

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-11124 | 6. SURFACE: State |
| 1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> | | | 7. IF INDIAN, ALLOTTEE OR TRIBE NAME: | |
| B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/> | | | 8. UNIT or CA AGREEMENT NAME: | |
| 2. NAME OF OPERATOR: The Houston Exploration Company | | | 9. WELL NAME and NUMBER: Hacking Reservoir 9-32-8-25 | |
| 3. ADDRESS OF OPERATOR: 1100 Louisiana, Suit 200 CITY Houston STATE TX ZIP 77002 | | PHONE NUMBER: (713) 830-6800 | 10. FIELD AND POOL, OR WLDCAT: Undesignated | |
| 4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 1,968' FSL & 734' FEL AT PROPOSED PRODUCING ZONE: same as above | | | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 32 T8S 25E | |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 43.45 miles south of Vernal, UT | | | 12. COUNTY: Uintah | 13. STATE: UTAH |
| 15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 734' | 16. NUMBER OF ACRES IN LEASE: 600 | 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 | | |
| 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1,800' | 19. PROPOSED DEPTH: 5,600 | 20. BOND DESCRIPTION: 104155044 | | |
| 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5,465' GR | 22. APPROXIMATE DATE WORK WILL START: 1/15/2006 | 23. ESTIMATED DURATION: 30 Days | | |

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | CASING SIZE, GRADE, AND WEIGHT PER FOOT | SETTING DEPTH | CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT | | | |
|--------------|---|---------------|---|---------|---------|----------|
| 11" | 9 5/8 J-55 36# | 2,000 | Premium Lite II | 250 SKS | 3.38 CF | 11.0 PPG |
| | | | CLASS "G" | 329 SKS | 1.2 CF | 15.6 PPG |
| | | | Calcium Chloride | 200 SKS | 1.10 CF | 15.6 PPG |
| 7 7/8 | 4 1/2 N-80 11.6# | 5,600 | Premium Lite II | 200 SKS | 3.3 CF | 11.0 PPG |
| | | | CLASS "G" | 400 SKS | 1.56 CF | 14.3 PPG |

ATTACHMENTS

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

- | | |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN |
| <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

CONFIDENTIAL

NAME (PLEASE PRINT) William A Ryan TITLE Agent
SIGNATURE *William A Ryan* DATE 12/05

(This space for State use only)

API NUMBER ASSIGNED: 43-047-37483

Approved by the
Utah Division of
Oil, Gas and Mining

RECEIVED
DEC 09 2005

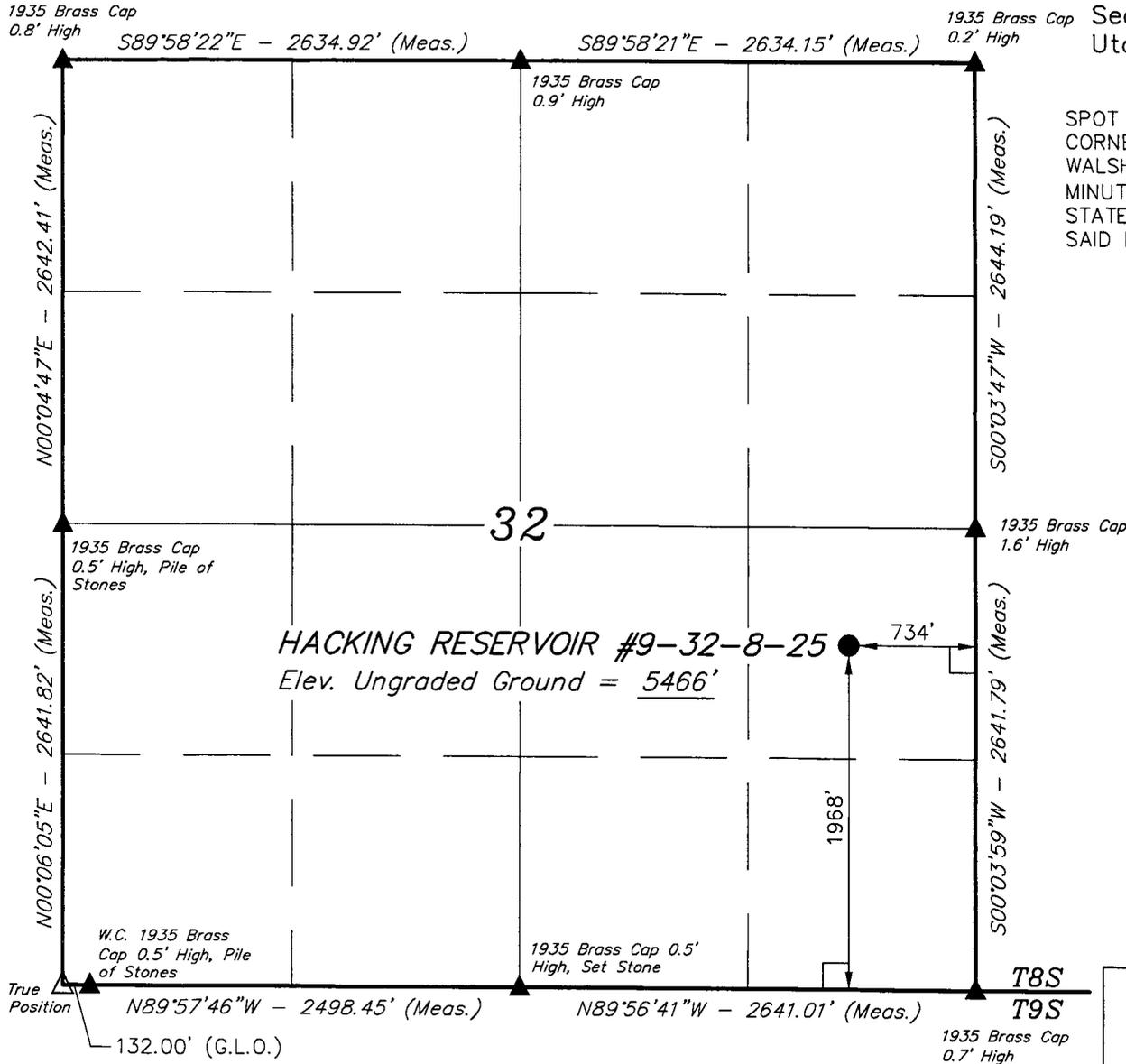
Date: 01-12-06

DIV. OF OIL, GAS & MINING

T8S, R25E, S.L.B.&M.

THE HOUSTON EXPLORATION COMPANY

Well location, HACKING RESERVOIR #9-32-8-25, located as shown in the NE 1/4 SE 1/4 of Section 32, T8S, R25E, S.L.B.&M. Uintah County, Utah.

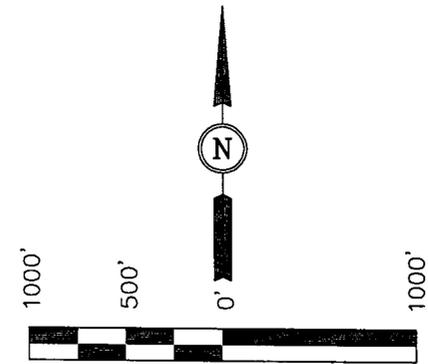


BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT A TRAIL CROSSING IN THE SW 1/4 CORNER OF SECTION 4, T9S, R25E, S.L.B.&M. TAKEN FROM THE WALSH KNOLLS, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5607 FEET.

BASIS OF BEARINGS

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



SCALE

CERTIFICATE

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

[Signature]
REGISTERED LAND SURVEYOR
REGISTRATION NO. 761579
STATE OF UTAH

LEGEND:

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

(AUTONOMOUS NAD 83)
LATITUDE = 40°04'37.76" (40.077156)
LONGITUDE = 109°07'05.68" (109.118244)
(AUTONOMOUS NAD 27)
LATITUDE = 40°04'37.88" (40.077189)
LONGITUDE = 109°07'03.26" (109.117572)

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

| | | |
|---------------------------|---|-------------------------|
| SCALE 1" = 1000' | DATE SURVEYED: 10-28-05 | DATE DRAWN: 11-15-05 |
| PARTY N.H. D.S. E.C.O. | REFERENCES G.L.O. PLAT | |
| WEATHER COOL | FILE THE HOUSTON EXPLORATION COMPANY | |

Ten Point Plan

The Houston Exploration Company

Hacking Reservoir 9-32-8-25

Surface Location NE ¼ SE ¼, Section 32, T. 8S., R. 25E.

1. Surface Formation

Green River

2. Estimated Formation Tops and Datum:

| <u>Formation</u> | <u>Depth</u> | <u>Datum</u> |
|-------------------------|--------------|--------------|
| Green River | Surface | +5,465' G.L. |
| Uteland Butte Limestone | 3,746 | +1,719' |
| Wasatch | 3,880 | +1,585' |
| Mesaverda | 5,547 | -82' |
| TD | 6,500' | -1,035' |

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:

Proposed Well:

Hacking Reservoir #15-32-8-25

Hacking Reservoir #11-32-8-25

Hacking Reservoir #7-32-8-25

Hacking Reservoir #5-32-8-25

Hacking Reservoir #3-32-8-25

Shut in Well:

C.S. #32-2

Abandoned Well:

C.B. #33-5

4. Proposed Casing:

| <u>Hole Size</u> | <u>Casing Size</u> | <u>Weight/FT</u> | <u>Grade</u> | <u>Setting & Tread</u> | <u>Casing Depth</u> | <u>New/Used</u> |
|------------------|--------------------|------------------|--------------|----------------------------|---------------------|-----------------|
| 11 | 9 5/8 | 36# | J-55 | STC | 2000 | NEW |
| 7 7/8 | 4 1/2 | 11.6# | N-80 | LTC | T.D. | NEW |

Cement Program:

The Surface Casing will be cemented 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> |
|----------|--------------------|--|-----------------------|-------------------------|----------------------|
| Lead: | 9 5/8 | Premium Lite II .05#/sk Static Free .25#/sk Cello Flake 5#/sk KOL Seal .002 gps FP-6L 10% Bentonite .5% Sodium Metasilicate 3% Potassium Chloride | 250 sks. +/- | 3.38ft ³ /sk | 11.0 ppg |
| Tail: | 9 5/8 | Class "G" 2% Calcium Chloride .25#/sk Cello Flake | 329 sks. +/- | 1.2ft ³ /sk | 15.6 ppg |
| Top Job: | 9 5/8 | 4% Calcium Chloride .25#/sk Cello Flake | 200 sks. +/- | 1.10ft ³ /sk | 15.6 ppg |

Production casing will be cemented to 2,500' 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: | 4 1/2 | Premium Lite II .25#/sk Cello Flake .05#/sk Static Free 5#/sk Kol Seal 3% Potassium Chloride .055 gps FP-6L 10% Bentonite .5 Sodium Metasilicate | 200 sks +/- | 3.3ft ³ /sk | 11.0 ppg |
| Tail: | 4 1/2 | Class "G" .05% Static Free 2 Sodium Chloride .1% R-3 2% Bentonite | 400 sks +/- | 1.56ft ³ /sk | 14.3 ppg |

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 9 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 ½" 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:

