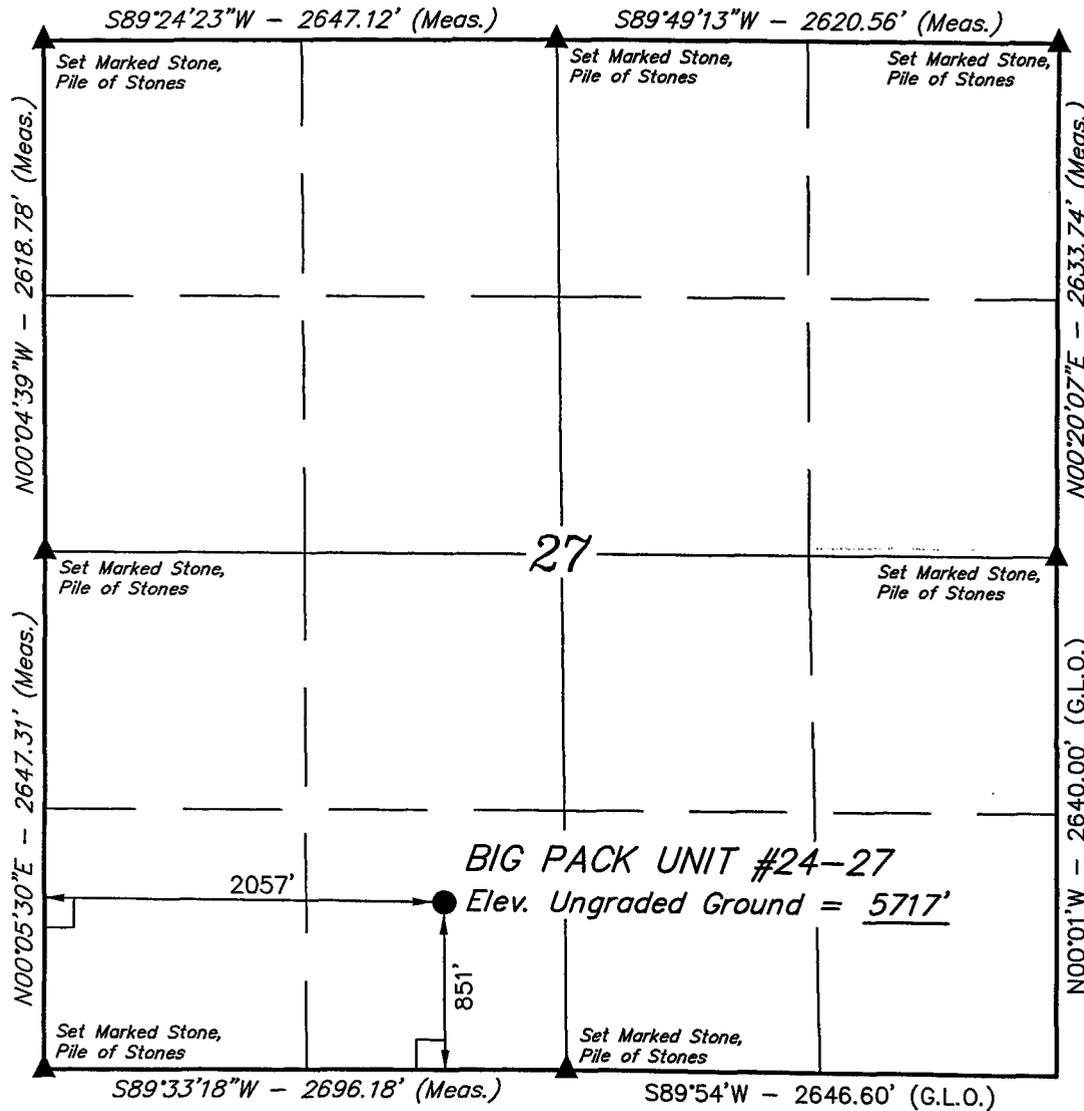


T11S, R20E, S.L.B.&M.



LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

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

(NAD 83)

LATITUDE = $39^{\circ}49'35.71''$ (39.826586)
 LONGITUDE = $109^{\circ}40'02.07''$ (109.667242)

(NAD 27)

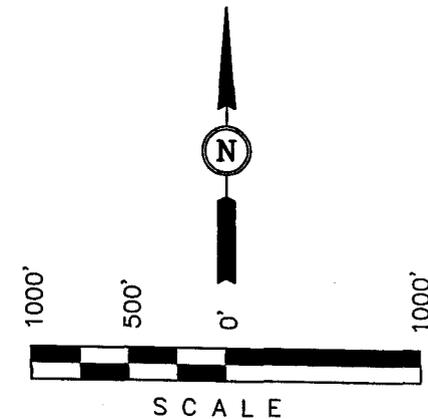
LATITUDE = $39^{\circ}49'35.83''$ (39.826619)
 LONGITUDE = $109^{\circ}39'59.58''$ (109.666550)

MAK J ENERGY

Well location, BIG PACK UNIT #24-27, located as shown in the SE 1/4 SW 1/4 of Section 27, T11S, R20E, S.L.B.&M. Uintah County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 20, T10S, R20E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN. NW QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5251 FEET.



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.

John A. Hays
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 161319
 STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

| | | |
|-------------------------|---------------------------|------------------------|
| SCALE 1" = 1000' | DATE SURVEYED: 1-25-05 | DATE DRAWN: 1-26-05 |
| PARTY A.F. B.G. K.G. | REFERENCES G.L.O. PLAT | |
| WEATHER COLD | FILE MAK J ENERGY | |

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

002

APPLICATION FOR PERMIT TO DRILL OR REENTER

| | |
|---|--|
| 5. Lease Serial No. UTU-34705 | |
| 6. If Indian, Allottee or Tribe Name na | |
| 7. If Unit or CA Agreement, Name and No. na (proposed Big Pack Unit) | |
| 8. Lease Name and Well No. Big Pack Unit #24-27 | |
| 9. API Well No. | |
| 10. Field and Pool, or Exploratory Unnamed | |
| 11. Sec., T. R. M. or Blk. and Survey or Area Section 27, T11S-R20E, S.L.B. &M. | |
| 12. County or Parish Uintah | 13. State Ut |
| 14. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2057' | 15. No. of acres in lease 2,480 |
| 16. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1921' | 17. Spacing Unit dedicated to this well 40 |
| 18. Elevations (Show whether DF, KDB, RT, GL, etc.) 5715' graded ground level | 19. Proposed Depth 9,200' |
| 20. Approximate date work will start* 08/15/2005 | 21. BLM/BIA Bond No. on file UTB000160 |
| 22. Estimated duration 8 days | |

1a. Type of work: DRILL REENTER

1b. Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone

2. Name of Operator
Mak-J Energy Operating Company, LLC

3a. Address **370 17th Street, Suite 2710
Denver, Colorado 80202**

3b. Phone No. (include area code)
303-339-5873

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface **851' FSL & 2057' FWL**
At proposed prod. zone **same as above**

14. Distance in miles and direction from nearest town or post office*
22 miles to Ouray, Utah

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) **2057'**

16. No. of acres in lease
2,480

17. Spacing Unit dedicated to this well
40

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. **1921'**

19. Proposed Depth
9,200'

20. BLM/BIA Bond No. on file
UTB000160

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5715' graded ground level

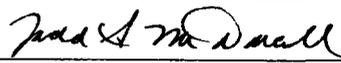
22. Approximate date work will start*
08/15/2005

23. Estimated duration
8 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

| | | |
|--|---|---------------------------|
| 25. Signature  | Name (Printed/Typed) Todd S. McDonald | Date 06/22/2005 |
|--|---|---------------------------|

Title
Vice President

| | | |
|-------------------------|----------------------|------|
| Approved by (Signature) | Name (Printed/Typed) | Date |
|-------------------------|----------------------|------|

Title
Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

*(Instructions on page 2)

EIGHT POINT DRILLING PLAN
Attached to Form 3160-3: Application for Permit to Drill
Mak-J Energy Operating Company, LLC
Big Pack Unit #24-27
Federal Lease Number UTU-34705
851' FSL & 2057' FWL, Sec 27, T11S- R20E, SLB&M
Uintah County, Utah

1. ESTIMATED TOPS - IMPORTANT GEOLOGIC MARKERS

| | |
|-------------|-------|
| Uinta | 0' |
| Green River | 423' |
| Wasatch | 3605' |
| Mesaverde | 6328' |
| Neslen | 7682' |
| Sego | 8457' |
| Castlegate | 8659' |
| Mancos | 8959' |
| Total Depth | 9200' |

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

Water: Green River: occasional sands from 423' to 3605'
 Wasatch: occasional sands from 3605' to 6328'
 Mesaverde: occasional sands from 6328' to 8457'

Oil: no oil is anticipated during the drilling of this well

Gas: Wasatch: occasional sands from 3605' to 6328'
 Mesaverde: occasional sands from 6328' to 7682'
 Neslen: occasional sands and coals from 7682' to 8457'
 Sego: occasional sands from 8457' to 8659'
 Castlegate occasional sands from 8659' to 8959'
 Mancos occasional sands from 8959' to 9200'

3. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

- a. A diagram of the Blowout Preventer Stack and Choke Manifold is presented in Exhibit #1 and #1A.
- b. A 3M (3,000 psi minimum Working Pressure) system will be required for this operation and will consist of:
 - i. The Blow-Out Preventer Stack Description and Specifications:
 - An 8-5/8" x 11" SOW 3,000 psi WP casing head will be installed as the starting head.
 - An 11" 3,000 psi x 11" 3,000 psi WP drilling spool will be installed on the starting head.

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Uintah County, Utah

- An 11" x 3,000 psi WP (min) double gate hydraulic type ram preventer with pipe rams over blind rams will be installed above the drilling spool.
- An 11" x 3,000 psi (WP) annular preventer will be installed on top of the double gate preventer.
- An 11" rotating head may be installed above an annular preventer.

ii. The Choke and Kill Manifolds:

- A 2" x 3,000 psi (min) kill line and a 3" x 3,000 psi (min) choke line will be tied into opposite sides of the 11" x 3,000 psi WP (min) drilling spool.
- Two 3" x 3,000 psi (min) WP FO gate valves will be up-stream of the choke manifold assembly. These valves will be in the open position during normal drilling operations.
- The choke manifold will consist of both 2" & 3" x 3,000 psi (min) WP pipe (see Exhibit 1). The 3" pipe will be the bleed line to the flare pit. There will be 2 - 2" lines, both directed to the mud gas separator or pit. There will be 2 - 2" x 3,000 psi (min) WP FO adjustable chokes downstream of 2 - 2" x 3000 psi (min) WP FO valves on the 2" lines. These valves will be closed during normal mud drilling operations. A single 3" x 3,000 psi (min) WP FO gate valve will be between the flow tee and the 3"(min) bleed line. This valve will be closed during normal mud drilling operations. In-board of the gate valves in the manifold assembly there will be a 3" x 3,000 (min) psi WP flow tee with bull plug, needle valve, and gauge for well control operations.
- The bleed line will be appropriately staked and chained down to the flare pit.
- The 2" kill line will consist of 2 valves (3,000 psi min) one of which will be a check valve.

iii. Surface Drill String Valves:

- A 3,000 psi WP (min) FO safety valve with subs to fit all drill strings in use will be kept on the drill floor after surface casing is set.
- A 3,000 psi (min) WP Upper kelly valve with handle will be used throughout drilling operations.

iii. The Accumulator System:

- The 3M system accumulator shall have sufficient capacity to close all BOP equipment and retain a minimum of 200 psi above the pre-charge pressure on the closing manifold without the use of the closing pumps. A nitrogen bottle system may be used to provide independent (reserve) power to operate the system in the event rig motors must be shut

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Uintah County, Utah

down.

c. Testing Procedures and Test Frequency:

- All of the pressure side BOP Equipment specified in Part b. above will be nipped-up on the surface casing. A test plug will then be set in the starting head profile.
- All ram type preventers and associated equipment will be hydraulically tested for ten (10) minutes (min) to 3000 psi and five (5) minutes (min) to 300 psi prior to drilling out cement. The annular preventer shall be tested to 1500 psi (50% of rated working pressure). Surface casing will be pressure tested to 1500 psi before drilling out the surface casing shoe. These components will be re-tested every 30 days, whenever any seal subject to test pressure is broken, and following any related repairs.
- Pipe rams will be operationally checked each 24-hour period and the blind rams operationally checked each time pipe is pulled from the hole.
- All pressure tests and function tests will be noted on the daily drilling report.

d. Tripping procedures for well control:

- The maximum bottom-hole pressure is 3850 psi in the Mancos. Anticipated mud weight at total depth is 9.5 ppg. At Mancos depth this will provide an anticipated hydrostatic pressure of 4425 psi for an over-balance pressure of +/-575 psi.
- The well will be drilled by a triple, double, or lay-down singles derrick rig with 4-1/2" drill pipe and 6" (minimum) drill collars.
- The well will be monitored each 9-10 joints on trips out of the hole to insure that the BHA is not swabbing the well in. The well will be filled after each 30 joints of drill pipe and as each drill collar is pulled from the hole. Pits will be monitored in order to insure that the well is taking fluid on the trip.
- The fill-up line will be used to fill the well on trips. The kill line **WILL NOT** be used to fill the well on trips.
- **In the event that the bit is plugged on a trip the well will be filled after each 15 joints of drill pipe are pulled from the well and as each drill collar is pulled from the well. Swabbing will be checked each 6 joints.**

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Big Pack Unit #24-27
Federal Lease Number UTU-34705
851' FSL & 2057' FWL, Sec 27, T11S- R20E, SLB&M
Uintah County, Utah

4. CASING AND CEMENTING PROGRAM

a. General Casing and Cementing Design Specifications:

| Hole Size (in.) | Depth (feet) | Casing OD (inches) | Wt/Gd/Jt/Cond | Cement |
|-----------------|--------------|--------------------|--------------------------|--|
| 12 1/4" | 2200' | 9 5/8" | 36#/ft, J55, ST&C, new | Lead: 200 sxs 65/35 Pozmix containing 16% gel, 10#/sx gilsonite, and 0.25#/sx flocele, 3.0 #/GR-3, 3% salt BWOC. Weight = 11.0 ppg, yield = 3.82 cu.ft./sx Tail: 300 sxs Class 'G' containing 2% CaCl and 0.25#/sx flocele. Weight = 15.8 ppg, yield = 1.15 cu.ft./sx |
| 7 7/8" | 9200' | 4 1/2" | 11.6#/ft, N80, LT&C, new | Lead: 200 sxs Hi-Fill 'V' containing 16% gel, 0.6% EX-1, 3% salt, 1% HR-7, 0.25#/sx flocele, and 10#/sx gilsonite. Weight = 11.6 ppg, yield= 3.12 cu.ft./sx Tail: 1180 sxs 50/50 Pozmix containing 2% gel, 0.6% Halad-322, 2% Microbond, 0.25#/sx flocele and 5% salt. Weight = 14.36 ppg, yield = 1.25 cu.ft./sx |

- NOTE: A full attempt will be made to lift cement at least 200' into the surface casing shoe. A mud log from the base of the surface casing to T.D. is planned and a Formation Density / Compensated Neutron / Caliper log will be run from T.D. to the base of surface casing to confirm volumes prior to cementing.

b. Casing Centralization Equipment:

i. Surface Casing:

- A total of 28 centralizers will be run on the 9-5/8" OD Surface Casing: 1 each on the bottom 3 joints of the casing and 1 on every other collar to surface.

