 has expired by its own terms and conditions, effective September 30, 2009. In view of the foregoing, this office is returning the referenced unapproved Application for Permit to Drill due to the lease expiration.

If you have any questions regarding this matter, please contact me at (435) 781-4455.

Sincerely,

*Cindy Severson*

Cindy Severson  
Land Law Examiner

cc: UDOGM

RECEIVED

OCT 08 2009

DIV. OF OIL, GAS & MINING