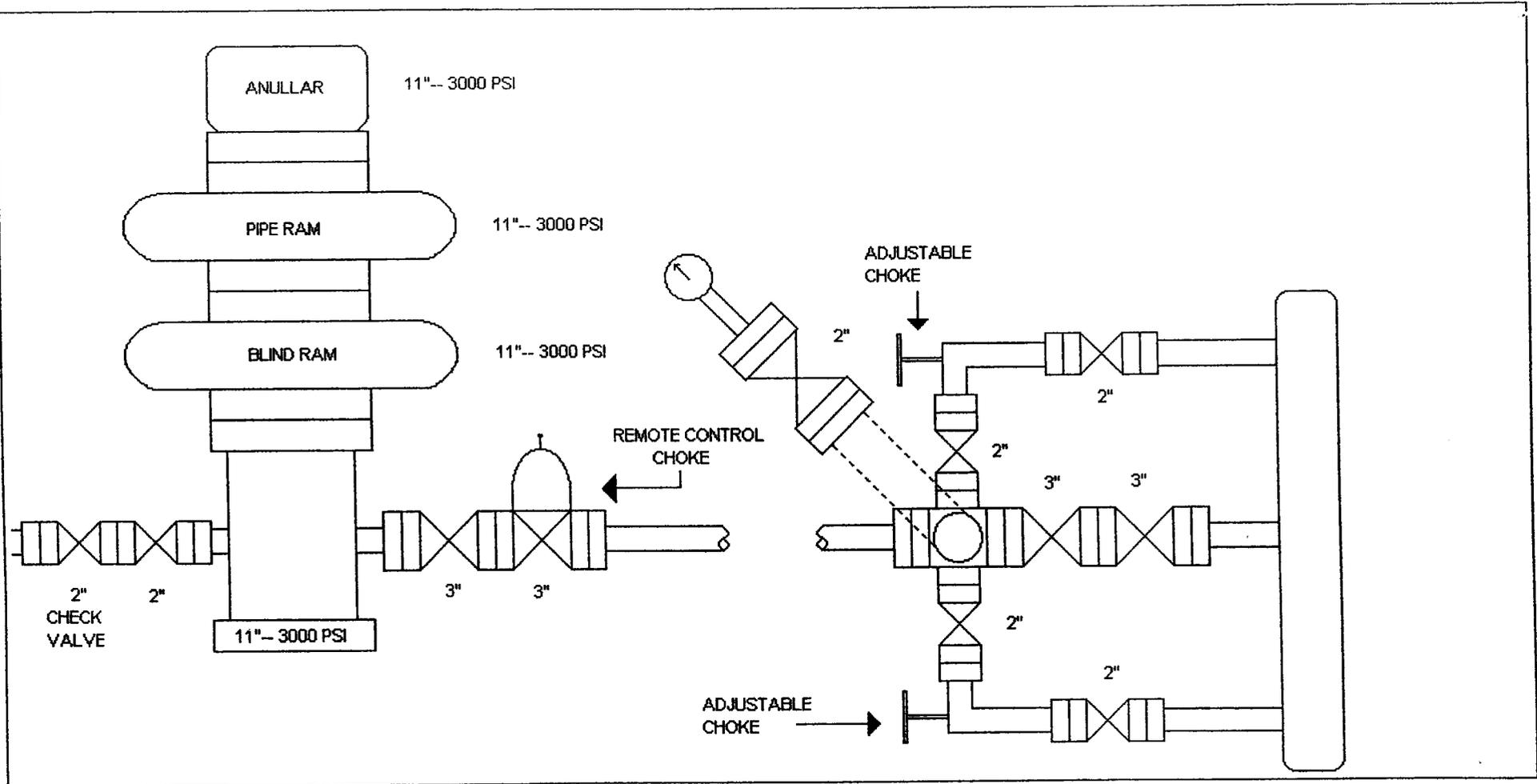
| Type | Interval |
|----------------------|-------------------|
| DLL/SFL W/GR and SP | T.D. to Surf. Csg |
| FDC/CNL W/GR and CAL | T.D. to Surf. Csg |

9. Abnormalities (including sour gas):

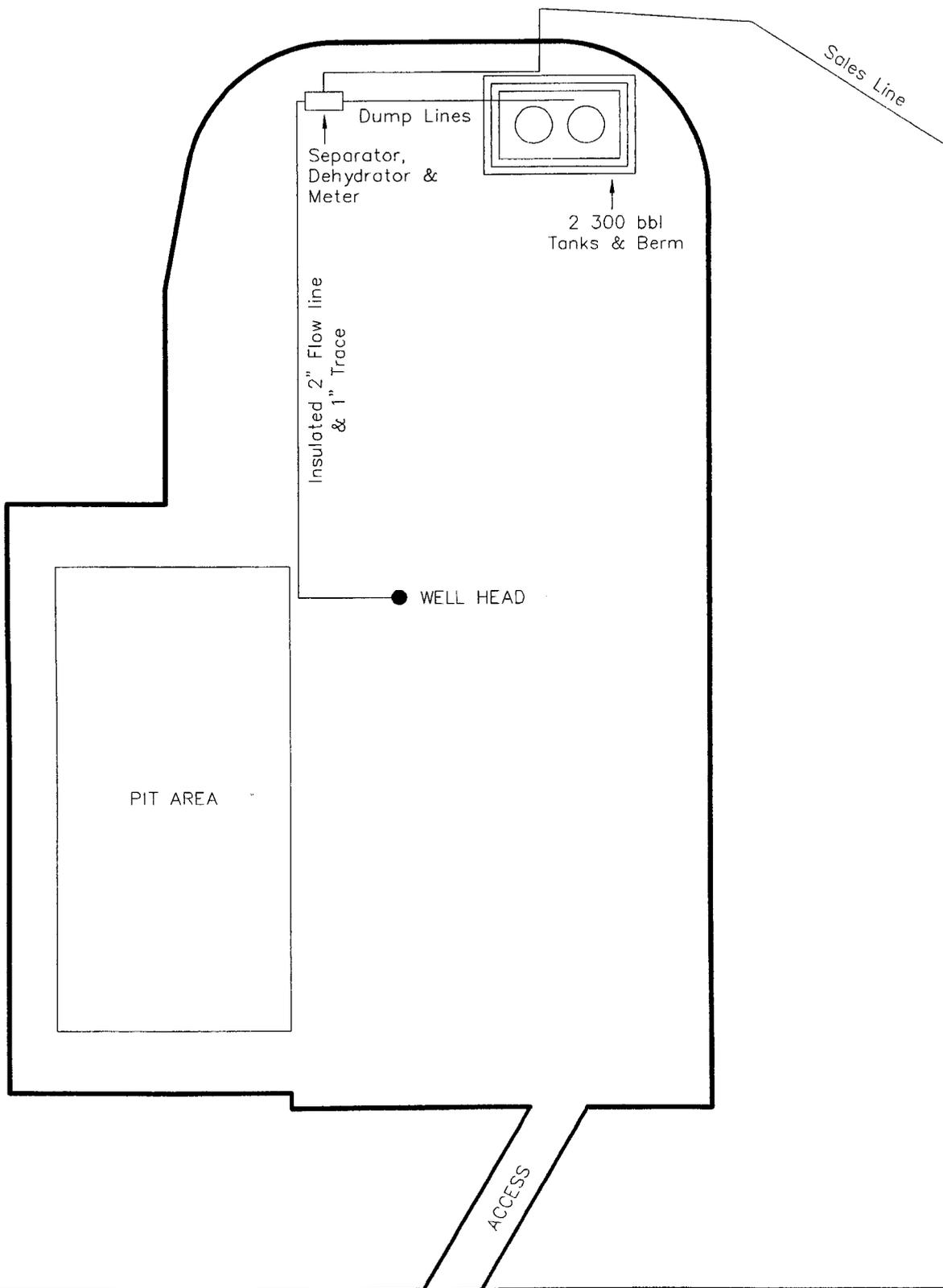
No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H₂S.

10. Drilling Schedule:

The anticipated starting date is 01/15/2006 Duration of operations is expected to be 30 days.



TYPICAL PRODUCTION LAYOUT



THE HOUSTON EXPLORATION COMPANY

13 POINT SURFACE USE PLAN

FOR WELL

HACKING RESERVOIR 9-32-8-25

LOCATED IN NE ¼ SE ¼

SECTION 32, T.8S, R25E, S.L.B.&M.

UINTAH COUNTY, UTAH

LEASE NUMBER: ML-11124

SURFACE OWNERSHIP: STATE

1. Existing Roads:

To reach The Houston Exploration Co. well Hacking Reservoir 9-32-8-25 in Section 32, T8S, R 25E, starting in Vernal, Utah:

Proceed in an easterly, then southerly, then southeasterly direction from Vernal, UT along US Highway 40 approximately 25.0 miles to the junction of this road and an existing road to the south; turn right and proceed in a southerly, then southeasterly, then southwesterly direction approximately 13.7 miles to the junction of this road and an existing road to the southeast; turn left and proceed in a southwesterly, then northeasterly, then southeasterly, then southwesterly direction approximately 3.4 miles to the beginning of the proposed access for the 15-32-8-25 to the southwest; follow road flags in a southwesterly, then southeasterly direction approximately 1.15 miles to the beginning of the proposed access to the northeast; follow road flags in a northeasterly, then northerly direction approximately 0.2 miles to the proposed location.

Total distance from Vernal, Utah to the proposed well location is approximately 43.45 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 1056' of new construction on lease. The road will be graded once per year minimum and maintained.

- A) Approximate length 1056 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 State
- 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 C.B. #33-5
- D) Temp. abandoned well None
- E) Disposal well None

meter calibration report will be submitted to the 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 in 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.

8. Ancillary facilities

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

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 25.7 ft.
- G) Max fill 7.1 ft.
- H) Total cut yds. 11,920 cu yds
- I) Pit location West end
- J) Top soil location East end
- K) Access road location South end
- L) Flare Pit corner C

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

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.

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 1,740 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 men) 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) Seed Mix

To be determined by the Authorized Officer.

11. Surface ownership:

| | |
|--------------------|--------------|
| Access road | State |
| Location | State |
| Pipe line | State |

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 dwelling 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.

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 The White River located approximately 4 miles to the Southeast.

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
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

G) Flare pit:

The flare pit will be located in **corner C** of the reserve pit out side 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.

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

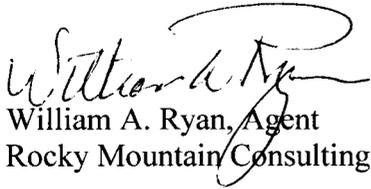
435-789-0970 Fax

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 performed 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.

Date 10-1-09


William A. Ryan, Agent
Rocky Mountain Consulting

Onsite Dates:

THE HOUSTON EXPLORATION COMPANY

HACKING RESERVOIR #9-32-8-25

LOCATED IN UINTAH COUNTY, UTAH
SECTION 32, T8S, R25E, S.L.B.&M.