EIGHT POINT DRILLING PLAN
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Uintah County, Utah

- ii. Production Casing:
 - Placement of centralizers will be determined after review of the open hole logs.

5. PROPOSED DRILLING FLUIDS

| DEPTH | TYPE | MUD WT., LB/GAL | VISCOSITY | WATER LOSS |
|------------------|-----------------|--------------------|----------------|------------|
| 0' – 2200' (Min) | Fresh water gel | NA | NA | No Control |
| 2200' – 4000' | Fresh, LSND | 8.4 – 8.8 | 32 – 36 Sec/Qt | 10 – 18 |
| 4000' – TD | Fresh, LSND | 8.8 – 9.5 | 36 – 40 Sec/Qt | 10 – 16 |

6. LOGGING, TESTING, AND CORING PROGRAM

- a. The logging program will consist of:
 - i. AIT/GR/SP:
T.D. to surface casing
 - ii. FDC – CNL w/ GR & Caliper:
T.D. to surface casing
- b. No cores are planned.
- c. No DST's are planned.
- d. A manned mud logging unit with a hotwire and chromatograph is planned from the base of the surface casing to TD. 30 ft samples will be obtained from the base of the surface casing to TD or at geologist's discretion.

7. ABNORMAL CONDITIONS - PRESSURE - TEMPERATURE - POTENTIAL HAZARDS

Normal pressures and temperatures are expected in the objective formation. A maximum surface shut-in pressure based upon a maximum bottom-hole pressure of 3,850 psi in the Mancos, assuming a partially evacuated hole with a pressure gradient of 0.22 psi/ft, is 1880 psi. A maximum bottom hole temperature of

EIGHT POINT DRILLING PLAN
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Uintah County, Utah

195 degrees Fahrenheit is anticipated. Sour gas (H₂S) is not anticipated.

8. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS

Road and location construction will begin as soon as APD approval has been granted by the BLM. The anticipated spud date for this well is currently August 15, 2005 subject to rig availability and permit approval. A spud rig may be moved in prior to the drilling rig to set surface casing. Once surface casing has been set drilling operations should be finished within 7 to 10 days. Side-tracking operations, if required, will considerably extend the period of operations. Appropriate verbal notification of side-tracking operations shall immediately be made if such operations are required, plug-back procedures confirmed, and appropriate Sundry Notices filed as soon as possible. If the subject well is deemed to be capable of production an additional 10 to 15 days will be required for completion.

SURFACE USE AND OPERATING – 13 POINT PLAN
Attached to Form 3160-3
Mak-J Energy Operating Company, LLC.
Big Pack Unit #24-27
Federal Lease Number UTU-34705
851' FSL & 2057' FWL
Section 27, T11S-R20E, SLB&M
Uintah County, Utah

1. EXISTING ROADS

- A. The proposed well site digital photographs, elevation/survey plat, location layout, cross section, and topographic maps ('A' Topo and 'B' Topo) are attached.
- B. To reach the well site proceed from Ouray, Utah 9.1 miles south on Seep Ridge Road. Turn right (west) on Turkey Track Road (County Road #5110) and travel +/- 2.8 miles to Willow Creek Road (County Road #5120). Turn left (south) on County Road #5120 and travel 4.6 miles to County Road #5230, Big Pack Mountain Loop Road. Turn right (west) onto this existing County road and travel +/- 1.6 miles to an existing oil and gas well located in the senesw, Section 10, T11S-R20E . Turn left (south) and continue on County Road #5230 for +/- 3.8 miles to the proposed new access road. The newly proposed access is approximately 0.15 mile in length as proposed on 'B' Topo.
- C. The new access road is color coded and labeled as shown on 'B' Topo.
- D. Existing highways and roads in the area are under the jurisdiction of the BLM or Uintah County.

2. PLANNED ACCESS ROADS

- A. The proposed access road will depart from Big Pack Mountain Loop Road in a westerly direction for +/- 0.15 miles (See 'B' Topo). The access road is located entirely on Federal Lease #UTU-34705.
- B. The access road will be crown and ditch construction. The general access road width will have a 15' traveling surface. A maximum disturbance width of 30' is requested (i.e., road right-of-way = 30 feet). The route for this road was chosen to minimize surface disturbance in providing access to the location. There will be no drainage ditches built.
- C. The access road grade will average 0 to 5%.
- D. No turnouts are planned except at the access road entrance into the location.
- E. Water bars will be placed if appropriate. None are anticipated.
- F. No culverts, bridges, or major cuts and fills are anticipated.
- G. Surfacing materials will consist of native surface soil, native alluvium where present, and 3/4" road-base crush from a commercial gravel pit if gravel is required due to drilling, completion, or production operations.

SURFACE USE AND OPERATING – 13 POINT PLAN
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Uintah County, Utah

- H. Based upon the field inspection conducted on March 16, 2005 no cattle guards and / or culverts are anticipated at this time. However, a low water crossing will be necessary across the major wash encountered immediately after exiting County Road #5230.
- I. No additional ROW's will be required.

3. **LOCATION OF EXISTING WELLS**

For the location of existing wells within a one-mile radius of the subject well, see Topo 'C'. The wells indicated on Topo 'C' are all that Mak-J Energy is aware of at this time.

- A. There are **No** domestic water wells within a one-mile radius.
- B. There are **No** abandoned wells within a one-mile radius.
- C. There are **No** temporarily abandoned wells within a one-mile radius.
- D. There are **No** known disposal wells within a one-mile radius.
- E. There are **No** drilling wells within a one-mile radius.
- F. There are **No** producing wells within a one-mile radius.
- G. There is **One** known shut-in well within a one mile radius.
- H. There are **No** known injection wells within a one-mile radius.

4. **LOCATION OF EXISTING OR PROPOSED FACILITIES IF WELL IS PRODUCTIVE**

- A. If the well is productive, contemplated facilities will be as follows:
 - (1) Where practicable the tank battery will be located on solid ground of the cut area of the drill pad. All Mak-J Energy facilities will be contained on the planned well pad.
 - (2) Refer to Figure #3 for the proposed production facility schematic.
 - (3) Dependent upon flow test results, a heated gas separator, multiple 400 bbl tanks, and a meter house will be required. All well pad flow lines and piping will be buried and

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Uintah County, Utah

installed according to API specifications. Construction materials will consist of excavated alluvium, shale, and soils (except top soils). Use of additional materials from outside sources is not anticipated at this time (with the exception of 3/4" crushed road-base gravel from a commercial pit). All facilities will be painted Carlsbad Canyon as agreed to during the on-site inspection on 3/16/2005.

- (4) No surface pits are planned at this time.

B. Off well pad:

- (1) On February 24, 2005 Mak-J Energy Operating Company filed an Area in Depth with the Bureau of Land Management, Salt Lake City requesting permission to form the Big Pack Unit. In general, the Big Pack Unit outline encompasses lands in the south half of Township 11 South-Range 20 East and the north half of Township 12 South-Range 20 East. The BLM approved the unit pending signature of unit joinders which were sent to potential unit participants on May 20th. There will be two unit obligation wells, the Big Pack Unit #32-22 and the Big Pack Unit #31-34. In anticipation of the Big Pack Unit being formed Mak-J Operating Company proposes to install a bare 4" gas sales line extending east from the subject well a distance of approximately 700 feet which would intersect the Big Pack Mountain Loop Road (County Road #5230). The 4" sales line has been centerline staked, will be buried, and will be located directly adjacent to the access road. At no point will the 4" pipeline fall outside of the requested 30' road right-of-way. At the intersection of County Road #5230 the 4" pipeline will tie into a proposed 8" sales pipeline that will connect the two obligation wells together. Exhibit 'E' shows the general layout of the proposed 8" pipeline and associated potential well connects. The gathering system will be owned and operated by Mak-J Energy Operating Co. LLC. Archaeological surveys have been completed for the aforementioned pipeline route and are attached to this permit. Construction will be contingent upon well-test results and permit approval / clearance by the BLM. The pipeline route will remain entirely on lease or within the Unit boundaries and will not require a separate right-of-way.
- (2) No additional facilities are planned at this time.
- (3) No additional protective measures are planned to protect livestock and wildlife.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water will be obtained from the State of Utah; Willow Creek at Buck Canyon under A-1 Tank

SURFACE USE AND OPERATING – 13 POINT PLAN
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Uintah County, Utah

Rental water permit #49-2179. Dependant on the availability of water from Willow Creek water may have to be purchased from a water supply well located in Ouray, Utah under water permit #43-8496, A-1 Tank Rental.

- B. Water will be hauled by tank truck to the drilling site as needed. The access will conform to roads identified on 'A' Topo.
- C. No water well will be drilled on, or near, this well location.

6. **SOURCE OF CONSTRUCTION MATERIALS**

- A. No construction materials are anticipated for drilling the well or constructing the access road onto the location. Compacted cut material will be utilized for the drilling site and access road. Drill-site and pit top soil will be stockpiled for re-vegetation and be placed between Points 5 and 8 and 1 and 2 as shown on Figure #1.
- B. Only native construction materials in the permitted area of disturbance, outlined for use in construction herein, will be used from BLM administered lands.
- C. Native surface soil materials for construction of the new access road should be sufficient. If necessary, road surface materials (3/4" road-base) will be purchased from the dirt contractor. An appropriate crush will be specified.
- D. 'A' Topo and 'B' Topo identify the access roads. Uintah County and Bureau of Land Management roads are involved. Care will be taken in maintaining County and BLM road entrances and will adhere to Uintah County and BLM Standards.
- E. Figure #2 shows proposed cut & fill cross-sections for the location.

7. **METHODS OF HANDLING WASTE DISPOSAL**

- A. Methods and location of proposed safe containment and disposal of waste material are:
 - (1) Cuttings not retained for evaluation purposes will be discharged into the reserve pit as shown on Figure #1.
 - (2) A portable chemical toilet will be provided on the location for human waste. Trailer septic tank facilities will be provided for trailer wastes. This sewage waste will be removed to and disposed of at the Ashley Valley Sewage Treating Plant.

SURFACE USE AND OPERATING – 13 POINT PLAN
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Section 27, T11S-R20E, SLB&M
Uintah County, Utah

- (3) Garbage and trash produced during drilling, completion and testing operations will be handled in a trash cage. This garbage will be hauled to the Uintah County landfill after drilling / completion operations are finished.
 - (4) Water and tailings will be disposed into the reserve pit.
 - (5) Small amounts of potassium chloride are anticipated in the drilling mud system and will be disposed of in the reserve pit.
 - (6) No toxic waste/chemicals subject to reporting under SARA Title III in an amount greater than 10,000 pounds will be used in the proposed operations.
 - (7) If the well is productive, produced water will be disposed of at the Ace Disposal - 10 miles west of Vernal, Utah.
- B. Drilling mud/water will be contained in steel mud tanks or in the reserve pit. It will be disposed of by pit evaporation or hauled to an appropriate disposal facility. Oil produced during drilling operations, if sufficient, will be trucked from location. The reserve pit will be lined with a synthetic liner as described in section 9C. The reserve pit will contain any excess flow from the well during mud drilling and cementing operations. The dimensions of the pit will be approximately 150' x 100' x 10' deep as shown in Figure #1.
- C. After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location. All stock piles of top soil will be seeded with the mixture described in Section 10A and will be walked in with a dozer to hold seed and minimize erosion. Any open pits will be fenced after drilling operations conclude and these pits will remain fenced until they have dried. All pits will be back filled, re-contoured, and re-seeded when pits are dry enough to backfill as weather permits. Only that part of the pad required for production operations and well maintenance operations will be kept in use. All other drill pad areas will be re-contoured and re-seeded. In the event of a dry hole, only an appropriately specified dry hole marker will remain.

8. **ANCILLARY FACILITIES**

No air strip, campsite, or other facilities will be constructed during drilling and completion operations at this well site.

9. **WELL SITE LAYOUT**

A. Refer to Figure #1 for the drill pad layout as staked. Planned cuts and fills across the location are

SURFACE USE AND OPERATING – 13 POINT PLAN
Attached to Form 3160-3
Mak-J Energy Operating Company, LLC.
Big Pack Unit #24-27
Federal Lease Number UTU-34705
851' FSL & 2057' FWL
Section 27, T11S-R20E, SLB&M
Uintah County, Utah

shown on Figure #2.

- B. Refer to Figure #1 for a planned location diagram of the proposed rig and drilling equipment, reserve pit, and pipe racks. No permanent living facilities are planned. There will be trailers for supervision on the site. Sewage will be collected in septic facilities for disposal.
- C. The rig orientation, turn-around area, parking area, and access road entrance onto location are shown on Figure #1. The reserve pit will be located on the western edge of the location. A plastic nylon reinforced liner will be used. **It will be a minimum of 12 mil thickness with felt bedding to cover any rocks.** The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit.

The flare pit may receive cuttings, gas, and mud/water during drilling operations. The flare pit will be approximately 20' x 20' x 6' deep. The flare pit will be located at least 100' (nearest corner or edge) from the wellbore, +/-30 ft from the north corner of the reserve pit. A minimum 10' earthen backstop of earth fill shall be constructed at the far end of the flare pit. Earthen embankments shall be constructed to prevent fluid loss to surrounding lands. Flare pit fluids shall drain via a trench, by gravity, into the reserve pit (see Figure #1).

The reserve pit will be fenced with 39-inch net wire with one strand of barbed wire on the three (3) exterior sides prior to the commencement of drilling operations. The fourth side will be fenced when the rig moves off location. The flare pit will be fenced on all sides prior to the commencement of drilling operations.

10. PLANS FOR RESTORATION OF SURFACE

A. Productive Well

The plan for rehabilitation of the disturbed area no longer needed for production operations after drilling and completion activities are finished is as follows:

The entire location will be inspected for trash and other refuse, and such trash/refuse if found, will be cleaned up.

Oil or other adverse substance on the pits will be removed in accordance with 43 CFR 3162.7-1.

The pit liner will be torn and perforated before back filling of the reserve pit after the contents of the pit are dry.

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The area of the drill site not needed for producing operations/facilities and well maintenance operations will be re-contoured to the original contours as nearly as possible and re-vegetated/re-seeded along contours. Vegetation and rehabilitation will be achieved by reseeded after re-contouring the site. A seed mixture of 3 #/acre Shadscale, 2 #/acre Indian Rice Grass, 2 #/acre Needle & Thread Grass, and 1 #/acre Crested Wheat, and 1#/acre Globe Mallow will be used. Time to complete rehabilitation depends upon the time necessary for pits to dry. Pit closure, re-contouring, planting, and re-vegetation should occur by fall 2006, if normal weather patterns ensue.

B. Dry Hole/Abandoned Location

If the well is to be plugged and abandoned, a subsequent report of abandonment will be submitted to obtain the appropriate surface rehabilitation conditions of approval.

11. SURFACE OWNERSHIP

The surface ownership of the access road and location is BLM.

12. OTHER INFORMATION

A Cultural Resources Survey, by Montgomery Archaeological Consultants, Moab, Utah has been completed for the proposed well site, access road, and pipeline route within the Unit boundary. No significant cultural resources were identified. The archeological report is attached to this permit. A Paleontological Reconnaissance Report has also been completed by Montgomery Archeological Consultants. It is also included in this report and no signs of fossil material inside the proposed construction area were found. An on-site inspection was conducted on March 16, 2005 under NOS procedure. In attendance were Paul Buhler and Amy Torres, Bureau of Land Management - Vernal Resource Area, Jim and Travis Oldham of Diamond J Construction Inc., and Todd S. McDonald with Mak-J Energy Operating Company LLC.

Noxious weeds will be controlled along rights-of-way for roads, pipelines, well sites, or other applicable facilities pertaining to this project. A pesticide use proposal will be submitted prior to the application of herbicides or pesticides.

Drilling rigs and/or equipment will not be stacked or stored on Federal lands.

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Mak-J Energy Operating Company, LLC.
Big Pack Unit #24-27
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851' FSL & 2057' FWL
Section 27, T11S-R20E, SLB&M
Uintah County, Utah

13. **LESSEE'S AND OPERATOR'S REPRESENTATIVE**

Mak-J Energy Operating Company, LLC.
370 17th Street, Suite 2710
Denver, Colorado 80202

Contact: Todd S. McDonald
Vice President
phone: (303) 339-5873 office

phone: (303) 320-4523 home
phone: (303) 842-0883 cellular

SURFACE USE AND OPERATING – 13 POINT PLAN
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851' FSL & 2057' FWL
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Uintah County, Utah

CERTIFICATION

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

Please be advised that Mak-J Energy Operating Company is considered to be the operator of the Big Pack Unit #24-27, which is located in the SE/4 SW/4, Section 27, Township 11S, Range 20E, Federal Lease #UTU-34705, Uintah County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Operations will be conducted under Mak-J Energy Operating Company BLM Bond number UTB000160 which provides state-wide bond coverage on all Federal lands.

Date: June 22, 2005



Todd S. McDonald
Vice President
Mak-J Energy Operating Company, LLC.

CULTURAL RESOURCE INVENTORY OF
MAK-J ENERGY'S BIG PACK UNIT
16 WELL LOCATIONS
UINTAH COUNTY, UTAH

Kylie Lower-Eskelson
and
Keith Montgomery

CULTURAL RESOURCE INVENTORY OF
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By:

Kylie Lower-Eskelson
and
Keith Montgomery

Prepared For:

Bureau of Land Management
Vernal Field Office
and
State of Utah
School and Institutional
Trust Lands Administration

Prepared Under Contract With:

Mak-J Energy Partners, Ltd.
370 17th Street, Suite 2710
Denver, CO 80202

Prepared By:

Montgomery Archaeological Consultants
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MOAC Report No. 05-45

March 21, 2005

United States Department of Interior (FLPMA)
Permit No. 04-UT-60122

State of Utah Antiquities Project (Survey)
Permit No. U-05-MQ-0096b,s

ABSTRACT

In March of 2005, a cultural resource inventory was conducted by Montgomery Archaeological Consultants, Inc. (MOAC) of Mak-J Energy's 16 proposed well locations with associated access/pipeline corridors situated in the Big Pack Mountain locality of Uintah County, Utah. The proposed well locations are designated Big Pack Unit 21-15, 12-15, 14-15, 21-22, 32-22, 32-22, 21-27, 24-27, 31-34, 34-34, 41-3, 12-2, 12-33, 32-29, 14-20, 23-20. The legal description of the project is T 11S R 20E Sections 15, 20, 22, 27, 29, 32, 33, 34, and 35, and T 12S R 20E Sections 2, 3, 4, 9, and 10. A total of 437 acres was inventoried with 408 acres occurring on lands administered by the Bureau of Land Management (BLM) and an additional 19 acres occurring on lands administered by the School and Institutional Trust Lands Administration (SITLA).

The cultural resource inventory resulted in the documentation of 15 new historic sites (42Un4728 through 42Un4742). All of the newly documented sites are recommended not eligible to the NRHP because they lack additional research potential and are unlikely to contribute to the history of the area. Ten of these sites (42Un4728, 42Un4730, 42Un4731, 42Un4732, 42Un4734, 42Un4735, 42Un4736, 42Un4737, 42Un4738, and 42Un4741) are surficial historic temporary home-on-range camps with ephemeral features and limited artifact assemblages. Temporal indicators at most of these camps indicate an occupation between 1935 and 1945. Three of the sites (42Un4729, 42Un4739 and 42Un4742) are surficial low density historic artifact scatters which lack associated features. Site 42Un4740 is a prospectors pit with one tin can artifact and site 42Un4733 is a corral with axe-cut wood piles and a mixture of in-period and modern trash. Historic temporary camps are common site types to the area with minimal artifact classes (mostly tin cans). None of these sites are related to known historical events or important persons. Therefore, they do not add significant data to the historic research domains of the area beyond their present documentation.

The inventory of Mak-J Energy's 16 proposed well locations with access and pipeline corridors resulted in the documentation of 15 historic sites (42un4728 through 42Un4742). None of these sites are recommended as eligible to the NRHP and therefore no avoidance recommendations are proposed. On the basis of the findings, a recommendation of "no historic properties affected" pursuant to Section 106, CFR 800 is proposed for this project.

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INTRODUCTION

In March 2005, a cultural resource inventory was conducted by Montgomery Archaeological Consultants, Inc. (MOAC) of Mak-J Energy's, 16 well pads and access roads in the Big Pack Mountain Locality of Uintah County. The project area is located southeast of Roosevelt, Utah in Duchesne County, northeastern Utah. The proposed well locations are designated Big Pack Unit 21-15, 12-15, 14-15, 21-22, 32-22, 32-22, 21-27, 24-27, 31-34, 34-34, 41-3, 12-2, 12-33, 32-29, 14-20, 23-20. The inventory was implemented at the request of Todd McDonald, Mak-J Energy Partners, Denver, Colorado. The project area occurs on both lands administered by the Bureau of Land Management (BLM), Vernal Field Office and School and Institutional Trust Lands Administration (SITLA).

The objective of the inventory was to locate, document and evaluate any cultural resources within the project area. This project was carried out in compliance with Federal and State legislation including the Antiquities Act of 1906, the National Historic Preservation Act (NHPA) of 1966, National Environmental and Historic Preservation Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979 and the American Indian Religious Freedom Act of 1978.

The fieldwork was conducted by Keith R. Montgomery (Principal Investigator) and assisted by Eli Jones, Mark Beeson, Mark Bond and Kylie Lower-Eskelson between March 8 and 15, 2005 under the auspices of U.S.D.I. (FLPMA) Permit No. 04-UT-60122 and State of Utah Antiquities Project (Survey) No. U-05-MQ-0096b,s issued to MOAC, Inc., Moab, Utah.

A file search for previous projects and documented cultural resources was conducted by Marty Thomas at the Utah Division of State History (March 1, 2005). This consultation indicated that a small number of cultural resource inventories have been completed in the area, although few have been documented, none of which occur in the current project area. In 1981, Powers Elevation conducted two cultural resource inventories of a proposed well pads for Cotton Petroleum Co., both of which located no cultural resources (Tate 1981a, U-81-PA-0715b; Tate 1981b, U-81-PA-0663b). In 1983 Chambers Consultants and Planners conducted a cultural resource study on the White River oil shale lease lands in the Vernal district resulting in the documentation of 14 sites and 40 isolates including 3 historic sites, 6 prehistoric sites and 5 petroglyph sites (Reynolds, Cella, Schander 1983, U-83-CE-0499b). In 1986 Archeological-Environmental Research Corporation (AERC) conducted cultural resource evaluations of three proposed well locations in the Willow Creek and Bitter Creek Canyon localities for Enserch Exploration Company in which no sites were documented (Hauck 1986, U-86-AF-611b). In 2005 Montgomery Archaeological Consultants conducted a Cultural Resource Inventory of Mak-J Energy's Main Pipeline for Big Pack Mtn well locations T 11S, R 20E and T11S, R 21E which resulted in the documentation of no cultural resources (Montgomery and Taylor 2005, U-05-MQ-0098b).

DESCRIPTION OF PROJECT AREA

The proposed Mak-J Energy 16 Well Locations in the Big Pack Mountain area, southeast of Ouray, Utah in Uintah County (Figure 1 and Table 1). The legal description of the project is T 11S R 20E Sections 15, 20, 22, 27, 29, 32, 33, 34, and 35, and T 12S R 20E Sections 2, 3, 4, 9, and 10. A total of 437 acres was inventoried with 408 acres occurring on lands administered by the Bureau of Land Management (BLM) and an additional 19 acres occurring on lands administered by the School and Institutional Trust Lands Administration (SITLA).

Table 1. Mak-J Energy's 16 Well Locations and Access/Pipeline Corridors

| | | | |
|----------------|-------------------------------|---|--------------------|
| #21-15 BLM | T11S, R20E, Sec 15 (NE/NW) | Access and Pipeline: 312 ft | None |
| #12-15 BLM | T11S, R20E, Sec 15(SW/NW) | Access and Pipeline: 486 ft | 42Un4728 |
| #14-15 BLM | T11S, R20E, Sec 15 (SW/SW) | Access and Pipeline: along existing road | None |
| #21-22 BLM | T11S, R20E, Sec 22 (NE/NW) | Access and Pipeline: along existing road | None |
| #32-22 BLM | T11S, R20E, Sec 22 (SW/NE) | Access and Pipeline: along existing road | None |
| #34-22 BLM | T11S, R20E, Sec 22 (SW/SE) | Access and Pipeline: 676 ft | None |
| #21-27 BLM | T11S, R20E, Sec 27 (NE/NW) | Access and Pipeline: 974 ft | None |
| #24-27 BLM | T11S, R20E, Sec 27 (SE/SW) | Access and Pipeline: 732 ft | None |
| #31-34 BLM | T11S, R20E, Sec 34 (NW/NE) | Access and Pipeline: 459 ft | None |
| #34-34 BLM | T11S, R20E, Sec 34 (SW/SE) | Access and Pipeline: 1056 ft | 42Un4729 |
| #41-3 BLM | T12S, R20E, Sec 3 (NE/NE) | Access and Pipeline: 889 ft | 42Un4730, 42Un4731 |
| #12-2 Sitla | T12S, R20E, Sec 2 (SW/NW) | Access and Pipeline: 623 ft | None |
| #12-33 BLM | T11S, R20E, Sec 33 (SW/NW) | Access and Pipeline: along existing road | None |
| #32-29 BLM | T11S, R20E, Sec 29 (SW/NE) | Access and Pipeline: 482 ft | 42Un4738, 42Un4739 |
| #14-20 BLM | T11S, R20E, Sec 20 (SW/SW) | Access and Pipeline: along existing road | 42n4740 |
| #23-20 BLM | T11S, R20E, Sec 20 (NE/SW) | Access and Pipeline: 1535 ft | 42Un4742, 42Un4741 |

| | | | |
|--|---|-----------|--|
| Associated Access / Pipeline Corridors | T11S, R20E Sec 15, 20, 22, 27, 29, 32, 33, 34, & 35, T12S, R20E Sec 2, 3, 4, 9, & 10. | 72,323 ft | 42Un4732, 42Un4733, 42Un4734, 42Un4735, 42Un4736, 42Un4737 |
|--|---|-----------|--|

Environment

The study area lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). The Uinta Basin ecosystem is within the Green River drainage, considered to be the northernmost extension of the Colorado Plateau. The geology is comprised of Tertiary age deposits which include Paleocene age deposits, and Eocene age fluvial and lacustrine sedimentary rocks. The Uinta Formation, which is predominate in the project area, occurs as eroded outcrops formed by fluvial deposited, stream laid interbedded sandstone and mudstone, and is known for its prolific paleontological localities.