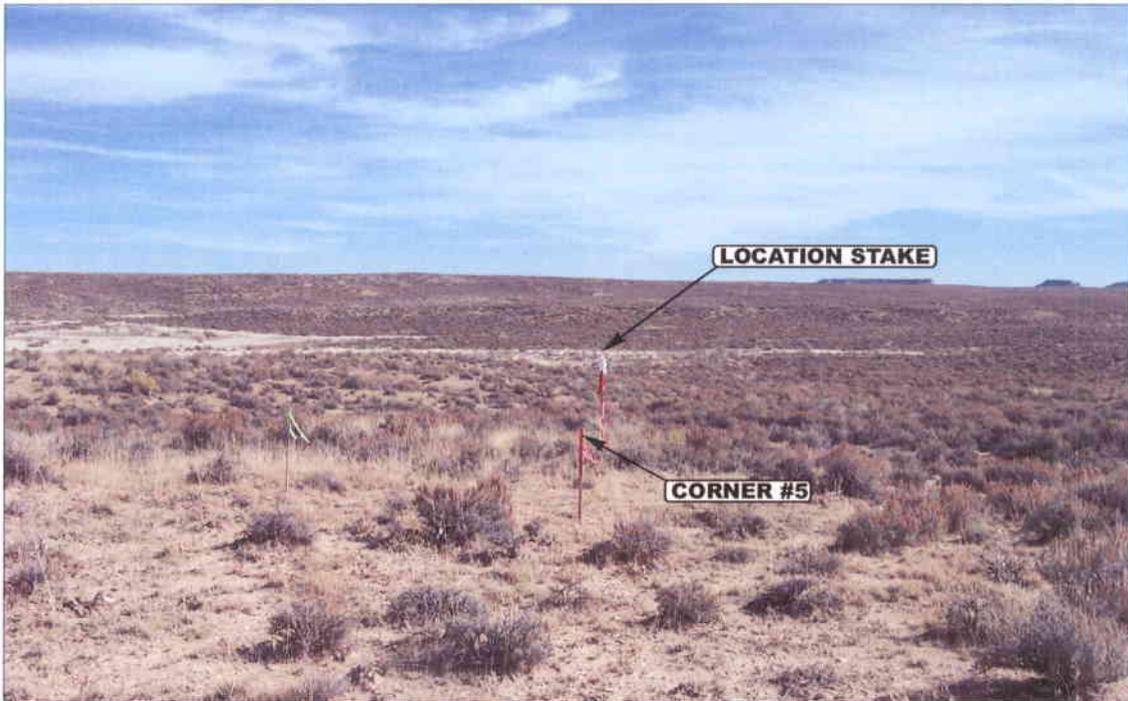


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: EASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



- Since 1964 -

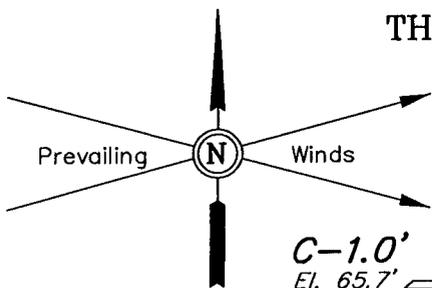
UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

| | | | | | | |
|------------------------|----------------|-------------------|-----------|-----------|-----------|--------------|
| LOCATION PHOTOS | | | 11 | 15 | 05 | PHOTO |
| | | | MONTH | DAY | YEAR | |
| TAKEN BY: N.H. | DRAWN BY: C.H. | REVISED: 00-00-00 | | | | |

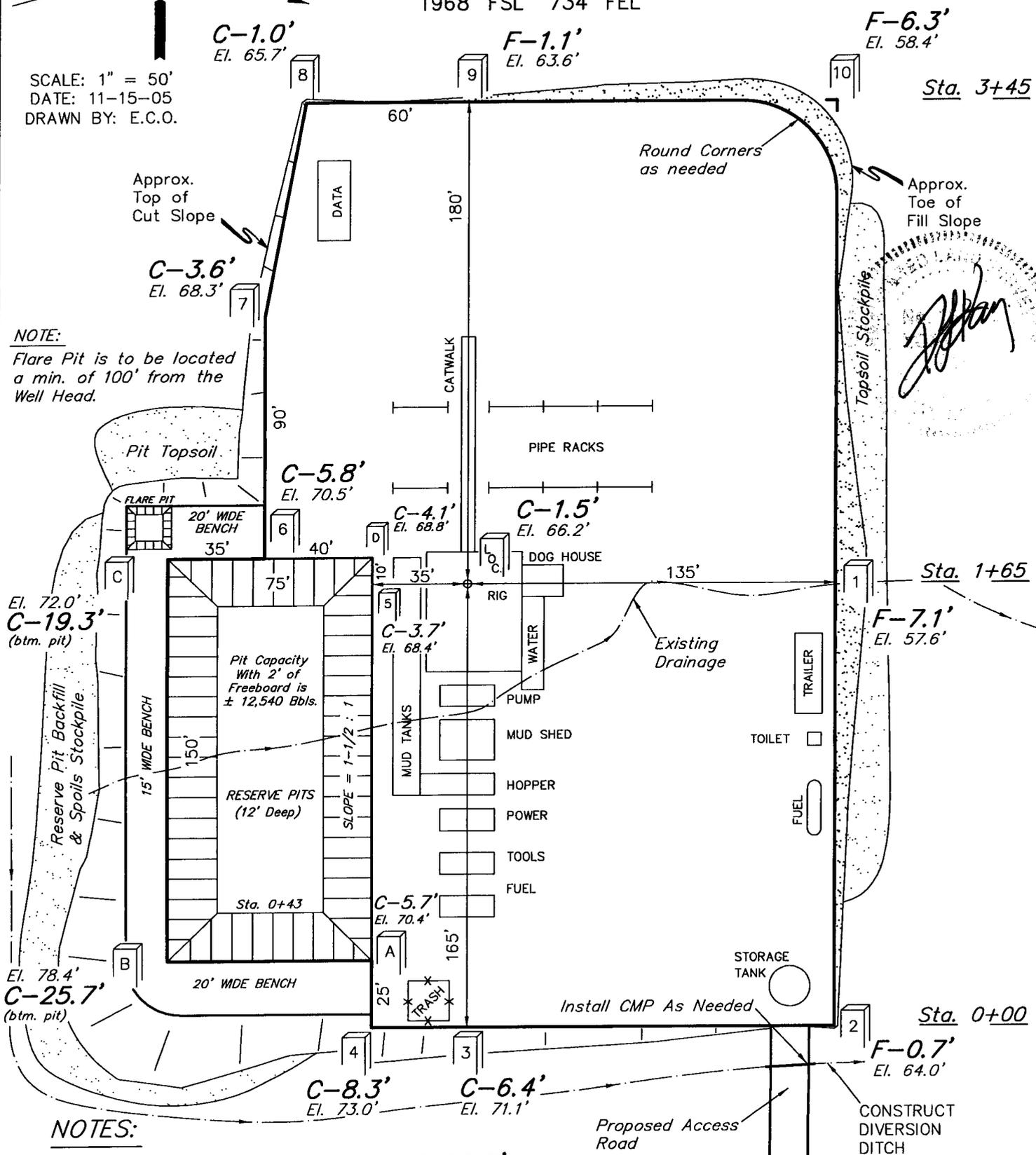
THE HOUSTON EXPLORATION COMPANY

LOCATION LAYOUT FOR
 HACKING RESERVOIR #9-32-8-25
 SECTION 32, T8S, R25E, S.L.B.&M.
 1968' FSL 734' FEL

FIGURE #1



SCALE: 1" = 50'
 DATE: 11-15-05
 DRAWN BY: E.C.O.



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

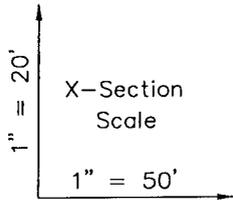
[Handwritten Signature]

NOTES:

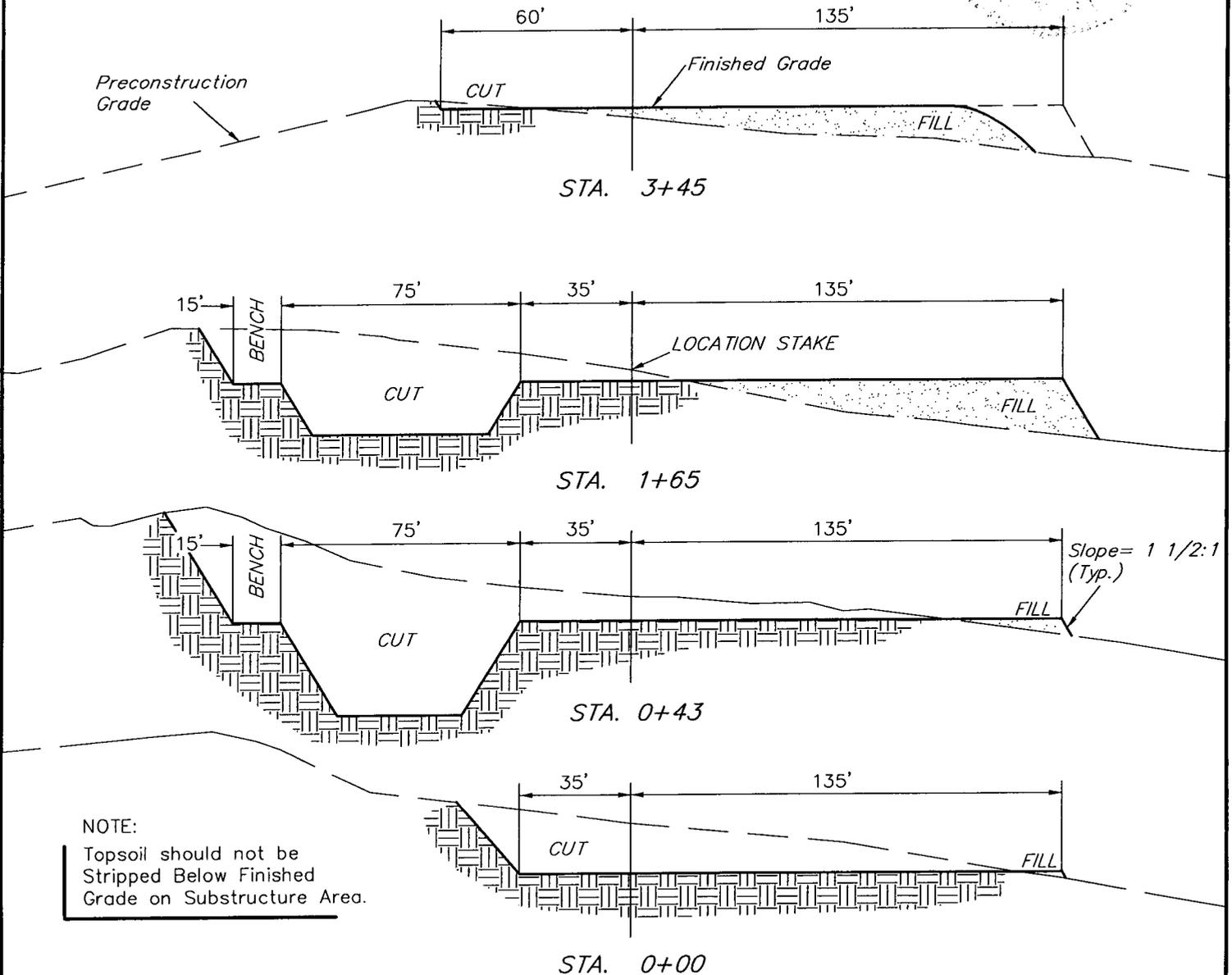
Elev. Ungraded Ground At Loc. Stake = **5466.2'**
 FINISHED GRADE ELEV. AT LOC. STAKE = **5464.7'**

THE HOUSTON EXPLORATION COMPANY

TYPICAL CROSS SECTIONS FOR
 HACKING RESERVOIR #9-32-8-25
 SECTION 32, T8S, R25E, S.L.B.&M.
 1968' FSL 734' FEL



DATE: 11-15-05
 DRAWN BY: E.C.O.



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

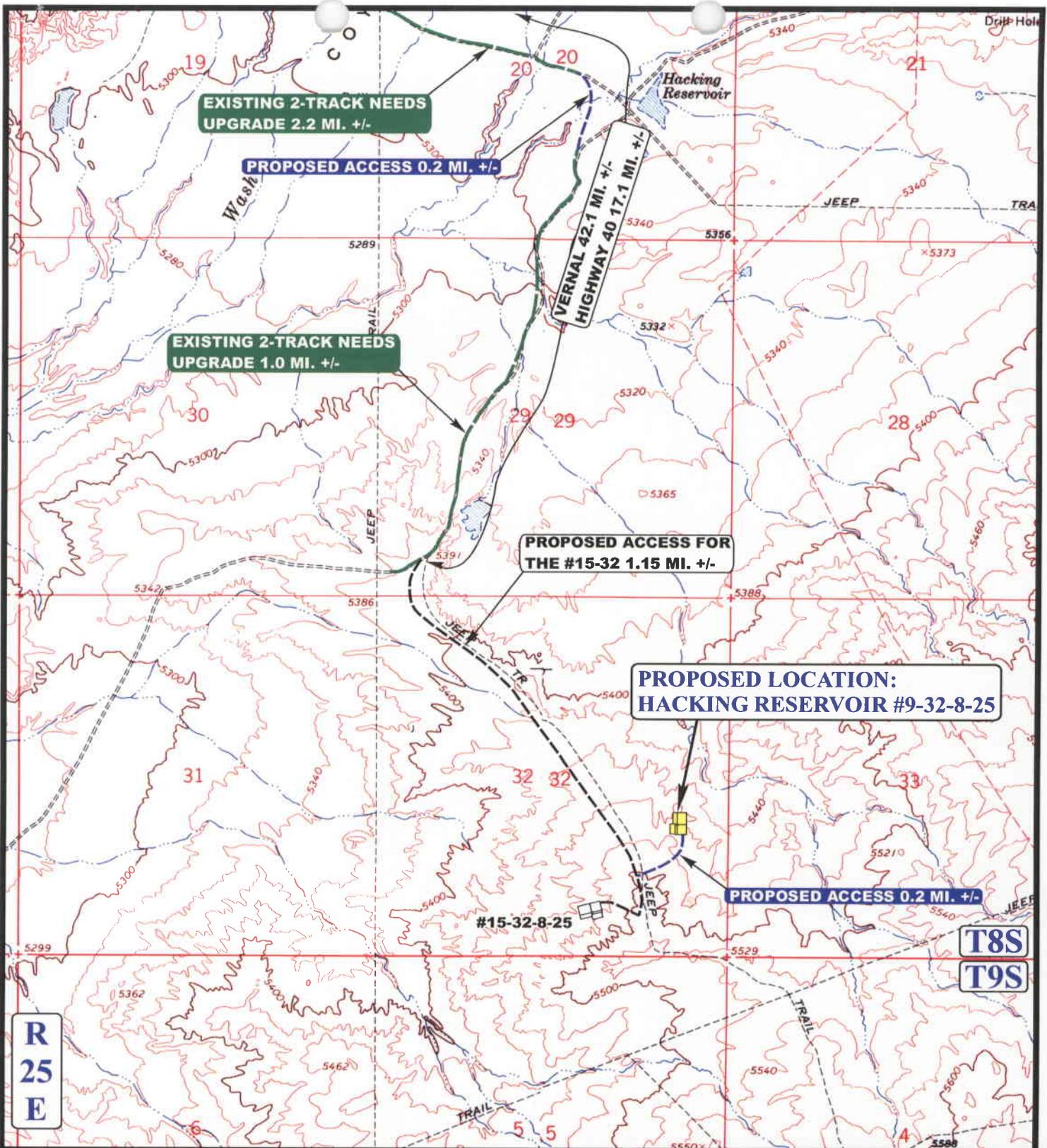
* NOTE:
 FILL QUANTITY INCLUDES
 5% FOR COMPACTION

FIGURE #2

APPROXIMATE YARDAGES

| | |
|------------------------|-------------------------|
| CUT | |
| (6") Topsoil Stripping | = 1,740 Cu. Yds. |
| Remaining Location | = 10,180 Cu. Yds. |
| TOTAL CUT | = 11,920 CU.YDS. |
| FILL | = 3,670 CU.YDS. |

| | |
|--|------------------|
| EXCESS MATERIAL | = 8,250 Cu. Yds. |
| Topsoil & Pit Backfill (1/2 Pit Vol.) | = 3,440 Cu. Yds. |
| EXCESS UNBALANCE (After Rehabilitation) | = 4,810 Cu. Yds. |



LEGEND:

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



THE HOUSTON EXPLORATION COMPANY

HACKING RESERVOIR #9-32-8-25
SECTION 32, T8S, R25E, S.L.B.&M.
1968' FSL 734' FEL

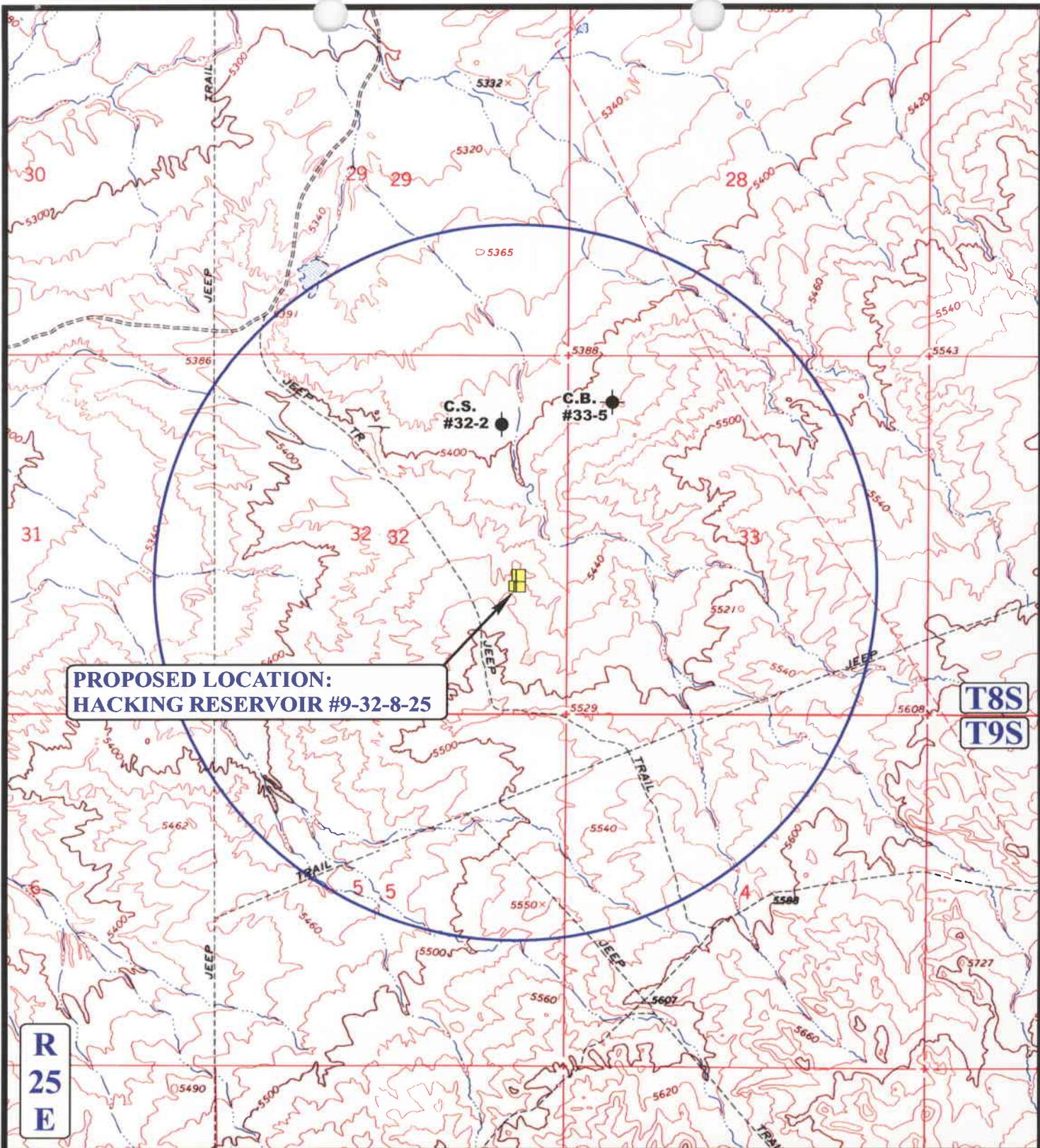


Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP **11 15 05**
 MONTH DAY YEAR

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





**PROPOSED LOCATION:
HACKING RESERVOIR #9-32-8-25**

**T8S
T9S**

**R
25
E**

LEGEND:

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



THE HOUSTON EXPLORATION COMPANY

**HACKING RESERVOIR #9-32-8-25
SECTION 32, T8S, R25E, S.L.B.&M.
1968' FSL 734' FEL**



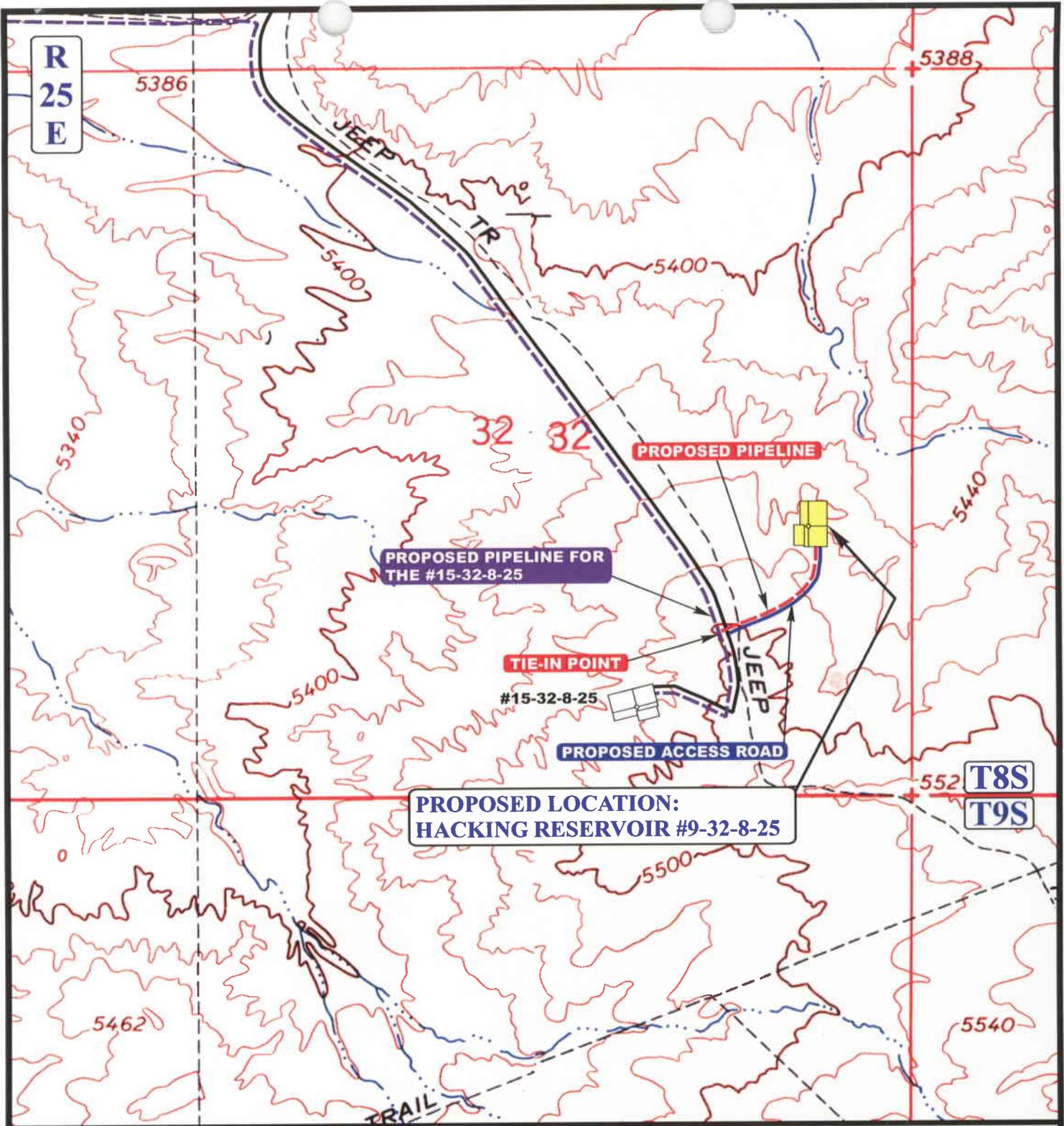
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
MAP**

11 15 05
MONTH DAY YEAR

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





APPROXIMATE TOTAL PIPELINE DISTANCE = 980' +/-

LEGEND:

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



THE HOUSTON EXPLORATION COMPANY

HACKING RESERVOIR #9-32-8-25
SECTION 32, T8S, R25E, S.L.B.&M.
1968' FSL 734' FEL



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

TOPOGRAPHIC 11 15 05
MAP MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: C.H. REVISED: 00-00-00



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

FORM 3

AMENDED REPORT
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

| | | | |
|--|--|--|---|
| 1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> | | 5. MINERAL LEASE NO: ML-11124 | 6. SURFACE: State |
| B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/> | | 7. IF INDIAN, ALLOTTEE OR TRIBE NAME: | |
| 2. NAME OF OPERATOR: The Houston Exploration Company | | 8. UNIT or CA AGREEMENT NAME: | |
| 3. ADDRESS OF OPERATOR: 1100 Louisiana, Suit 200 CITY Houston STATE TX ZIP 77002 | | PHONE NUMBER: (713) 830-6800 | 9. WELL NAME and NUMBER: Hacking Reservoir 9-32-8-25 |
| 4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 1,968' FSL & 734' FEL 660512X 40.677133 AT PROPOSED PRODUCING ZONE: same as above 44378064 -109.117567 | | 10. FIELD AND POOL, OR WLDCAAT: Undesignated | |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 43.45 miles south of Vernal, UT | | 12. COUNTY: Uintah | 13. STATE: UTAH |
| 15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 734' | 16. NUMBER OF ACRES IN LEASE: 600 | 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 | |
| 18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1,800' | 19. PROPOSED DEPTH: 5,600 | 20. BOND DESCRIPTION: 104155044 | |
| 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5,465' GR | 22. APPROXIMATE DATE WORK WILL START: 1/15/2006 | 23. ESTIMATED DURATION: 30 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 | | | |
|--------------|---|---------------|---|---------|---------|----------|
| 11" | 9 5/8 J-55 36# | 2,000 | Premium Lite II | 250 SKS | 3.38 CF | 11.0 PPG |
| | | | CLASS "G" | 329 SKS | 1.2 CF | 15.6 PPG |
| | | | Calcium Chloride | 200 SKS | 1.10 CF | 15.6 PPG |
| 7 7/8 | 4 1/2 N-80 11.6# | 5,600 | Premium Lite II | 200 SKS | 3.3 CF | 11.0 PPG |
| | | | CLASS "G" | 400 SKS | 1.56 CF | 14.3 PPG |
| | | | | | | |

25. ATTACHMENTS

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

- | | |
|--|--|
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN |
| <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER |

CONFIDENTIAL

NAME (PLEASE PRINT) William A Ryan TITLE Agent
SIGNATURE *William A Ryan* DATE 12.7.05

(This space for State use only)

API NUMBER ASSIGNED: 43-047-37483

APPROVAL:

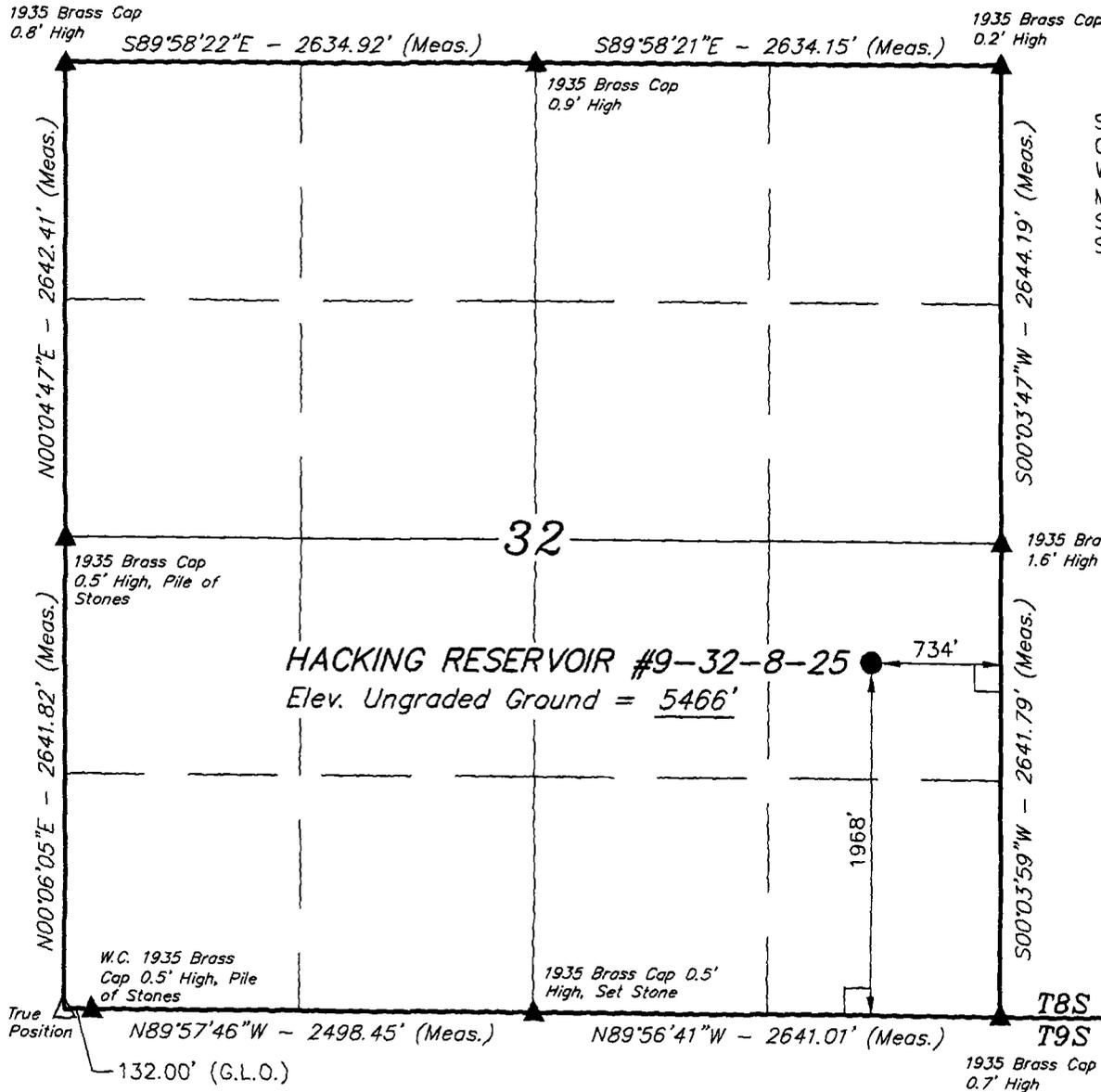
RECEIVED
DEC 09 2005

DIV. OF OIL, GAS & MINING

T8S, R25E, S.L.B.&M.

THE HOUSTON EXPLORATION COMPANY

Well location, HACKING RESERVOIR #9-32-8-25, located as shown in the NE 1/4 SE 1/4 of Section 32, T8S, R25E, S.L.B.&M. Uintah County, Utah.

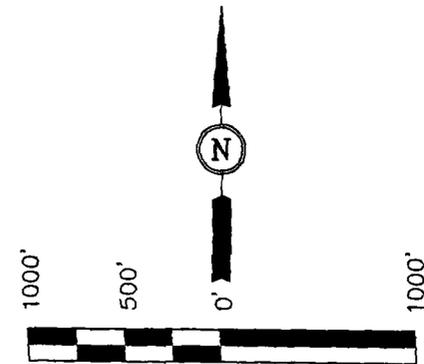


BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT A TRAIL CROSSING IN THE SW 1/4 CORNER OF SECTION 4, T9S, R25E, S.L.B.&M. TAKEN FROM THE WALSH KNOLLS, QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5607 FEET.

BASIS OF BEARINGS

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



SCALE

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 16319

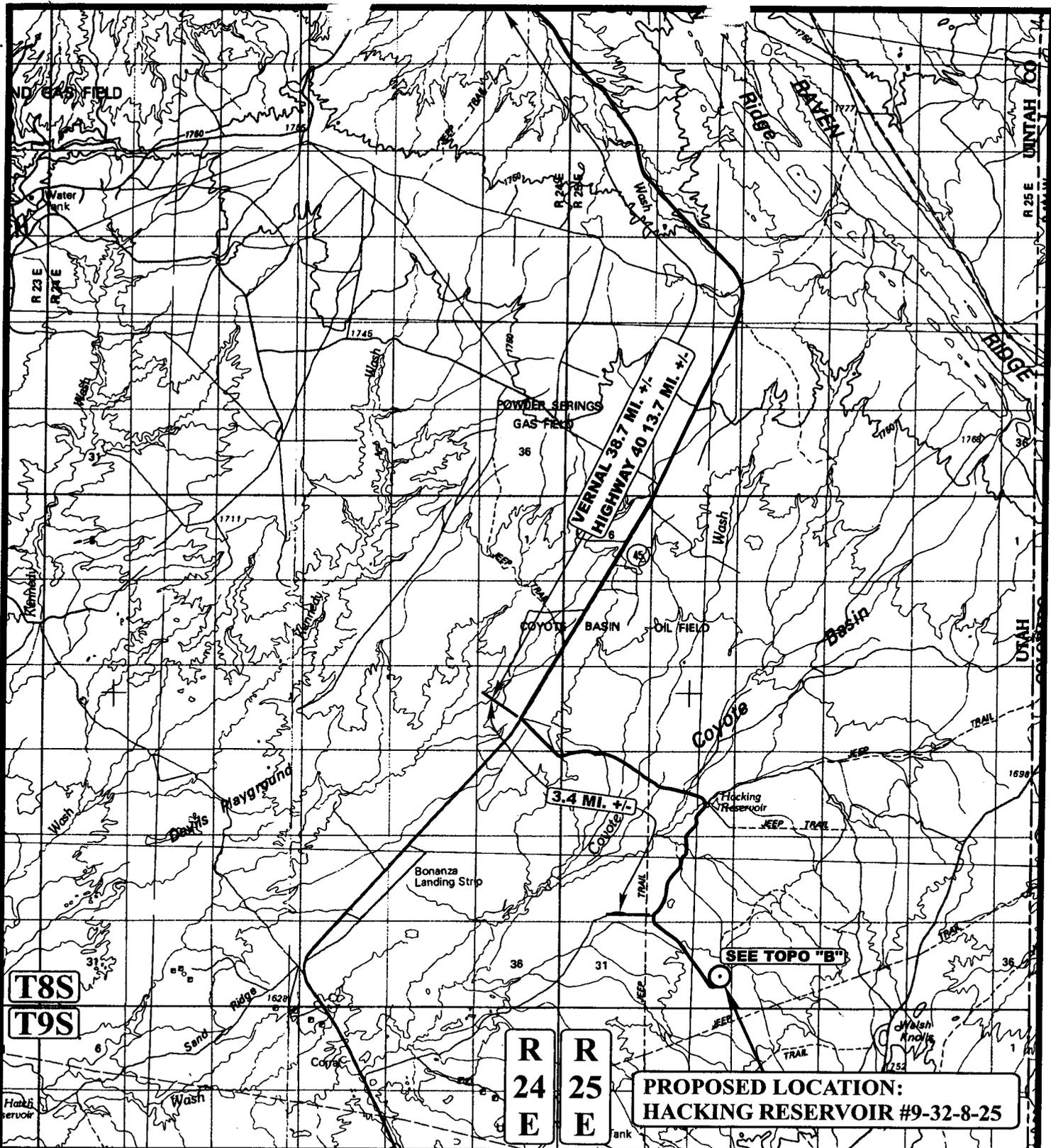
LEGEND:

- \perp = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = TRUE POSITION.