Specifically, the project area occurs on the east side of Willow Creek on the valley floors which are interspersed by flat topped buttes and narrow steep-sided ridges. The area is heavily dissected and carved by ephemeral drainages. Surface geology consists of hard pan residual soil armored with shale and sandstone pebbles. The elevation ranges between 5300 ft and 6300 ft a.s.l. The project occurs within the Upper Sonoran Desert Shrub Association which includes sagebrush, shadscale, greasewood, mat saltbush, snakeweed, rabbitbrush, prickly pear cactus, Indian ricegrass and other grasses. Modern disturbances include roads and oil/gas development.

Cultural-Historical Overview

The cultural-chronological sequence represented in the area includes the Paleoindian, Archaic, Fremont, Protohistoric, and Euro-American stages. The earliest inhabitants of the region are representative of the Paleoindian stage (ca. 12,000-8,000 B.P.). This stage is characterized by the adaptation to terminal Pleistocene environments and by the exploitation of big game fauna. The presence of Paleoindian hunters in the Uinta Basin region is implied by the discovery of Clovis and Folsom fluted points (ca. 12,000 B.P. - 10,000 B.P.), as well as the more recent Plano Complex lanceolate points (ca. 10,000 B.P. - 7,000 B.P.). Near the project area, a variety of Paleoindian projectile points have been documented, including Goshen, Alberta, and Midland styles (Hauck).

The Archaic stage (ca. 8,000 B.P.-1,500 B.P.) is characterized by the dependence on a foraging subsistence, with peoples seasonally exploiting a wide spectrum of plant and animal species in different ecozones. The shift to an Archaic lifeway was marked by the appearance of new projectile point types, and the development of the atlatl, perhaps in response to a need to pursue smaller and faster game (Holmer 1986). In the Uinta Basin, evidence of Early Archaic presence is relatively sparse compared to the subsequent Middle and Late Archaic periods. Early Archaic (ca. 6000-3000 B.C.) sites in the Basin include sand dune sites and rockshelters primarily clustered in the lower White River drainage (Spangler 1995:373). Early Archaic projectile points recovered from Uinta Basin contexts include Pinto Series, Humboldt, Elko Series, Northern Side-notched, Hawken Side-notched, Sudden Side-notched and Rocker Base Side-notched points. Excavated sites in the area with Early Archaic components include Deluge Shelter in Dinosaur National Monument, and open campsites along the Green River and on the Diamond Mountain

Figure 1. *continued...*

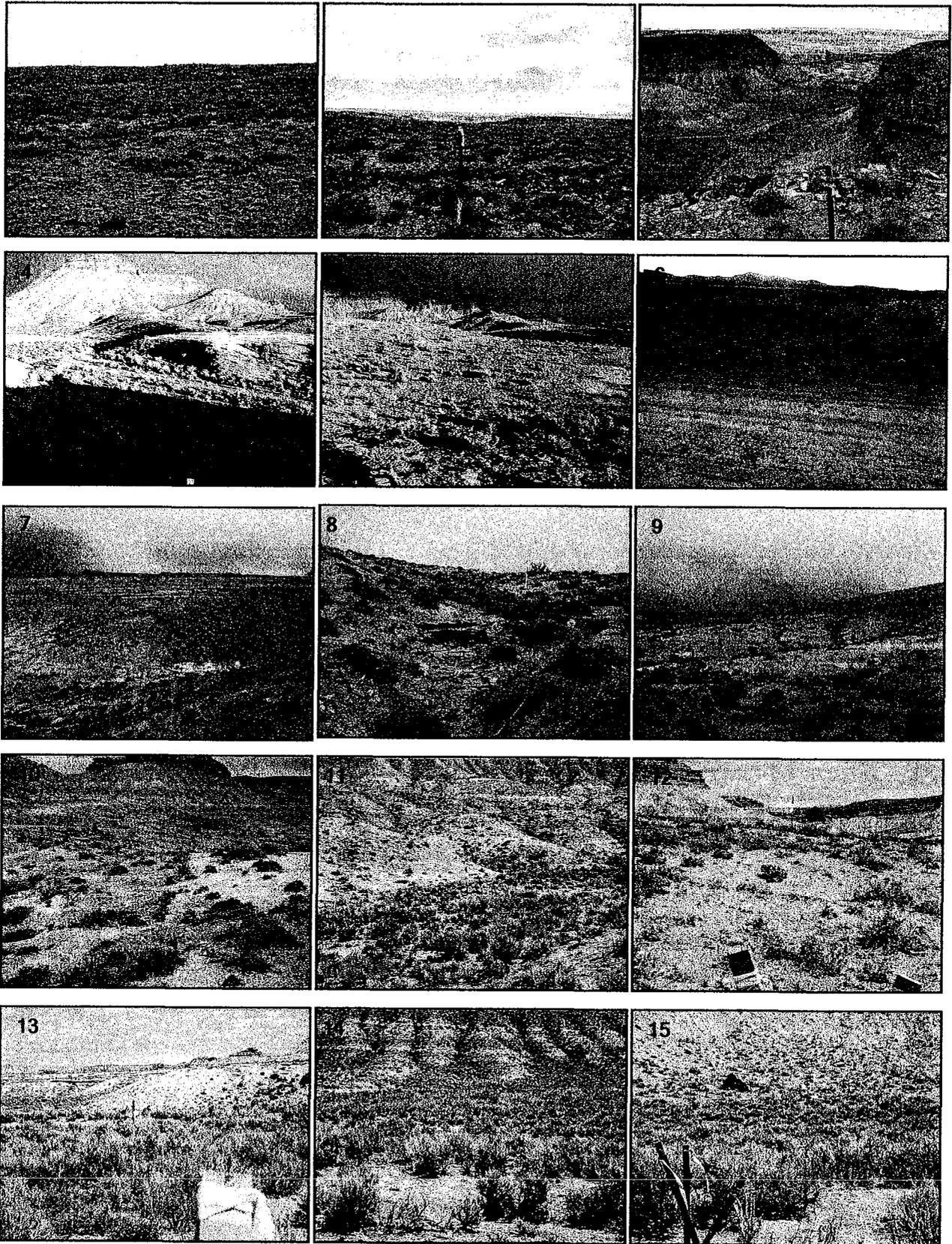
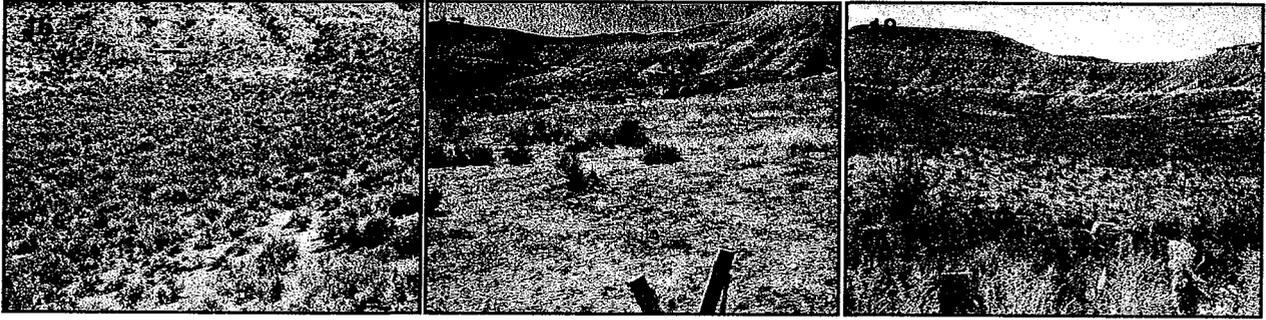


Figure 1. *continued...*



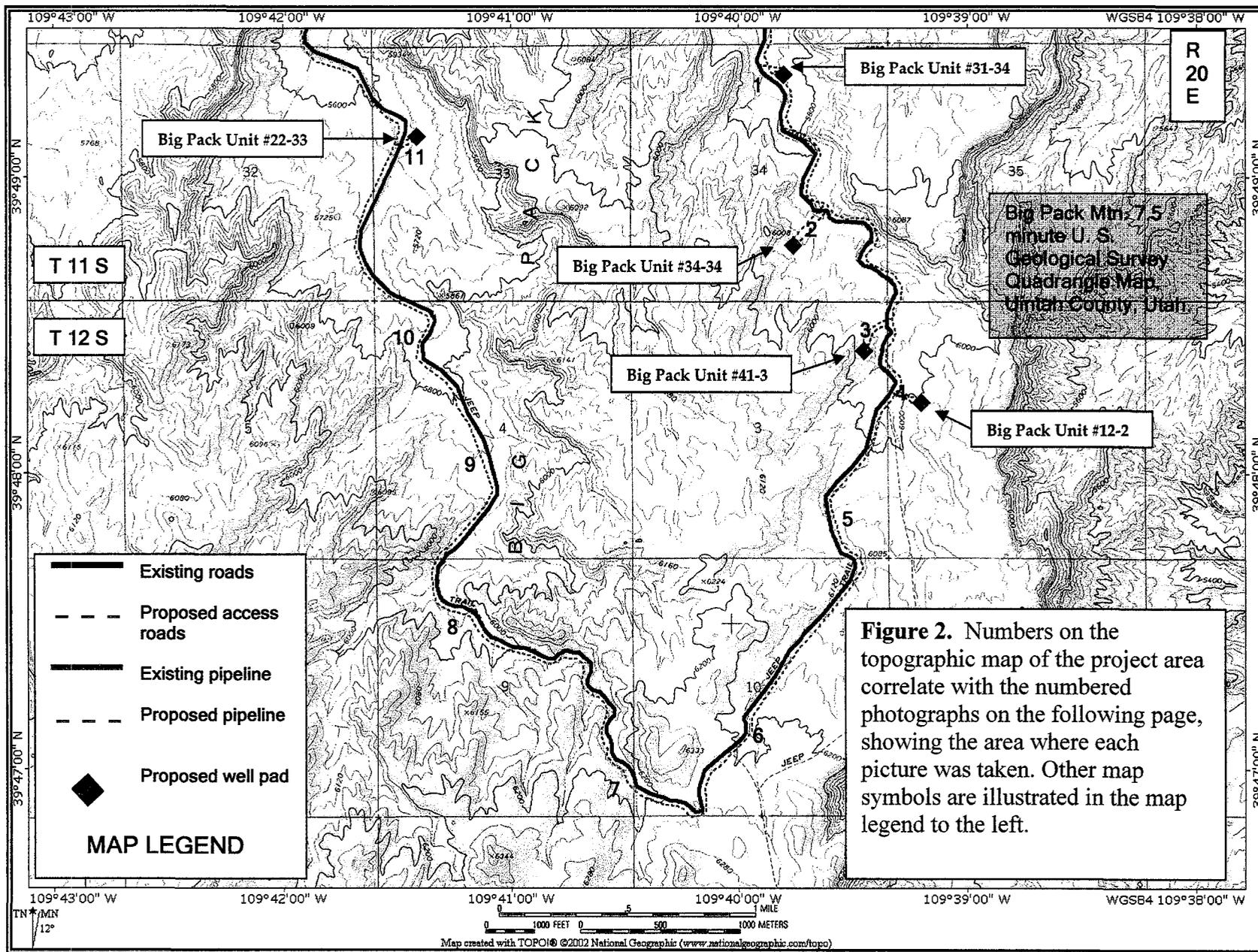
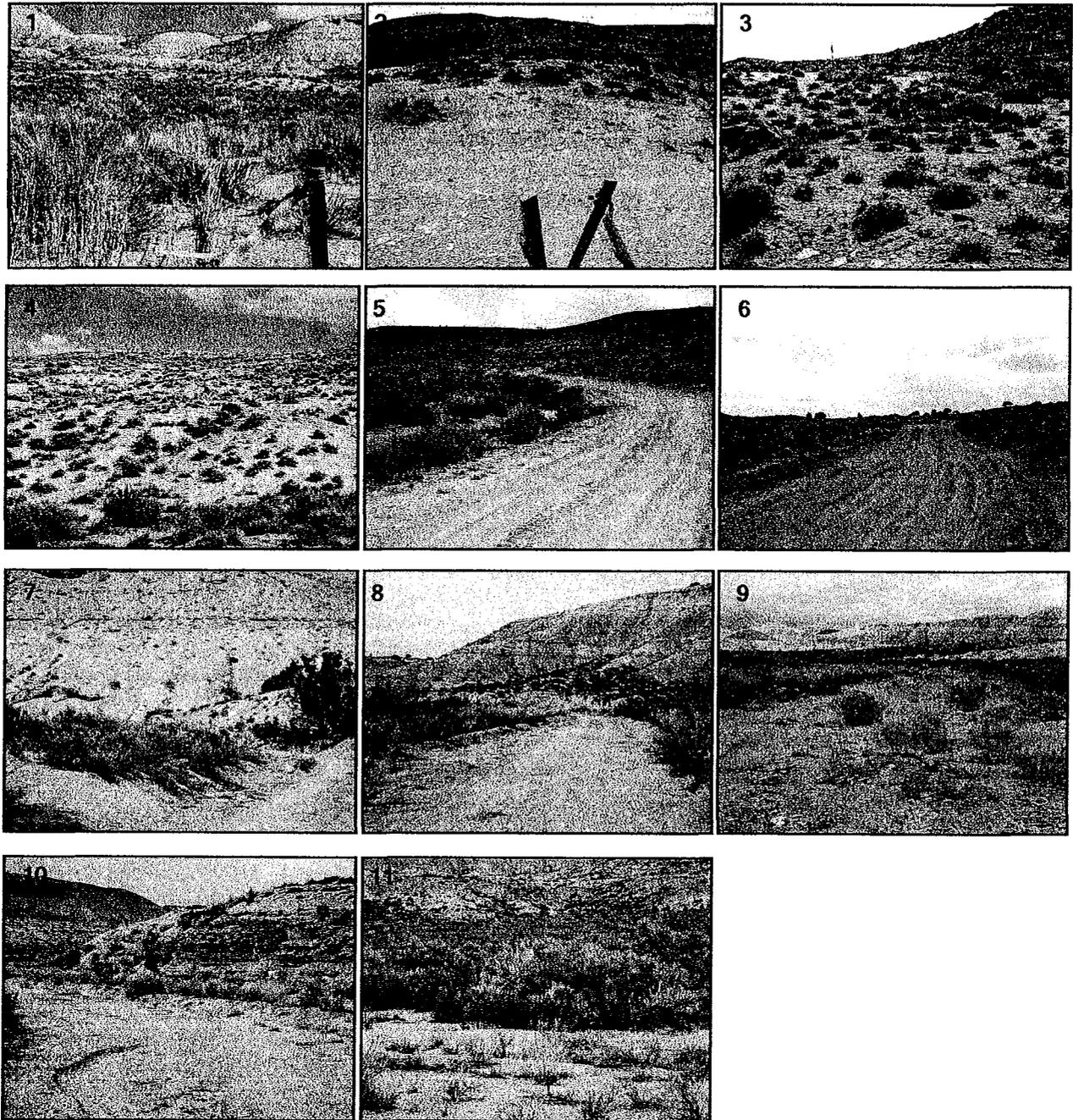


Figure 2. continued...