(AUTONOMOUS NAD 83)
LATITUDE = $40^{\circ}04'37.76''$ (40.077156)
LONGITUDE = $109^{\circ}07'05.68''$ (109.118244)
(AUTONOMOUS NAD 27)
LATITUDE = $40^{\circ}04'37.88''$ (40.077189)
LONGITUDE = $109^{\circ}07'03.26''$ (109.117572)

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

| | | |
|---------------------------|----------------------------|---------------------------------|
| SCALE 1" = 1000' | DATE SURVEYED: 10-28-05 | DATE DRAWN: 11-15-05 |
| PARTY N.H. D.S. E.C.O. | REFERENCES G.L.O. PLAT | |
| WEATHER COOL | FILE | THE HOUSTON EXPLORATION COMPANY |



LEGEND:

○ PROPOSED LOCATION

THE HOUSTON EXPLORATION COMPANY

HACKING RESERVOIR #9-32-8-25
SECTION 32, T8S, R25E, S.L.B.&M.
1968' FSL 734' FEL



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



TOPOGRAPHIC
MAP

| | | |
|-----------|-----------|-----------|
| 11 | 15 | 05 |
| MONTH | DAY | YEAR |

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



**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 12/09/2005

| |
|--------------------------------|
| API NO. ASSIGNED: 43-047-37483 |
|--------------------------------|

WELL NAME: HACKING RES 9-32-8-25
 OPERATOR: HOUSTON EXPLORATION CO, (N2525)
 CONTACT: BILL RYAN

PHONE NUMBER: 435-789-0968

PROPOSED LOCATION:

NESE 32 080S 250E
 SURFACE: 1968 FSL 0734 FEL
 BOTTOM: 1968 FSL 0734 FEL
 UINTAH
 WILDCAT (1)

| INSPECT LOCATN BY: / / | | |
|------------------------|----------|---------|
| Tech Review | Initials | Date |
| Engineering | DRO | 1/11/06 |
| Geology | | |
| Surface | | |

LEASE TYPE: 3 - State
 LEASE NUMBER: ML-11124
 SURFACE OWNER: ~~3 - State~~ Federal
 PROPOSED FORMATION: MVRD
 COALBED METHANE WELL? NO

LATITUDE: 40.07713
 LONGITUDE: -109.1176

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]
(No. 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: 12/27/2005)
- 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: Needs Permit (12-19-05)

STIPULATIONS: 1- Spacing Strip
2- STATEMENT OF BASIS

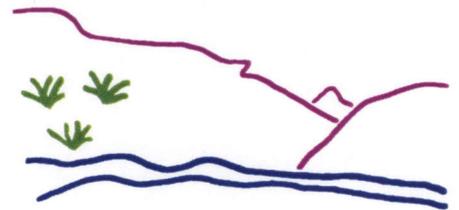


BONANZA UNIT

OPERATOR: THE HOUSTON EXPL CO (N2525)
 SEC: 32 T. 8S R. 25E
 FIELD: WILDCAT (001)
 COUNTY: UINTAH
 SPACING: R649-3-2 / GENERAL SITING

| | |
|--|---|
| Field Status | Unit Status |
| <ul style="list-style-type: none"> ABANDONED ACTIVE COMBINED INACTIVE PROPOSED STORAGE TERMINATED | <ul style="list-style-type: none"> 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: 12-DECEMBER-2005

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

OPERATOR: THE HOUSTON EXPLORATION COMPANY
WELL NAME & NUMBER: HACKING RESERVOIR 9-32-8-25
API NUMBER: 43-047-37483
LOCATION: 1/4,1/4 NESE Sec: 32 TWP: 8S RNG: 25E 1968' FSL 734' FEL

Geology/Ground Water:

The Houston Ex. Co. proposes to set 2000 feet of surface casing cemented to the surface. The base of the moderately saline water is estimated at 3,500 feet. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 32. The surface formation at this location is the Uinta Formation. The Uinta Formation is made up of discontinuous sands interbedded with shales and are not expected to produce prolific aquifers. The proposed surface casing should adequately protect any near surface aquifers.

Reviewer: Brad Hill **Date:** 12-22-05

Surface:

The pre-site investigation of the surface was performed on 12/19/05. This site is on State surface, with state minerals. Jim Davis of SITLA was present but stated no concerns with drilling at this site. Ben Williams of DWR stated that this site is high value pronghorn habitat, and sage grouse brood habitat, but made no requests.

Reviewer: Richard Powell **Date:** 12/19/2005

Conditions of Approval/Application for Permit to Drill:

1. A synthetic liner with a minimum thickness of 16 mils and a felt subliner shall be properly installed and maintained in the reserve pit

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

OPERATOR: THE HOUSTON EXPLORATION COMPANY
WELL NAME & NUMBER: HACKING RESERVOIR 9-32-8-25
API NUMBER: 43-047-37483
LEASE: ML-11124 FIELD/UNIT: WILDCAT
LOCATION: 1/4,1/4 NE/SE Sec: 32 TWP: 8S RNG: 25E 1968' FSL 734' FEL
LEGAL WELL SITING: 460 F SEC. LINE; 460 F 1/4,1/4 LINE; 920 F ANOTHER WELL.
GPS COORD (UTM): 4437816 660512 SURFACE OWNER: STATE.

PARTICIPANTS

Richard Powell (DOGM), Jim Davis (SITLA), Ben Williams (DWR), Ginger Stringham (Houston Exploration), Cory Stubbs (Dirt Contractor).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

Location is set near the top of the south side of a small ridge. The surrounding area is made up of gently rolling hills and small valleys draining generally north. Vernal, UT is approximately 36 miles to the northwest.

SURFACE USE PLAN

CURRENT SURFACE USE: Livestock and Wildlife Grazing.

PROPOSED SURFACE DISTURBANCE: Location will be 345' by 245'. Proposed new access road to be approximately 0.2 miles accessed from the 15-32 road. Existing two-track to be upgraded. Proposed access to the 15-32 approximately 1.3 miles.

LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS: See attached map from GIS database.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be on location and added after drilling well. Pipeline will follow access road.

SOURCE OF CONSTRUCTION MATERIAL: All construction material will be borrowed from site during construction of location.

ANCILLARY FACILITIES: None will be required.

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): Unlikely.

WASTE MANAGEMENT PLAN:

Drilled cuttings will be settled into reserve pit. Liquids from pit will be allowed to evaporate. Formation water will be confined to storage tanks. Portable toilets, sewage holding tanks, and onsite sewage treatment equipment will be handled by commercial contractors and

regulated by the appropriate health authority. Trash will be contained in trash baskets and disposed of at an approved landfill.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: none

FLORA/FAUNA: Halogeton, Sagebrush, Greasewood, Rabbit Brush, Shad scale, Prickly Pear, and Cheat grass / Deer, Elk, Rodents, Raptors, Coyote, Rabbit, Bobcat, Pronghorn, Prairie Dog.

SOIL TYPE AND CHARACTERISTICS: Poor light brown silty clay soil, covered with fractured shale.

EROSION/SEDIMENTATION/STABILITY: Very little natural erosion. Sedimentation and stability are not a problem and location construction shouldn't cause an increase in stability or erosion problems.

PALEONTOLOGICAL POTENTIAL: None observed.

RESERVE PIT

CHARACTERISTICS: 150' BY 75' and twelve feet deep.

LINER REQUIREMENTS (Site Ranking Form attached): A liner will be required for reserve pit. Site ranking score is 30.

SURFACE RESTORATION/RECLAMATION PLAN:

Will be per SITLA.

SURFACE AGREEMENT: As per SITLA.

CULTURAL RESOURCES/ARCHAEOLOGY: Center stake was marked by "Sagebrush" 11/30/05.

OTHER OBSERVATIONS/COMMENTS

ATTACHMENTS

Photos of this site were taken and placed on file.

RICHARD POWELL
DOGM REPRESENTATIVE

12/19/05 3:30 PM
DATE/TIME

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

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

Final Score 30 (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.

Sensitivity Level II = 15-19; lining is discretionary.

Sensitivity Level III = below 15; no specific lining is required.





12-19-2005 15:30



12-19-2005 15:31

STATE ACTIONS
Resource Development Coordinating Committee
Governor's Office of Planning and Budget
5110 State Office Building
SLC, UT 84114
Phone No. 537-9230

| | |
|---|--|
| 1. State Agency Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801 | 2. Approximate date project will start: Upon Approval or December 26, 2005 |
| 3. Title of proposed action: Application for Permit to Drill | |
| 4. Description of Project: The Houston Exploration Company proposes to drill the Hacking Reservoir 9-32-8-25 well (wildcat) on a State lease ML-11124, Uintah County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence. | |
| 5. Location and detailed map of land affected (site location map required, electronic GIS map preferred) (include UTM coordinates where possible) (indicate county) 1968' FSL 734' FEL, NE/4 SE/4, Section 32, Township 8 South, Range 25 East, Uintah County, Utah | |
| 6. Possible significant impacts likely to occur: Surface impacts include up to five acres of surface disturbance during the drilling and completion phase (estimated for five weeks duration). If oil and gas in commercial quantities is discovered, the location will be reclaimed back to a net disturbance of between one and two acres – not including road, pipeline, or utility infrastructure. If no oil or gas is discovered, the location will be completely reclaimed. | |
| 7. Identify local government affected a. Has the government been contacted? No. b. When? c. What was the response? d. If no response, how is the local government(s) likely to be impacted? | |
| 8. For acquisitions of land or interests in land by DWR or State Parks please identify state representative and state senator for the project area. Name and phone number of state representative, state senator near project site, if applicable: a. Has the representative and senator been contacted? N/A | |
| 9. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1) Uintah Basin Association of Governments | |
| 10. For further information, contact: Diana Whitney Phone: (801) 538-5312 | 11. Signature and title of authorized officer  Gil Hunt, Associate Director Date: December 12, 2005 |

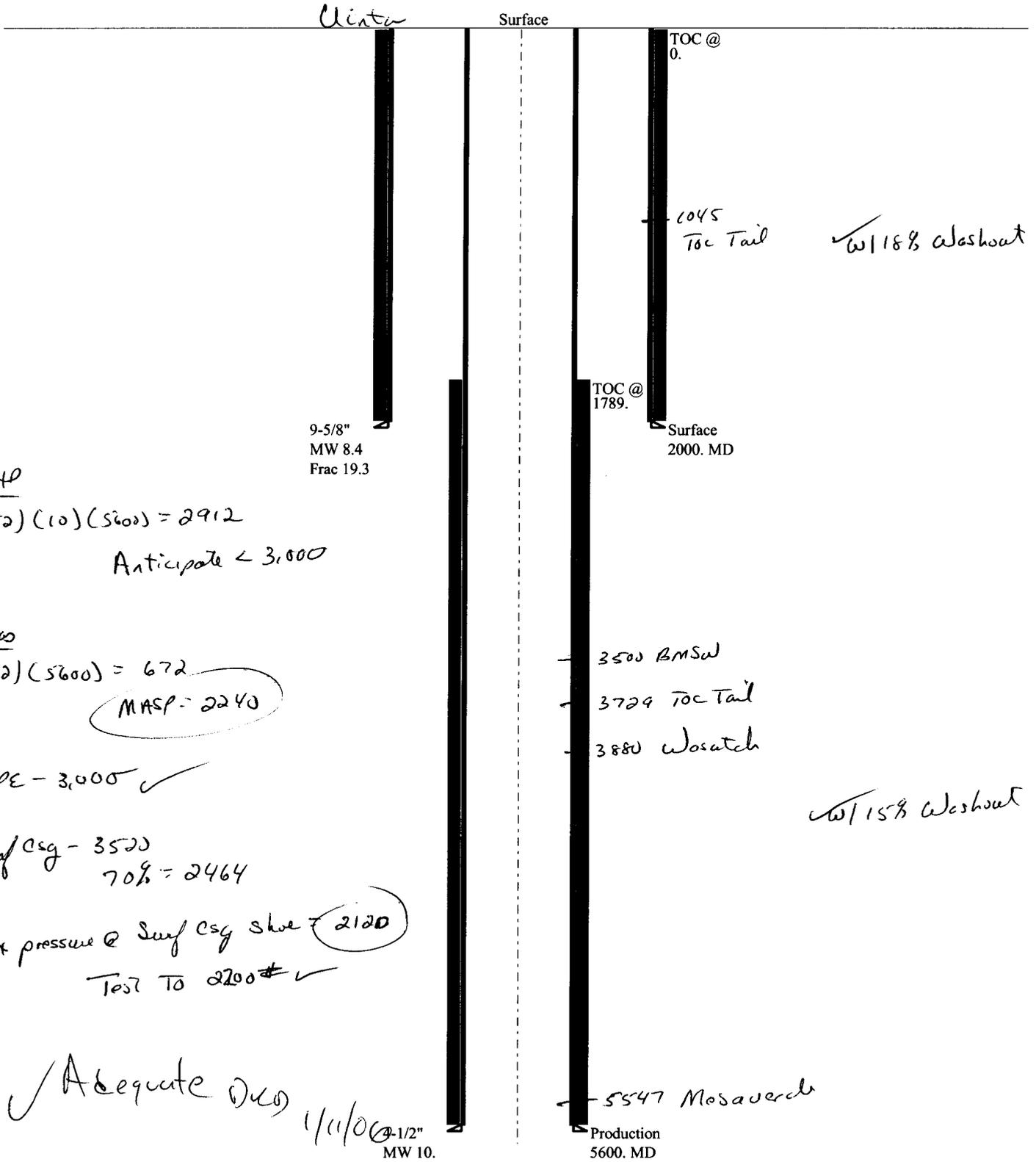
Project Number: 6022 Sponsor: Division of Oil, Gas and Mining
SLB&M: Sec. 32, T8S, R25E Counties Affected: Uintah
Description: Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 9-32-8-25 on a State lease ML-11124
Comments Due to Sponsor 12/28/2005