REFERENCES CITED

- Abbott, W., 1957, Tertiary of the Uinta Basin: Intermountain Assoc. Petroleum Geologists Guidebook, Eighth Ann. Field Conf., p. 102-109.
- Betts, C. W., 1871, The Yale College expedition of 1870: Harper's New Monthly Magazine, v. 43, p. 663-671.
- Black, C. C. and Dawson, M. R., 1966, A Review of Late Eocene Mammalian Faunas from North America: American Journal of Science, v. 264, p. 321-349.
- Bradley, W. H., 1931, Origin and microfossils of the oil shale of the Green River Formation of Colorado and Utah: U.S. Geological Survey Professional Paper 168, 58 p.
- Bryant, B., Naeser C. W., Marvin R. F., Mahner H. H., 1989, Cretaceous and Paleogene Sedimentary Rocks and Isotopic Ages of Paleogene Tuffs, Uinta basin, Utah. And Ages of Late Paleogene and Neogene Tuffs and the Beginning of Rapid Regional Extension, Eastern Boundary of the Basin and Range Province near Salt lake City, Utah: In: Evolution of Sedimentary basins-Uinta and Piceance Basins. U. S. Geological Survey Bulletin 1787-J, K.
- Cashion, W. B., and Donnell, J. R., 1974, Revision of nomenclature of the upper part of the Green River Formation, Piceance Creek Basin, Colorado, and eastern Uinta Basin, Utah: U.S. Geological Survey Bulletin 1394-G, 9 p.
- Dane, C. H., 1955, Stratigraphic and Facies Relationships of the Upper Part of the Green River Formation and the Lower Part of the Uinta Formation in Duchesne, Uintah, and Wasatch Counties, Utah: U. S. Geol. Survey Oil and Gas Investigations Prelim., chart 52.
- Flynn, J. J., 1986, Correlation and geochronology of middle Eocene strata from the western United States: Palaeogeographic, Palaeoclimatology, Palaeoecology v, 55, p. 335-406.
- Hamblin, A. H. and Miller, W. E., 1987, Paleogeography and Paleoecology of the Myton Pocket, Uinta Basin, Utah (Uinta Formation-Upper Eocene): Brigham Young University Geology Studies, vol. 34, p 33-60.
- Kay, J. L., 1934, Tertiary formations of the Uinta Basin, Utah: Annals of Carnegie Museum, v. 23, p. 357-371.
- Marsell, R. E., 1964, Geomorphology of the Uinta Basin-A Brief Sketch: Thirteenth Annual Field Conference. Association of Petroleum Geologists, p.34-46.

- Marsh, O. C., 1871, On the geology of the Eastern Uintah Mountains: American Journal of Science and Arts, v. 1, p. 1-8.
- _____ 1875a, Ancient lake basins of the Rocky Mountain region: American Journal of Science and Arts, v. 9, p. 49-52.
- _____ 1875b, Notice of new Tertiary mammals, IV: American Journal of Science and Arts, Third Series, v. 9, p. 239-250.
- Osborn, H. F., 1895, Fossil mammals of the Uinta beds, expedition of 1894: American Museum of Natural History Bulletin, v. 7, p. 71-106.
- _____ 1929, The Titanotheres of Ancient Wyoming, Dakota and Nebraska: Monograph of the U. S. Geological Survey, v. 55, p. 1-953.
- Peterson, O. A. and Kay, J. L., 1931, The Upper Uinta Formation of Northeastern Utah: Annals of the Carnegie Museum, v. 20, p. 293-306.
- Prothero, D. R., 1996, Magnetic Stratigraphy and biostratigraphy of the middle Eocene Uinta Formation, Uinta Basin, Utah, *in* Prothero, D. R., and Emry, R. J. editors, The Terrestrial Eocene-Oligocene Transition in North America, p. 3-24.
- Rasmussen, D. T., Conroy, G. C., Friscia, A. R., Townsend, K. E. and Kinkel, M. D., 1999, Mammals of the middle Eocene Uinta Formation: Vertebrate Paleontology of Utah, p. 401-420.
- Riggs, E. S., 1912. New or Little Known Titanotheres from the Lower Uintah Formations: Field Museum of Natural History Geological Series, v, 159, p.17-41.
- Ryder, R. T., Fouch, T. D., Elison, J. H., 1976, Early Tertiary sedimentation in the western Uinta Basin, Utah: Geological Society of America Bulletin v. 87, p. 496-512.
- Stucky, R. K., 1992, Mammalian faunas in North America of Bridgerian to early Arikareean "age" (Eocene and Oligocene), *in* Prothero, D. R., and Berggren, W. A., eds., Eocene-Oligocene climatic and biotic evolution: Princeton University Press, p. 464-493.
- Weiss, M. P., Witkind, I. J., and Cashion, W. B., 1990. Geologic map of the Price 30' x 60' quadrangle, Carbon, Duchesne, Uintah, Utah, and Wasatch counties, Utah: Department of the Interior U.S. Geological Survey Miscellaneous Investigations Series Map I-1981.
- Wood, H. E., 1934, Revision of the Hyrachyidae: American Museum of Natural History Bulletin, v. 67, p. 181-295.
- _____ and others, 1941, Nomenclature and Correlation of the North America Continental Tertiary: Geol. Soc. Amer. Bull., v. 52, no. 1, Jan. 1, p. 1-48.

LOCATION

The proposed well pads and their associated access roads and pipelines for "Big Pack Units #21-15, 12-15, 14-15, 23-20, 14-20, 21-22, 32-22, 34-22, 21-27, 24-27, 32-29, 22-33, 31-34, & 34-34" (Sec. 15, 20, 22, 27, 29, 32-34 & 35, T 11 S, R 20 E); "Big Pack #12-2 & 41-3" (Sec. 2-4 & 9-10, T 12 S, R 20 E); and pipeline (Sec. 10-11 & 13-15, T 11 S, R 20 E) & (Sec. 17 & 18, T 11 S, R 21 E) are on BLM land and on land managed by the State of Utah Trust Lands Administration (SITLA) in the Willow Creek and Big Pack Mountain area some 31-34 miles southeast of Ouray, Utah. The project area can be found on the Big Pack Mtn. & Big Pack Mtn. SE 7.5 minute U. S. Geological Survey Quadrangle Maps, Uintah County, Utah.

PREVIOUS WORK

The basins of western North America have long produced some of the richest fossil collections in the world. Early Cenozoic sediments are especially well represented throughout the western interior. Paleontologists started field work in Utah's Uinta Basin as early as 1870 (Betts, 1871; Marsh, 1871, 1875a, 1875b). The Uinta Basin is located in the northeastern corner of Utah and covers approximately 31,000 sq. km (12,000 sq. miles) and ranges in elevation from 1,465 to 2,130 m (4,800 to 7,000 ft) (Marsell, 1964; Hamblin et al., 1987). Middle to late Eocene time marked a period of dramatic change in the climate, flora, (Stucky, 1992), and fauna (Black and Dawson, 1966) of North America.

GEOLOGICAL AND PALEONTOLOGICAL OVERVIEW

Early in the geologic history of Utah, some 1,000 to 600 Ma, an east-west trending basin developed creating accommodation for 25,000 feet of siliclastics. Uplift of that filled-basin during the early Cenozoic formed the Uinta Mountains (Rasmussen et al., 1999). With the rise of the Uinta Mountains the asymmetrical synclinal Uinta Basin is thought to have formed through the effects of down warping in connection with the uplift. Throughout the Paleozoic and Mesozoic deposition fluctuated between marine and non-marine environments laying down a thick succession of sediments in the area now occupied by the Uinta Basin. Portions of these beds crop out on the margins of the basin due to tectonic events occurring during the late Mesozoic.

Early Tertiary Uinta Basin sediments were deposited in alternating lacustrine and fluvial environments. Large shallow lakes periodically covered most of the basin and surrounding areas during early to mid Eocene time (Abbott, 1957). These lacustrine sediments show up in the western part of the basin, dipping 2-3 degrees to the northeast and are lost in the subsurface on the east side. The increase of cross-bedded coarse-grained sandstone and conglomerates preserved in paleo-channels indicates a transition to a fluvial environment toward the end of the epoch.

Four Eocene formations are recognized in the Uinta Basin: the Wasatch, Green River, Uinta, and Duchesne River, respectively (Wood, 1941). The Uinta Formation is subdivided into two lithostratigraphic units namely: the Wagonhound Member (Wood, 1934), formerly known as Uinta A and B (Osborn, 1895, 1929), and the Myton Member previously regarded as the Uinta C.

The Green River Formation was traditionally subdivided up into four stratigraphic units namely from oldest to youngest the Douglas Creek, Garden Gulch, Parachute, and Evacuation Creek Members (Bradley, 1931). Later, many authors introduced varying terminology to describe the Green River Formation (Dane, 1955; Cashion and Donnell, 1974; Ryder et al., 1976; Bryant et al., 1989 and Weiss et al., 1990). When describing Green River beds in the eastern portion of the basin the member names will be used and in the western portion of the basin description by facies will be employed (Table 1). For detailed description of the Green River Formation facies see the above mentioned references.

Within the Uinta Basin in northeast Utah, the Uinta Formation in the western part of the basin is composed primarily of lacustrine sediments interfingering with over-bank deposits of silt and mudstone and westward flowing channel sands, and fluvial clays, muds and sands in the east (Bryant et al, 1990; Ryder et al, 1976). Stratigraphic work done by early geologists and paleontologists within the Uinta Formation focused on the definition of rock units and attempted to define a distinction between early and late Uintan faunas (Riggs, 1912; Peterson and Kay, 1931; Kay 1934). More recent work focused on magnetostratigraphy, radioscopic chronology, and continental biostratigraphy (Flynn, 1986; Prothero, 1996). Well known for its fossiliferous nature and distinctive mammalian fauna of mid-Eocene Age, the Uinta Formation is the type formation for the Uintan Land Mammal Age (Wood et al, 1941).

FIELD METHODS

In order to determine if the proposed access roads, pipelines and well pads from this project area contained any paleontological resources, a "drive-by" or brief reconnaissance was performed for this project. An on-site observation of the proposed areas undergoing surficial disturbance is necessary, because judgments made from topographic maps alone are often

| | | | |
|-----------------------------------|--|-----|---------------------------------|
| | Starr Flat Memb. Fluvial siltstone, sandstone, conglomerate | | Duchesne River Formation |
| | Lapoint Memb. Fluvial mudstone, claystone, sandstone | | |
| | Dry Gulch Creek Memb. Fluvial claystone, sandstone | | |
| | Brennan Basin Memb. Fluvial claystone, sandstone, pebbly sandstone | | |
| Bedded SS.-L. Facies | Myton Memb. Fluvial claystones, sandstones | "C" | Uinta Formation |
| | Wagonhound Memb. Fluvial siltstones, sandstones | "B" | |
| | Saline Facies | "A" | |
| Carbonate-Sapropelic Shale Facies | Evacuation Creek Memb. | | Green River Formation |
| | Parachute Creek Memb. | | |
| Fluvial Facies | Garden Gulch Memb. | | |
| Black Shale Facies | Douglas Creek Memb. | | |

Table 1. Uinta Basin stratigraphy

unreliable. Areas of low relief have potential to be erosional surfaces with the possibility of bearing fossil materials rather than surfaces covered by unconsolidated sediment or soils.

When found within the proposed construction areas, outcrops and erosional surfaces were checked to determine if fossils were present and to assess needs. Careful effort is made during surveys to identify and evaluate significant fossil materials or fossil horizons when they are found. Microvertebrates, although rare, are occasionally found in anthills or upon erosional surfaces, and are of particular importance.