Comments:

Well must be drilled and managed to to prevent degradation of water quality through measures to limit erosion, limit stormwater runoff, and limit pollutant loading to stormwater runoff.

- 1- Wellpad placement or expansion disturbs soils. Vegetative and/or structural measures to control erosion should be implemented within 60 days of initial soil disturbance to prevent erosion leaving the site from exceeding the tolerable rate as determined by the local office of USDA/NRCS.
- 2- If vegetation surrounding the wellpad does not provide at least 60% ground cover within 60 days of creating the wellpad, engineering practices should be implemented within those 60 days to control erosion. Such engineering measures may include mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing or such other erosion control practices as are required to prevent erosion from exceeding the tolerable rate.
- 3- No disturbance or degradation to or of surrounding or nearby soils, native or beneficial vegetation, or riparian areas should be permitted.
- 4- In addition, no spills nor runoff of chemicals including hydrocarbons, lubricants, salt water, antifreeze, or other potentially damaging materials should be permitted.

0. 06 Houston Hacking Reservo. 9-32-8-25
Casing Schematic



Well name:

01-06 Houston Hacking Reservoir 9-32-8-25

Operator: **Houston Exploration Company**

String type: **Surface**

Project ID:

43-047-37483

Location: **Uintah County**

Design parameters:

Collapse

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

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 93 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 250 ft

Cement top: 0 ft

Burst

Max anticipated surface pressure: 1,760 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,000 psi

No backup mud specified.

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: 1,751 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 5,600 ft
Next mud weight: 10,000 ppg
Next setting BHP: 2,909 psi
Fracture mud wt: 19,250 ppg
Fracture depth: 2,000 ft
Injection pressure 2,000 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Internal Capacity (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1 | 2000 | 9.625 | 36.00 | J-55 | LT&C | 2000 | 2000 | 8.796 | 142.4 |
| 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 | 873 | 2020 | 2.315 | 2000 | 3520 | 1.76 | 63 | 453 | 7.18 J |

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

Phone: 801-538-5280
FAX: 810-359-3940

Date: January 10, 2006
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2000 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: | 01-06 Houston Hacking Reservoir 9-32-8-25 | |
| Operator: | Houston Exploration Company | Project ID: |
| String type: | Production | 43-047-37483 |
| Location: | Uintah County | |

Design parameters:

Collapse

Mud weight: 10.000 ppg
 Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 2,237 psi
 Internal gradient: 0.120 psi/ft
 Calculated BHP: 2,909 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: 4,763 ft

Environment:

H2S considered? No
 Surface temperature: 65 °F
 Bottom hole temperature: 143 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 1,500 ft

Cement top: 1,789 ft

Non-directional string.

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Internal Capacity (ft³) |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-------------------------|
| 1 | 5600 | 4.5 | 11.60 | N-80 | LT&C | 5600 | 5600 | 3.875 | 129.8 |
| 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 | 2909 | 6350 | 2.183 | 2909 | 7780 | 2.67 | 55 | 223 | 4.04 J |

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

Phone: 801-538-5280
 FAX: 810-359-3940

Date: January 10, 2006
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 5600 ft, a mud weight of 10 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.

MEMORANDUM

DATE: December 20, 2005
TO: Utah Division of Oil, Gas and Mining
CC: Resource Development Coordinating Committee
FROM: Utah Geological Survey Ground Water & Paleontology Program
SUBJECT: UGS comments on RDCC short turn around items 6018, 6019, 6020, 6021, 6022, 6025, 6027, and 6028.

THEC
6022

6018. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 11-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6019. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 3-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6020. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 5-

32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6021. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 15-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6022. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 9-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6025. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 8, T29S, R24E, San Juan County
Application for Permit to Drill - proposal to drill a wildcat well the NW Bullhorn 8-31 on a Fee lease Fee

Although there are no paleontological localities recorded in our files for this project area, the Early Cretaceous Burro Canyon that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6027. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 2, T6S, R21E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 13-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6028. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 2, T6S, R21E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 15-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

From: Robert Clark
To: Whitney, Diana
Date: 12/20/2005 4:08:49 PM
Subject: RDCC comments

The following comments on **RDCC #6018 - 6028** are being sent directly to DOG&M due to their short turn around times.

RDCC #6018 - 6022, #6027, & #6028, comments begin: The proposed Houston Exploration well drilling projects in Uintah County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.**

RDCC #6023, #6025, & #6026, comments begin: The proposed Cabot Oil and Gas well drilling projects in San Juan County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.**

RDCC #6024, comments begin: The proposed Delta Petroleum well drilling project in Grand County may require a permit, known as Approval Order, from the Utah Division of Air Quality if any compressor stations are constructed at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.**

Robert Clark
Utah Division of Air Quality
536-4435

CC: Mcneill, Dave; Wright, Carolyn

THEC
6018

MEMORANDUM

DATE: December 20, 2005

TO: Utah Division of Oil, Gas and Mining

CC: Resource Development Coordinating Committee

FROM: Utah Geological Survey Ground Water & Paleontology Program

SUBJECT: UGS comments on RDCC short turn around items 6018, 6019, 6020, 6021, 6022, 6025, 6027, and 6028.

6018. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 11-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6019. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 3-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6020. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 5-

32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6021. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 15-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6022. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 32, T8S, R25E, Uintah County
Application for Permit to Drill - proposal to drill a wildcat well the Hacking Reservoir 9-32-8-25 on a State lease ML-11124

Although there are no paleontological localities recorded in our files for this project area, the Eocene Uinta Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6025. Division of Oil, Gas and Mining
Short Turn Around Drilling Permit
Sec. 8, T29S, R24E, San Juan County
Application for Permit to Drill - proposal to drill a wildcat well the NW Bullhorn 8-31 on a Fee lease Fee

Although there are no paleontological localities recorded in our files for this project area, the Early Cretaceous Burro Canyon that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6027. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 2, T6S, R21E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 13-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

6028. Division of Oil, Gas and Mining

Short Turn Around Drilling Permit

Sec. 2, T6S, R21E, Uintah County

Application for Permit to Drill - proposal to drill a wildcat well the North Horseshoe 15-2-6-21 on a State lease ML-47549

Although there are no paleontological localities recorded in our files for this project area, the Eocene Duchesne River Formation that is exposed here has the potential for yielding significant vertebrate fossil localities. The office of the State Paleontologist therefore recommends that a paleontological evaluation be conducted for this project.

From: Robert Clark
To: Whitney, Diana
Date: 12/20/2005 4:08:49 PM
Subject: RDCC comments

The following comments on **RDCC #6018 - 6028** are being sent directly to DOG&M due to their short turn around times.

RDCC #6018 - 6022, #6027, & #6028, comments begin: The proposed Houston Exploration well drilling projects in Uintah County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.**

RDCC #6023, #6025, & #6026, comments begin: The proposed Cabot Oil and Gas well drilling projects in San Juan County may require permits, known as Approval Orders, from the Utah Division of Air Quality if any compressor stations are constructed at the sites. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed projects are also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the projects. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.**

RDCC #6024, comments begin: The proposed Delta Petroleum well drilling project in Grand County may require a permit, known as Approval Order, from the Utah Division of Air Quality if any compressor stations are constructed at the site. A permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, SLC, UT, 84116 for review according to the Utah Air Quality Rule R307-401. Permit: Notice of Intent and Approval Order. The proposed project is also subject to Utah Air Quality Rule R307-205-3, Fugitive Dust, due to the fugitive dust that is generated during the excavating phases of the project. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Division of Air Quality, but steps need to be taken to minimize fugitive dust, such as, watering and/or chemical stabilization, providing vegetative or synthetic cover and windbreaks. A copy of the rules may be found at www.rules.utah.gov/publicat/code/r307/r307.htm . **Comments end.**

Robert Clark
Utah Division of Air Quality
536-4435

CC: Mcneill, Dave; Wright, Carolyn



State of Utah

School and Institutional TRUST LANDS ADMINISTRATION

675 East 500 South, Suite 500
Salt Lake City, Utah 84102-2818
801-538-5100
801-355-0922 (Fax)
<http://www.trustlands.com>

Jon M. Huntsman, Jr.
Governor
Kevin S. Carter
Director

December 22, 2005

United States Department of the Interior
Bureau of Land Management – Vernal District
ATTENTION: Mr. Bill Stringer, District Manager
170 South 500 East
Vernal, UT 84078

RE: ML 11124
32-8S-25E, SLM
Uintah County, UT

Dear Mr. Stringer:

The captioned oil and gas lease is one of several that were exchanged with the BLM in the "Syntana Exchange" in 1983, but administration of the lease and revenues have continued to flow to School and Institutional Trust Lands Administration ("TLA") because of a settlement from a court case between the BLM and SITLA in 1999. The caveat from the settlement, however, is that until the lease expires, should any new surface disturbing activities occur on the leased lands, TLA, through the Utah Division of Oil, Gas and Mining ("UDOGM"), will notify the Vernal office of the BLM to coordinate the protection of surface resources.

Please be advised, that TLA has recently been informed that the following APDs have been filed on the lands with UDOGM by The Houston Companies:

Hacking Reservoir 11-32-8-25, NESW 32-8S-25E
Hacking Reservoir 3-32-8-25, NENW 32-8S-25E
Hacking Reservoir 5-32-8-25, SWNW 32-8S-25E
Hacking Reservoir 15-32-8-25, SWSE 32-8S-25E
Hacking Reservoir 9-32-8-25, NESE 32-8S-25E

Houston's local representative in Vernal is Mr. Bill Ryan at Rocky Mountain Consulting. TLA and UDOGM would appreciate it if you would coordinate any surface requirements pursuant to the settlement agreement with Mr. Ryan or Houston's designee if someone other than Mr. Ryan. Since this lease has not yet expired, TLA assumes that the wells will be permitted by UDOGM in their normal course of business and, should all paperwork be in order, will be approved within the next 30-45 days. Because this is an unusual situation, TLA and UDOGM will both appreciate being kept informed of the extent and progress of completion on any special surface requirements the BLM will make.