PROJECT AREA

The project area is situated in the Green River Formation and Wagonhound Member (Uinta A & B) of the Uinta Formation. The following list provides a description for each individual proposed well site and its coupled access road and pipeline. A proposed pipeline which follows the existing road throughout the project area acts as the tie-line for all of the shorter planned pipelines leading into each individual proposed well (Figure 1-3). The line crosses over soil-covered ground as well as exposures of the Green River Formation. No fossils were seen along its length save *Chlorellopsis* algae and an occasional shale bed containing poorly preserved plant fragments. Continuous, slightly-dipping lacustrine beds of tan, brown, gray, white and green shales, siltstones and mudstones dominated the area.

Big Pack Units #21-15

The short proposed access and pipeline leading into this well site depart east off an existing road and the proposed tie-pipeline. The route climbs a small rise to where the well pad is staked on exposures of the Green River Formation (Evacuation Member) or the saline facies (Table 1). Brown, gray, and light green shales and mudstones dominate the area with a few channel beds of tan to orange fine- to medium-grained sandstone (Figure 1). These sandstones display ripple-marks and to a lesser extent, mud-cracks. No fossils were found.

Big Pack Units #12-15

Departing west/northwest off an existing road and the proposed tie pipeline running north/south through Sec. 15, T 11 S, R 20 E, the route enters the staked well pad from the southeast (Figure 1). The pad is staked on an east sloping hillside where exposures of gray and green siltstone and mudstones and white to orange fine-grained sandstones outcrop. No fossils were found.

Big Pack Units #14-15

The proposed well pad is staked on a flat area covered in soil and on the southwest side of the existing road running through Sec. 15, T 11 S, R 20 E (Figure 1). No fossils were found.

Big Pack Units #23-20

Heading east off the existing road and tie-pipeline running southeast/northwest through the corner of Sec. 20, T 11 S, R 20 E, the proposed route follows an ephemeral wash for a short distance before climbing a side hill. Hooking back to the northwest, the route enters the well pad area staked on the west sloping foothills of Big Pack Mountain which are cut deep by westward

drainages (Figure 3). Green, white, tan, and orange shales and mudstones are exposed in the well pad area and poorly preserved plant fragments were observed. No other fossil were found.

Big Pack Units #14-20

This well pad is staked on the west side of the established road that runs southeast/northwest through the corner of Sec. 20, T 11 S, R 20 E. The area is flat and soil-covered with a small crescent shaped hill bordering the western edge of the pad (Figure 3). No fossils were found.

Big Pack Units #21-22

The well pad is staked on the south side of the existing road and tie-pipeline in the northwest corner of Sec. 22, T 11 S, R 20 E (Figure 1). The area is flat and soil-covered and no fossils were found.

Big Pack Units #32-22

Staked on the east side of the existing road and tie-pipeline, the site is flat and soil-covered with blocks of tan medium- to coarse-grained sandstone eroded off the steep hill to the east (Figure 1). No fossils were found.

Big Pack Units #34-22

Veering southeast off the existing road and tie-pipeline, the proposed access road and pipeline for this well location edge along a side hill to where the proposed well pad is staked (Figure 1). The pad is situated on soil-covered ground which slopes to the east/northeast. No fossils were found.

Big Pack Units #21-27

Heading southwest off the existing road and tie-pipeline, the proposed access road and pipeline cross an ephemeral wash and then along the foot of a tall cliffed hill to the north/northwest to where the well pad is staked (Figure 1). The pad is covered in thin, poor soil with large tan cross-bedded sandstone blocks from the above cliff. No fossils were found.

Big Pack Units #24-27

Departing southwest off the existing road and tie-pipeline, the proposed access road and pipeline cross over flat soil-covered ground to where the well pad is staked (Figure 1). The well pad is also flat and covered in soil. No fossils were found.

Big Pack Units #32-29

The short proposed access road and pipeline sweep northwest off the existing road and tie-pipeline to the soil-covered well pad (Figure 3). No fossils were found.

Big Pack Units #22-33

Veering northeast off the existing road and tie-pipeline, the short proposed access road and pipeline enter the flat soil-covered well pad area. No fossils were found.

Big Pack Units #31-34

The proposed well pad is staked on the east side of the existing road and tie-pipeline where green, gray, and brown siltstones, shales, and mudstones area exposed (Figure 2). Small gypsum nodules are found on the pad but no fossils were seen.

Big Pack Units #34-34

Heading southwest off the existing road and tie-pipeline, the proposed access road and pipeline climb gradually to the well pad staked on the ridge of a hill with flanks to the southwest and northwest (Figure 2). The pad is exposed in brown, green, and white limy shale and mudstone. No fossils were found.

Big Pack Units #12-2

Departing southeast off the existing road and tie-pipeline, the proposed access road and pipeline climb steadily to the staked well pad (Figure 2). The westward sloping hill where the pad is staked is exposed in gray, brown, green, and white shales and mudstones. No fossils were found.

Big Pack Units #41-3

The proposed access road and pipeline for this location hook southwest off the existing road and tie-pipeline up to where the well pad is staked on an eastward sloping hillside (Figure 2). Green, white, and tan shales and mudstones area exposed on the pad, but no fossils were found.

Pipeline (Sec. 10-11 & 13-15, T 11 S R 20 E) & (Sec. 17 & 18, T 11 S, R 21 E)

The proposed pipeline which ties the proposed Big Pack Unit wells of this project to the existing pipeline running north/south on the high plateau above Willow Creek starts at a tie point in the central portion of Sec. 17, T 11 S, R 21 E (Figure 1). The proposed corridor heads west from there for roughly a half of a mile over soil-covered ground vegetated with sagebrush and grasses. Crossing over into Sec. 18, T 11 S, R 21 E, the route soon heads down off the edge of the east wall of Broome Canyon. Reaching the bottom of the canyon, the route bends slowly to the northwest continuing down slope till it crosses Willow Creek running north/south in Sec. 13, T 11 S, R 20 E. Crossing over private pasture land the route then continues on for around a mile and a half over hilly terrain exposed in sandstones, siltstones, shales, and mudstones of the Green River Formation or saline facies through the northeastern corner of Sec. 14, T 11 S, R 20 E, crossing through the bottom of Sec. 11, T 11 S, R 20 E, until it reaches an existing road in the southeast corner of Sec. 10, T 11 S, R 20 E. From this point, the proposed pipeline route follows the existing road as it snakes west and then turns to the southwest to end at the tie point near Big Pack Unit #21-15 in the northern half of Sec. 15, T 11 S, R 20 E.

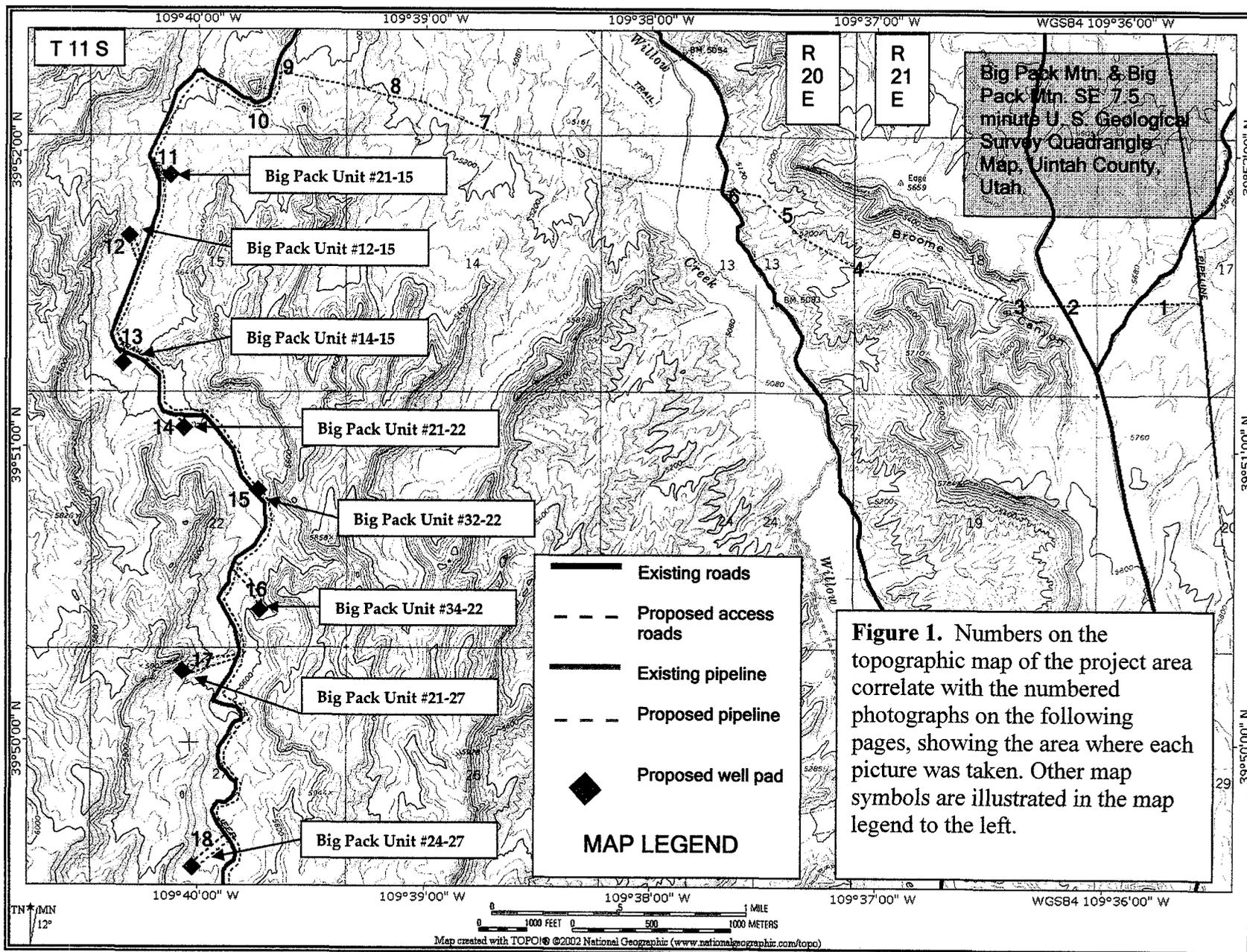
SURVEY RESULTS

| WELLS | GEOLOGY | PALEONTOLOGY |
|---|---|--|
| <p>“Big Pack Units #21-15, 12-15, 14-15, 23-20, 14-20, 21-22, 32-22, 34-22, 21-27, 24-27, 32-29, 22-33, 31-34, & 34-34” (Sec. 15, 20, 22, 27, 29, 32-34 & 35 T 11 S, R 20 E); “Big Pack #12-2 & 41-3” (Sec. 2-4 & 9-10, T 12 S, R 20 E)</p> | <p>All of the listed well are situated in the Green River Formation or saline facies which consists of continuous, slightly-dipping lacustrine beds of tan, brown, gray, white and green shales, siltstones and mudstones</p> | <p>No fossils were found. Condition 3.</p> |
| <p>Pipeline (Sec. 10-11 & 13-15, T 11 S R 20 E) & (Sec. 17 & 18, T 11 S, R 21 E)</p> | <p>The proposed corridor heads west from there for roughly a half of a mile over soil-covered ground vegetated with sagebrush and grasses. Crossing over private pasture land the route then continues on for around a mile and a half over hilly terrain exposed in sandstones, siltstones, shales, and mudstones of the Green River Formation or saline facies.</p> | <p>No fossils were found. Condition 3.</p> |

RECOMMENDATIONS

The “drive-by’s” and reconnaissance surveys for the proposed wells and their associated access roads and pipelines “Big Pack Units #21-15, 12-15, 14-15, 23-20, 14-20, 21-22, 32-22, 34-22, 21-27, 24-27, 32-29, 22-33, 31-34, & 34-34” (Sec. 15, 20, 22, 27, 29, 32-34 & 35 T 11 S, R 20 E); “Big Pack #12-2 & 41-3” (Sec. 2-4 & 9-10, T 12 S, R 20 E); and pipeline (Sec. 10-11 & 13-15, T 11 S R 20 E) & (Sec. 17 & 18, T 11 S, R 21 E) were brief. The areas examined showed no signs of vertebrate fossil material inside the proposed construction site. Therefore, we recommend that no paleontological limitation should be imposed upon construction related to the development of the well pads, access roads, and pipeline corridors within the project areas covered in this report.

However, if vertebrate fossil(s) are found during construction within the project area, recommendations are that a paleontologist is immediately notified in order to collect fossil materials in danger of being destroyed. Any vertebrate fossils found should be carefully moved outside of the construction areas to be check by a permitted paleontologist.



Plateau (Spangler 1995:374). The Middle Archaic (ca. 3000-500 B.C.) is characterized by improved climatic conditions and an increase in human population on the northern Colorado Plateau. Several stratified Middle Archaic sites have been excavated and dozens of sites have been documented in the Uinta Basin. Middle Archaic sites in the area reflect cultural influences from the Plains, although a Great Basin and/or northern Colorado Plateau influence is represented in the continuation of the Elko Series projectile points. Subsistence data from Middle Archaic components indicate gathering and processing of plants as well as faunal exploitation (e.g., mule deer, antelope, bighorn sheep, cottontail rabbit, muskrat, prairie dog, beaver and birds). The Late Archaic period (ca. 500 B.C.-A.D. 550) in the Uinta Basin is distinguished by the continuation of Elko Series projectile points with the addition of semi-subterranean residential structures at base camps. By about A.D. 100, maize horticulture and Rose Springs arrow points had been added to the Archaic lifeway. In the Uinta Basin, the earliest evidence of Late Archaic architecture occurs at the Cocklebur Wash Site (42Un1476) where a temporary structure, probably a brush shelter, yielded a date of 316 B.C. (Tucker 1986). The structure was probably associated with seasonal procurement of wild floral resources gathered along Cliff Creek. The Formative stage (A.D. 500-1300) is recognized in the area as the Uinta Fremont as first defined by Marwitt (1970). This stage is characterized by a reliance upon domesticated corn and squash, increasing sedentism, and in its later periods, substantial habitation structures, pottery, and bow and arrow weapon technology. Based on the evidence from Caldwell Village, Boundary Village, Deluge Shelter, Mantles Cave and others, the temporal range of the Uinta Fremont appears to be from A.D. 650 to 950. This variant is characterized by shallow, saucer-shaped pithouse structures with randomly placed postholes and off-center firepits, some of which were adobe-rimmed. Traits considered unique or predominate to the Uinta Basin include calcite-tempered pottery, two-handled wide-mouth vessels, Utah type metates, the use of gilsonite for pottery repair, settlement on tops of buttes and large-shouldered bifaces (Shields 1970).

Archaeological evidence suggests that Numic peoples appeared in east-central Utah at approximately A.D. 1100 or shortly before the disappearance of Formative-stage peoples (Reed 1994). The archaeological remains of Numic-speaking Utes consist primarily of lithic scatters with low quantities of brown ware ceramics, rock art, and occasional wickiups. Rock art has been defined by Cole (1990) as either Early Historic Ute Indian Style (A.D. 1600 to 1830) or Late Historic Ute Indian Style (A.D. 1830 to 1880). The brown ware ceramics appear to be the most reliable indicator of cultural affiliation, as Desert Side-notched and Cottonwood Triangular points were manufactured by other cultural groups beside the Ute (Horn, Reed, and Chandler 1994:130). The Ute appear to have been hunters and gatherers who exploited various fauna and flora resources. According to macrobotanical and faunal data from dated components, deer, elk, pronghorn, bison, and small game were acquired (Reed 1994:191). Plant materials thought to have been exploited for food include goosefoot, grass seeds, pinyon nuts, juniper berries, squawbush berries and leaves, hackberry seeds and possibly saltbush seeds, knotweed, chokecherry, and chickweed (Reed 1994:191).

The cultural history of the Eastern Ute, comprising the bands living east of the Green River, has been divided into four phases (Reed 1988). The earliest and most tenuous phase is the Chipeta Phase, dated between ca. 1250 and 1400. Diagnostic artifacts include Desert Side-notched, Cottonwood Triangular, and small corner-notched arrow points, and possibly Shoshonean knives. The Canalla phase (ca. A.D. 1400-1650) designates the period between the appearance of well-dated Uncompahgre brown ware ceramics and the adoption of an equestrian lifeway. Diagnostic artifacts include Uncompahgre Brown Ware ceramics, Desert Side-notched and Cottonwood Triangular points, and Shoshonean knives. The pedestrian hunter and gatherers

probably lived in wickiups. Near the end of the phase, some groups may have obtained trade items from Spanish settlements in New Mexico (Horn, Reed, and Chandler 1994:131). The Antero phase (ca. A.D. 1650-1881) represents a shift to a fully equestrian lifestyle and integration of Euroamerican trade goods into Ute material culture. The horse permitted hunting of bison on the Plains and led to an increase in the importance of raiding for economic gain (Ibid 131). Euroamerican trade goods became important, and tepees as well as wickiups were inhabited. The early Utes in Uintah County were Uinta-ats, a small band of a few hundred members (Burton 1996:20). In pre-horse days, Ute family groups lived largely independently of others with key gathering, hunting, and fishing sites being communal and granted to all, within both the local and extralocal Ute communities (Ibid 340). According to Smith's (1974) informants both deer and buffalo were important game for the White River Ute band. Before the buffalo became extinct in the Uintah Basin in the 1830s, the Ute would make trips northeast of Fort Bridger in the vicinity of what is now Rock Springs and Green River, Wyoming using the horse to surround and drive the buffalo over a precipice (Callaway, Janetski, and Stewart 1986; Smith 1974). All Ute groups made tripod or conical houses with a three or four-pole foundation and a circular ground plan some 10 to 15 feet in diameter with covering brush or bark.

The first Euro-Americans in the Uinta Basin were Spanish missionaries, traveling between Santa Fe, New Mexico up through western Colorado, towards the Utah Valley, and on to California. In 1776, under the leadership of Fray Francisco Atanasio Dominguez and Fray Silvestre Velez de Escalante, the Spanish commenced to explore a northern route from Santa Fe to the garrison of Monterey on the California coast (Spangler et al. 1995). Euro-American traders were another early factor in the history of the Uinta Basin. Some of these were Spaniards, who continued to visit the region until the Mexican war of independence in 1821, when most Spanish were expelled from the Southwest. It was the beaver trade in the early part of the nineteenth century, that cemented trade with Ute and Shoshone in the area, and resulted in the establishment of trading posts along the major rivers in the area, including the Duchesne, Green, and Uinta (Ibid 1995).

The settlement of the Uinta Basin differs from that of much of Utah in that early settlement occurred around Indian "agencies" assigned to the Uinta and Ouray Reservations, rather than under the direction of the Mormon church (Spangler et al. 1995). Early scouting parties sent out by the Mormon church had deemed the area unfit for settlers, and it was not until later that the region began to be homesteaded. In 1861, President Lincoln established the Uintah Indian Reservation, which was recognized by an act of Congress in 1864 (Burton 1996). The Indian agencies consisted of cabins and a trading post with farms cropping up around the agency, and were directed by a government Indian agent. The first agency was constructed at the mouth of Daniels Canyon in 1864, and was moved several times before 1868. In 1880 the White River Utes and the Uncompahgre Utes were forced to move to an adjacent area of land, southeast of the Uintah Reservation, and within a few years, the reservations were combined into the Uintah-Ouray Reservation.

By 1876, only a handful of ranchers, had settled the area, to be joined that year by a group of Mormons. They formed a settlement around the ranch of Pardon Dodds, an Indian agent, located in Dry Fork Canyon; later to become known as Old Ashley Town (Burton 1996). Another small group of Mormon settlers arrived in 1878, camping near the confluence of Ashley Creek, and naming their settlement Incline. In 1878, additional Mormon settlers ventured into the area; locating near what is today Vernal. Myton, located to the northeast of the project area, started as a trading post on the Uintah Indian Reservation sometime in the mid-1880s. The trading post served a small segment of the Indian population until 1886, when the army, as part of building the road between

Price and the newly established Fort Duchesne, built a bridge over the Duchesne River (Barton 1998:154). Myton was originally known as Bridge, and quickly changed from a small, bustling way-station and Indian trading post to a town of tents and a few wooden buildings prior to the opening of the Uintah Indian Reservation around 1905. The settlement attracted people from various parts of the world including Denmark, England, Switzerland, Sweden, Wales, and Germany, as well as many states of the Union (Ibid 156).

Livestock was a primary industry in the region from early on, along with agriculture, timbering, mining, bee keeping, and freighting (Burton 1996). Most of the early Mormon settlers had only a few head of cattle, that were grazed in cooperative herds on shared pasture lands, however, large herds of cattle had been seasonally grazed in the region from as early as the 1850s (Ibid 108). Before the early 1930s, grazing in the Tavaputs Plateau region, at the southern edge of the Uintah Basin, was mostly unregulated. This, combined with the lush grassland environment of the area at the time, attracted many ranchers with their cattle, horses, and sheep (Barton 1998). By 1893, a record number of cattle were being sold. Sheep quickly became an important commodity, after their introduction to the region in 1879, and by the early 1890s, more sheep were being ranged in the region than cattle (Burton 1996). By 1935, herds of both cattle and sheep were being decreased to halt overgrazing. In 1996, only two large, year-round herds remained in Uintah County, although small farms and ranches in the region still keep small quantities of stock animals.

SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. The pipeline and access corridors were examined to a width of 100 ft for cultural resources by the archaeologists walking parallel transects spaced no more than 10 m (30 ft) apart. At the proposed well locations, a 10 acre square parcel was defined, centered on the well pad center stake. The interior of the well location was examined for cultural resources by the archaeologist walking parallel transects spaced no more than 10 meters apart. Ground visibility was considered good. A total of 437 acres was inventoried with 408 acres occurring on lands administered by the Bureau of Land Management (BLM) and an additional 19 acres occurring on lands administered by the School and Institutional Trust Lands Administration (SITLA).

Cultural resources were recorded either as archaeological sites. Archaeological sites are defined as spatially definable areas with ten or more artifacts and/or features. Sites were documented by the archaeologists walking transects across the site, spaced no more than 3 m (10 ft) apart and marking the locations of cultural materials with pinflags. This procedure allowed clear definition of site boundaries and artifact concentrations. At the completion of the surface inspection, a Trimble G.P.S. unit was employed to point-provenience diagnostic artifacts and other relevant features in reference to the site datum, a steel rebar stamped with a temporary site number. Archaeological sites were plotted on a 7.5' USGS quadrangle, photographed, and documented with site data entered on an Intermountain Antiquities Computer System (IMACS, 1990 version) inventory form (Appendix A).

INVENTORY RESULTS

The inventory of Mak-J Energy's 16 proposed well locations resulted in the documentation of 15 new archaeological sites (42Un4728 through 42Un4742) No previously documented archaeological sites are located within the immediate project area.

Archaeological Sites

Smithsonian Site No.: 42Un4728
Temporary Site No.: MOAC 05-45-20
Legal Description: T 11S, R 20E, Sec. 15
NRHP Eligibility: Not Eligible

Description: This is a historic temporary camp located on a ridge just west of a jeep trail. The site consists of two features and a small artifact scatter. Artifacts are dominated by tin cans (N=13) which include four hole-in-cap cans, several hole-in-top milk cans, and two sanitary food containers. Miscellaneous items consist of a steel screw cap, bailing wire, and a metal strap piece. Feature A is a stone ring fire pit measuring 4' x 3'. The ring is constructed of 14 sandstone blocks varying from 6" to 18" in size, situated on the edge of a small drainage. The stones exhibit red oxidation, although no charcoal or soil staining is present. Feature B is a stone ring fire pit measuring 4' x 2 ½'. The pit is constructed of 15 sandstone slabs varying from 4" to 18" in size situated adjacent to a small drainage. The slabs exhibit red oxidation, although no charcoal or soil staining is visible. The artifacts exhibit two occupations. The earliest is represented by the hole-in-cap cans (1885-1903) and the more recent is exhibited by the hole-in-top milk cans stamped with Punch Here (1935-1945).

Smithsonian Site No.: 42Un4729
Temporary Site No.: MOAC 05-45-19
Legal Description: T 11S, R 20E, Sec. 34
NRHP Eligibility: Not Eligible

Description: This is a short-term range camp located on a low ridge adjacent to a jeep trail. Cultural materials are limited to 10 sanitary (food and tobacco and hole-in-top milk) tin cans, a galvanized pail with handle, three pieces of milled wood, one key strip coffee can lid, and two metal fragments. Approximately 50 wood chips are scattered throughout the site suggesting a home-on-range temporary camp. Several hole-in-top cans stamped with the "Punch Here" lend a date range between 1935 and 1945.

Smithsonian Site No.: 42Un4730
Temporary Site No.: MOAC 05-45-18
Legal Description: T 11S, R 20E, Sec. 35
NRHP Eligibility: Not Eligible

Description: This is a short term range camp located on a small hill just west of a jeep trail. The site consists of a low density artifact scatter and two features. The artifact assemblage is limited to tin cans (N=23) which include hole-in-top milk cans with ice-pick openings, sanitary commodity containers (food and coffee), an oil can (Valvoline), and tobacco tins. Feature A is a wood chip scatter comprised of approximately 40 wood chips spanning a 7' x 7' area. The largest chip in the feature measures 8" in length. The majority of the wood chips, however, are much smaller with the

average length being 3". No charcoal or soil staining are visible in association with this feature. Feature B is a fire ring comprised of at least 5 partially buried sandstone slabs, two of the slabs are upright. The average size of slabs in the feature is 14" x 8". The feature is filled by erosion and a greasewood bush grows inside. None of the slabs exhibit oxidation on the visible portions and no charcoal or soil staining is present. Tin can chronologies suggest that this may be a dual occupation site with one occupation dating from 1917-1929 and a brief second occupation post 1948.

Smithsonian Site No.: 42Un4731
Temporary Site No.: MOAC 05-45-17
Legal Description: T 12S, R 20E, Sec. 3
NRHP Eligibility: Not Eligible

Description: This is a historic temporary camp consisting of two features and a small artifact assemblage situated atop and on the eastern slope of a ridge just west of a dirt road. Artifacts are dominated by tin cans (N=14) which include hole-in-top milk cans, sanitary food containers, a spice tin, and tobacco cans. Feature A is a fire ring consisting of at least four partially buried sandstone slabs. The upper portion of the slabs occur level with mean ground surface. A small sagebrush now grows within the fire ring. All of the visible slabs exhibit red oxidation on their interior facing sides and one has cracked into three separate sections. The average slab size is 15" x 12". No charcoal, ash or soil staining are visible. Feature B is a low density juniper wood chip scatter which spans an area of 8' x 8' and is comprised of approximately 50 wood chips varying in length from 9" to small splinters with the average length being 5". No charcoal, ash or soil staining are seen in association with this feature. Based on tin can chronologies the site is likely to date from 1935 to 1945.

Smithsonian Site No.: 42Un4732
Temporary Site No.: MOAC 05-45-11
Legal Description: T 12S, R 20E, Sec. 3
NRHP Eligibility: Not Eligible

Description: This site is a historic temporary camp consisting of one feature and a low density artifact scatter located just east of a dirt road. Cultural materials are dominated by tin cans (N=22) which include hole-in-top milk cans with ice-pick openings (most stamped with Punch Here), and sanitary commodity cans (Spam and Maxwell House Coffee). Feature A consists of a low density wood chip scatter comprised of approximately 100 wood chips spanning an area of 12' x 12'. Wood chip sizes vary from 2' axe-cut logs to small splinters with an average length of 10". The scatter is situated atop a low lying hill and has partially eroded downslope. No ash, charcoal or soil staining is associated with this feature. There may be two occupations at this camp based on the tin can chronologies. The earliest dates between 1917 and 1929 with the most recent dating from 1935 to 1945.