Mr. Bill Stringer
ML 11124
December 22, 2005
Page Two

Information to the state agencies should be addressed as follows:

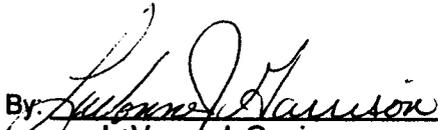
TLA
ATTENTION: Ms. LaVonne J. Garrison
675 East 500 South, Suite 500
Salt Lake City, UT 84102
801/538-5197

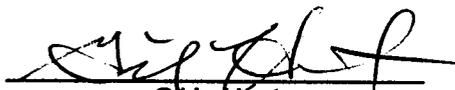
UDOGM
ATTENTION: Mr. Gil Hunt
P.O. Box 145801
Salt Lake City, UT 84114
801/538-5297

Yours very truly,

SCHOOL AND INSTITUTIONAL TRUST
LANDS ADMINISTRATION

UTAH DIVISION OF OIL,
GAS & MINING

By: 
LaVonne J. Garrison
Assistant Director/Oil & Gas

By: 
Gil L. Hunt
Associate Director/Oil & Gas

Cc: Mr. Steve Houston, The Houston Companies
Mr. Bill Ryan, Rocky Mtn Consulting
Mr. John Baza, Director, UDOGM
Mr. Ed Bonner, TLA



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

January 12, 2006

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

Re: Hacking Reservoir 9-32-8-25 Well, 1968' FSL, 734' FEL, NE SE, Sec. 32,
T. 8 South, R. 25 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 43-047-37483.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

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

Operator: Houston Exploration Company
Well Name & Number Hacking Reservoir 9-32-8-25
API Number: 43-047-37483
Lease: ML-11124

Location: NE SE **Sec.** 32 **T.** 8 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)

6. This proposed well will be located on a lease that was involved in an exchange with the Bureau of Land Management (BLM) in 1983. A court case that was settled in 1999, between the School and Institutional Trust Lands Administration (TLA) and the BLM, followed the exchange. Notification of the application to drill wells on this lease, in accordance with the court settlement, was given to the Vernal office of BLM by letter from TLA and the Division of Oil, Gas and Mining dated December 20, 2005. The operator is responsible for attaining any applicable surface rights-of-way or other permits from the BLM prior to drilling.
7. 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.
8. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.



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

February 20, 2007

Ginger Stringham
The Houston Exploration Co.
1100 Louisiana, Suite 2000
Houston, TX 77002-6800

Re: APD Rescinded –Hacking Reservoir 9-32-8-25 Sec. 32 T. 8 R. 25E
Uintah County, Utah API No. 43-047-37483

Ms. Stringham:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 12, 2006. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective February 20, 2007.

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

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

Sincerely,

A handwritten signature in cursive script that reads "Diana Mason".

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal
SITLA, Ed Bonner

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

FROM: (Old Operator):

N2525 - The Houston Exploration Company
 1100 Louisiana, Suite 2000
 Houston, TX 77002

Phone: 1-(713) 830-6800

TO: (New Operator):

N6965-Forest Oil Corporation
 707 17th St, Suite 3600
 Denver, CO 80202

Phone: 1 (303) 812-1755

CA No.

Unit:

| 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 not yet 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: 7/31/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 7/31/2007
- Bond information entered in RBDMS on: 7/31/2007
- Fee/State wells attached to bond in RBDMS on: 7/31/2007
- Injection Projects to new operator in RBDMS on: n/a
- Receipt of Acceptance of Drilling Procedures for APD/New on: pending

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

5. LEASE DESIGNATION AND SERIAL NUMBER:
See Attached List

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:
See Attached List

9. API NUMBER:
various

10. FIELD AND POOL, OR WILDCAT:

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 _____

2. NAME OF OPERATOR:
Forest Oil Corporation *N6965*

3. ADDRESS OF OPERATOR:
707 17th Street, #3600 CITY **Denver,** STATE **CO** ZIP **80202** PHONE NUMBER: **(303) 812-1755**

4. LOCATION OF WELL
FOOTAGES AT SURFACE: **See attached list** COUNTY: _____
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: _____ STATE: **UTAH**

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 type="checkbox"/> ACIDIZE | <input type="checkbox"/> DEEPEEN | <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 checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____ | <input type="checkbox"/> CHANGE WELL NAME | <input type="checkbox"/> PLUG BACK | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> PRODUCTION (START/RESUME) | <input type="checkbox"/> WATER SHUT-OFF |
| | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input checked="" type="checkbox"/> OTHER: <u>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
J. C. Ridens, Senior Vice President - Western Region

7-5-07
Date

NAME (PLEASE PRINT) Joanne C. Hresko TITLE Vice President & General Mgr. - Northern Division
SIGNATURE *Joanne C. Hresko* DATE 7-5-07

(This space for State use only)
APPROVED *7131107*
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

No wells in APD status or at this time

RECEIVED
JUL 30 2007

DIV OF OIL, GAS & MINING *WMP*

| well_name | sec | twp | rng | api | entity | lease | well | stat | flag | unit | qtr_qtr | l_num | op no |
|-----------------------------|-----|------|------|------------|--------|---------|------|------|------|------|---------|------------|-------|
| FEDERAL 28-01 | 28 | 080S | 250E | 4304730098 | 10095 | Federal | GW | S | | | SESE | UTU-016257 | N2525 |
| CONOCO STATE 32-2 | 32 | 080S | 250E | 4304730100 | 10096 | State | GW | S | | | NENE | ML-11124 | N2525 |
| ROCK HOUSE 11-31 | 31 | 100S | 230E | 4304733312 | 13984 | Federal | GW | P | | | NESW | UTU-76281 | N2525 |
| BONANZA 4B-12 | 12 | 090S | 230E | 4304733806 | 14593 | Federal | D | PA | | | NWNW | UTU-74426 | N2525 |
| WALKER HOLLOW 13-31 | 31 | 060S | 230E | 4304735039 | | Federal | GW | LA | | | SESW | UTU-76280 | N2525 |
| ROCK HOUSE 6D-32 | 32 | 100S | 230E | 4304735409 | 14293 | State | GW | S | | | SESW | ML-47063 | N2525 |
| BONANZA 2B-16 | 16 | 090S | 240E | 4304735694 | 14186 | State | D | PA | | | NWNE | ML-46526 | N2525 |
| ROCK HOUSE 2D-36 | 36 | 100S | 220E | 4304735759 | 14357 | State | GW | P | | | NWNE | ML-47061 | N2525 |
| ROCK HOUSE 2D-32 | 32 | 100S | 230E | 4304735760 | 14317 | State | GW | S | | | NWNE | ML-47063 | N2525 |
| ROCK HOUSE 10D-32 | 32 | 100S | 230E | 4304735761 | 14318 | State | GW | S | | | NWSE | ML-47063 | N2525 |
| ROCK HOUSE 12D-32 | 32 | 100S | 230E | 4304735762 | 14294 | State | GW | P | | | NWSW | ML-47063 | N2525 |
| ROCK HOUSE 11-36 | 36 | 100S | 220E | 4304735900 | 14478 | State | GW | P | | | NESW | ML-46907 | N2525 |
| ROCK HOUSE 4-36 | 36 | 100S | 220E | 4304735901 | 14449 | State | GW | S | | | NWNW | ML42061 | N2525 |
| BONANZA 12A-22 | 22 | 090S | 240E | 4304735922 | 14520 | Federal | D | PA | | | NWSW | UTU-78118 | N2525 |
| BONANZA 14-16 | 16 | 090S | 240E | 4304735941 | 14521 | State | D | PA | | | SESW | ML-46526 | N2525 |
| ROCK HOUSE 11-2 | 02 | 110S | 230E | 4304736153 | 14695 | State | GW | P | C | | NESW | ML-47078 | N2525 |
| ROCK HOUSE 7-32-10-23 | 32 | 100S | 230E | 4304736306 | 14766 | State | GW | S | | | SWNE | ML-47063 | N2525 |
| ROCK HOUSE 3-32-10-23 | 32 | 100S | 230E | 4304736307 | 14781 | State | GW | P | | | NENW | ML-47063 | N2525 |
| ROCK HOUSE 5-32-10-23 | 32 | 100S | 230E | 4304736410 | 14727 | State | GW | S | | | SWNW | ML-47063 | N2525 |
| GUSHER 6-2 | 02 | 060S | 190E | 4304736963 | | State | OW | LA | | | SESW | ML-49144 | N2525 |
| N HORSESHOE 3-16-6-21 | 16 | 060S | 210E | 4304737391 | 15716 | State | GW | DRL | C | | NENW | ML-49317 | N2525 |
| N HORSESHOE 12-7-6-22 | 07 | 060S | 220E | 4304737392 | | State | GW | LA | | | NWSW | ML-47969 | N2525 |
| N HORSESHOE 16-9-6-22 | 09 | 060S | 220E | 4304737393 | | State | GW | LA | | | SESE | ML-47969 | N2525 |
| N HORSESHOE 14-10-6-22 | 10 | 060S | 220E | 4304737394 | | State | GW | LA | | | SESW | ML-47969 | N2525 |
| N HORSESHOE 2-15-6-22 | 15 | 060S | 220E | 4304737395 | | State | GW | LA | | | NWNE | ML-47969 | N2525 |
| N HORSESHOE 4-15-6-22 | 15 | 060S | 220E | 4304737396 | | State | GW | LA | | | NWNW | ML-47969 | N2525 |
| N WALKER HOLLOW 12-32-6-23 | 32 | 060S | 230E | 4304737397 | | State | GW | LA | | | NWSW | ML-47777 | N2525 |
| N WALKER HOLLOW 16-32-6-23 | 32 | 060S | 230E | 4304737398 | | State | GW | LA | | | SESE | ML-47777 | N2525 |
| N WALKER HOLLOW 2-32-6-23 | 32 | 060S | 230E | 4304737399 | 15741 | State | GW | DRL | C | | NWNE | ML-47777 | N2525 |
| N WALKER HOLLOW 10-32-6-23 | 32 | 060S | 230E | 4304737400 | | State | GW | LA | | | NWSE | ML-47777 | N2525 |
| N WALKER HOLLOW 8-32-6-23 | 32 | 060S | 230E | 4304737401 | | State | GW | LA | | | SENE | ML-47777 | N2525 |
| N WALKER HOLLOW 11-36-6-23 | 36 | 060S | 230E | 4304737462 | | State | GW | LA | | | NESW | ML-47970 | N2525 |
| N WALKER HOLLOW 13-36-6-23 | 36 | 060S | 230E | 4304737463 | | State | GW | LA | | | SWSW | ML-47970 | N2525 |
| N WALKER HOLLOW 15-36-6-23 | 36 | 060S | 230E | 4304737464 | | State | GW | LA | | | SWSE | ML-47970 | N2525 |
| N WALKER HOLLOW 14-32-6-23 | 32 | 060S | 230E | 4304737478 | | State | GW | LA | | | SESW | ML-47777 | N2525 |
| HACKING RES 11-32-8-25 | 32 | 080S | 250E | 4304737479 | | State | GW | LA | | | NESW | ML-11124 | N2525 |
| HACKING RES 3-32-8-25 | 32 | 080S | 250E | 4304737480 | | State | GW | LA | | | NENW | ML-11124 | N2525 |
| HACKING RES 5-32-8-25 | 32 | 080S | 250E | 4304737481 | | State | GW | LA | | | SWNW | ML-11124 | N2525 |
| HACKING RES 15-32-8-25 | 32 | 080S | 250E | 4304737482 | | State | GW | LA | | | SWSE | ML-11124 | N2525 |
| HACKING RES 9-32-8-25 | 32 | 080S | 250E | 4304737483 | | State | GW | LA | | | NESE | ML-11124 | N2525 |
| HACKING RESERVOIR 7-32-8-25 | 32 | 080S | 250E | 4304737571 | 15885 | State | GW | DRL | C | | SWNE | ML-11124 | N2525 |