Smithsonian Site No.: 42Un4733
Temporary Site No.: MOAC 05-45-M4
Legal Description: T 12S, R 20E, Sec. 10
NRHP Eligibility: Not Eligible

Description: This is an in-use corral with three additional features, and associated artifacts. Feature A is a corral which is constructed of vertically set axe-cut juniper logs and bailing wire. Three 2" x 4" milled lumber posts were added subsequent to the corral's original construction. The bailing wire that encompasses the corral is strung forming a 12" x 6" rectangular pattern. The wire is hung on the juniper logs and fastened with wire nails. A 10' wide gate opening is located on the

northeast side of the corral. The gate is constructed of only wire. One juniper post is offset approximately 4' from each side of the fence in the westernmost inner corner of the corral. An additional length of rolled up bailing wire is present here and is arranged to form a separate pen using the offset juniper log as a post. The excess tolled up wire can be used to adjust the size of the separate pen. The corrals height is approximately 5'-6' and appears to be still in occasional use. Modern trash is abundant around the corral. Three additional wood chip scatter features are located on the site. The site artifact assemblage includes jar lids, miscellaneous metal fragments of unknown function, glass bottles and jars, sanitary cans and hole-in-top cans. One "Punch Here" hole-in-top milk can dates from 1935 and 1945. Additional datable artifacts extend from 1945 to modern times.

Smithsonian Site No.: 42Un4734
Temporary Site No.: MOAC 05-45-7
Legal Description: T 12S, R 20E, Sec. 10
NRHP Eligibility: Not Eligible

Description: This site is a historic temporary camp consisting of one feature and a low density artifact scatter situated atop and on the northern slope of a small hill just south of a dirt road. Feature A consists of a sparse juniper wood chip scatter spanning an area of approximately 10' x 10' which contains 50-75 wood chips varying in length from 12" to small splinters with the average size being 6" in length. No ash, charcoal or soil staining are visibly associated with this feature. The sites artifact assemblage is comprised of sanitary cans, hole-in-top milk cans, a hole-in-cap can, tobacco tins, and a leather shoe strap. Tin can chronologies suggest a date range between 1903 and 1930.

Smithsonian Site No.: 42Un4735
Temporary Site No.: MOAC 05-45-M3
Legal Description: T 12S, R 20E, Sec. 9
NRHP Eligibility: Not Eligible

Description: This site is a medium density historic artifact scatter situated along a ridge slope. The site consists of axe-cut wood chips which are widely scattered across this site forming no discernible concentration, a shell button (9/16 in diameter), a piece of sheet metal of unknown function, two axe-cut poles (3' 10" in length), 25 clear glass fragments, a liquor bottle with an "Owens Illinois" trademark (1933 to 1954), a purple glass piece (1880-1917), sanitary tin cans, tobacco tins and hole-in-top milk cans.

Smithsonian Site No.: 42Un4736
Temporary Site No.: MOAC 05-45-3
Legal Description: T 12S, R 20E, Sec. 9
NRHP Eligibility: Not Eligible

Description: This is a historic temporary camp consisting of two features and a low density artifact scatter located just south of an east/west trending dirt road, at the base of a small hill. Feature A consists of a low density wood chip scatter which sparsely spans a 10' x 10' area. The scatter is comprised of approximately 75 juniper wood chips and 10 larger logs. The majority of the wood chips are much smaller averaging 3" in length. No charcoal, ash or soil staining are visible. Feature B is a deflated hearth with oxidized rock located on the southeastern side of a small drainage. Four sandstone slabs form the feature, two are situated side by side and one slab is placed on top with an additional slab situated just downslope. Approximately 20 small pieces of

fire-cracked rock are located downslope with light soil staining. The artifact assemblage is dominated by tin cans (N=7) which include sanitary commodity cans and hole-in-top milk cans. Also a red painted ceramic sherd was noted.. Hole-in-Top cans embossed with "Punch Here" suggest a date range between 1935 and 1945.

Smithsonian Site No.: 42Un4737
Temporary Site No.: MOAC 05-45-2
Legal Description: T 12S, R 20E, Sec. 9
NRHP Eligibility: Not Eligible

Description: This is a historic temporary camp consisting of two features and a low density artifact scatter situated on the south side of a dirt road immediately south of a prominent ridge. Feature A consists of two collapsed segments of a hand woven wire fence constructed of two sizes of bailing wire. Wire widths are 1/16" and 2/16" are the woven fence measured approximately 3' in height where discernible. Feature B is a medium density wood chip scatter consisting of approximately 200 juniper wood chips spanning a 6' x 8' area. Wood chips vary in length from 12" to small splinters with the average length being 6". Cultural materials include sanitary commodity cans, hole-in-top milk cans, a white enamel covered metal lid (5 1/4" in diameter), a galvanized metal tub (embossed with "ANTI WEDGE"), a rectangular metal cow bell, and a piece of bailing wire. Hole-in-top milk cans stamped with "Punch Here" suggest a date range between 1935 and 1945.

Smithsonian Site No.: 42Un4738
Temporary Site No.: MOAC 05-45-16
Legal Description: T 11S, R 20E, Sec. 29
NRHP Eligibility: Not Eligible

Description: This is a historic temporary camp consisting of three features and a medium density artifact scatter situated atop a low ridge just west of a dirt road. Feature A is a stove platform comprised of three sandstone slabs. Two of the slabs are situated 12" apart in a north-south alignment with the third located immediately west. Both the northern and western slabs exhibit red oxidation on their interior sides. No charcoal, ash or soil staining are associated with the feature. Feature B is a wood chip scatter spanning an area of approximately 10' x 10'. The scatter is comprised of 100+ juniper wood chips varying in size from 12" to small splinters with the average length being 5". No ash, charcoal or soil staining are associated with this feature. Feature C is a rock alignment consisting of 15 sandstone slabs situated in a semi-circular alignment beside a low ledge which rises approximately 12" above mean ground surface. Slabs in the alignment vary in size from 20" x 8" x 5" to 7" x 4" x 2". Five of the slabs exhibit red oxidation and five small pieces of fire-cracked rock occur within the alignment, although no charcoal or soil staining are present. Cultural materials are limited to a galvanized metal basin, a black enamel covered metal hair brush handle, plastic thongs (likely a portion of the hair brush), a modified metal barrel, an external friction lid, a galvanized nail, a rectangular oil can, an oval shaped tin (possibly talcum powder), an internal friction lard can, hole-in-top milk cans, sanitary commodity cans and tobacco tins. Based on hole-in-top cans the occupation dates from 1935 to 1945.

Smithsonian Site No.: 42Un4739
Temporary Site No.: MOAC 05-45-15
Legal Description: T 11S, R 20E, Sec. 29
NRHP Eligibility: Not Eligible

Description: This site is a low density historic artifact scatter situated immediately southeast of a low lying east/west trending ridge and just north of a dirt road. Cultural materials consist of sanitary

commodity containers, hole-in-top milk cans, a hole-in-cap can, one green glass shard, a tobacco tin, and a small bunch of wound bailing wire. The hole-in-top milk cans embossed with "Punch Here" suggests a date range of 1935 to 1945, although the hole-in-cap can may be earlier.

Smithsonian Site No.: 42Un4740
Temporary Site No.: MOAC 05-45-M2
Legal Description: T 11S, R 20E, Sec. 20
NRHP Eligibility: Not Eligible

Description: This is prospect pit which has been excavated into the slope of a ridge. The sandstone is shale-like and yellow brown in color. The pit appears to have been excavated by hand and exhibits straight, stair-stepped sides on it's southern edge. The pit is rectangular in shape and measures approximately 15' x 25', with a depth of 4'. Each of the stair-steps on the southern edge (three in total) measure 1 ½' in height. Back dirt from the prospect is eroding downslope to the north. One hole-in-top can comprised the site artifact assemblage. This can has a date range of 1917 to 1929.

Smithsonian Site No.: 42Un4741
Temporary Site No.: MOAC 05-45-M1
Legal Description: T 11S, R 20E, Sec. 20
NRHP Eligibility: Not Eligible

Description: This site is a historic temporary camp situated aside a drainage consisting of one feature and a small artifact scatter. Feature A is an axe-cut wood chip scatter comprised of approximately eight pieces of axe-cut wood spanning a 7' x 8' area. Wood chips in the scatter vary in size from 3" to 7". The sites artifact assemblage is comprised of seven hole-in-cap milk cans of two different sizes. Production of hole-in-cap cans ceased by 1914 hence the site likely dates before 1914.

Smithsonian Site No.: 42Un4742
Temporary Site No.: MOAC 05-45-12
Legal Description: T11S, R 20E, Sec. 20
NRHP Eligibility: Not Eligible

Description: This site is a low density artifact scatter situated just north of a small knoll on the east side of a dirt road. The sites artifact assemblage consists of sanitary commodity cans, a tobacco tin, hole-in-top milk cans, a metal pull-tab, and one oxidized sandstone slab. The hole-in-top cans embossed with "Punch Here" indicated a date between 1935 and 1945.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

The National Register Criteria for Evaluation of Significance and procedures for nominating cultural resources to the National Register of Historic Places (NRHP) are outlined in 36 CFR 60.4 as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, material, workmanship, feeling, and association, and that they:

- a)...are associated with events that have made a significant contribution to the broad patterns of our history; or
- b)...are associated with the lives of persons significant to our past; or
- c)...embody the distinctive characteristics of a type, period, or method of construction; or that represents the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d)...have yielded or may be likely to yield information important in prehistory or history.

The cultural resource inventory resulted in the documentation of 15 new historic sites (42Un4728 through 42Un4742). All of the newly documented sites are recommended not eligible to the NRHP because they lack additional research potential and are unlikely to contribute to the history of the area. Ten of these sites (42Un4728, 42Un4730, 42Un4731, 42Un4732, 42Un4734, 42Un4735, 42Un4736, 42Un4737, 42Un4738, and 42Un4741) are surficial historic temporary home-on-range camps with ephemeral features and limited artifact assemblages. Temporal indicators at most of these camps indicate an occupation between 1935 and 1945. Three of the sites (42Un4729, 42Un4739 and 42Un4742) are surficial low density historic artifact scatters which lack associated features. Site 42Un4740 is a prospector's pit with one tin can artifact and site 42Un4733 is a corral with axe-cut wood piles and a mixture of in-period and modern trash. Historic temporary camps are common site types to the area with minimal artifact classes (mostly tin cans). None of these sites are related to known historical events or important persons. Therefore, they do not add significant data to the historic research domains of the area beyond their present documentation.

Table 2. Cultural Resources, Location, NRHP Assessment, and Avoidance Recommendations

| Site Number | Legal Description | NRHP Assessment | Avoidance Recommendations |
|-------------|---|-----------------|---------------------------|
| 42Un4728 | SE, SW, NW of Section 15 T11S , R20E | Not Eligible | N/A |
| 42Un4729 | SE, NE, NE of Section 34 T11S , R20E | Not Eligible | N/A |
| 42Un4730 | SW, SW, SW of Section 35 T11S , R20E | Not Eligible | N/A |
| 42Un4731 | SE, NE, NE of Section 3 T12S , R20E | Not Eligible | N/A |
| 42Un4732 | NE, NE, SE of Section 3 T12S , R20E | Not Eligible | N/A |
| 42Un4733 | SW, SE, SW of Section 10 T12S, R20E | Not Eligible | N/A |
| 42Un4734 | SE, SW, SW of Section 10 T12S , R20E | Not Eligible | N/A |
| 42Un4735 | NE, SE, SE of Section 9 T12S, R20E | Not Eligible | N/A |
| 42Un4736 | NW, SE, NE of Section 9 T12S , R20E | Not Eligible | N/A |
| 42Un4737 | SW, NE, NW of Section 9 T12S , R20E | Not Eligible | N/A |
| 42Un4738 | SE, NW, SE of Section 29 T11S , R20E | Not Eligible | N/A |
| 42Un4739 | NE, SW, NE of Section 29 T11S , R20E | Not Eligible | N/A |
| 42Un4740 | SW, SE, SW of Section 20 T11S, R20E | Not Eligible | N/A |
| 42Un4741 | SW, NE, SW of Section 20 T11S, R20E | Not Eligible | N/A |
| 42Un4742 | SW, NW, SW & SE, NW, SW of Section 20 T11S , R20E | Not Eligible | N/A |

CONCLUSIONS AND RECOMMENDATIONS

The inventory of Mak-J Energy's 16 proposed well locations with access and pipeline corridors resulted in the documentation of 15 historic sites (42un4728 through 42Un4742). None of these sites are recommended as eligible to the NRHP and therefore no avoidance recommendations are proposed. On the basis of the findings, a recommendation of "no historic properties affected" pursuant to Section 106, CFR 800 is proposed for this project.

REFERENCES CITED

- Barton, J.D.
1998 *A History of Duchesne County*. Slat Lake City: Utah State Historical Society.
- Burton, D.K.
1996 *A History of Uintah County: Scratching the Surface*. Salt lake City: Utah State Historical Society.
- Callaway, D., J. Janetski, and O.C. Stewart
1986 Ute. In *Great Basin*, edited by Warren L. D'Azevedo, pp. 336-367. Handbook of North American Indians, Volume II: Great Basin, edited by William C. Sturtevant, Amithsonian Institution, Washington.
- Hauck F.
1986 Cultural Resource Evaluations of Three Proposed Well Locations in the Willow Creek - Bitter Creek Canyon Localities of Uintah County, Utah. Project No.U-85-AF-611b.
- 1998 *Cultural Resource Evaluation of Various Large Tracts in the Wells Draw to Pariette Bench Locality in Duchesne and Uintah Counties, Utah*. Archelological-Environmental Research Corporation, Bountiful, Utah. Report No. U-98-AF-0164b,s, available at the BLM Vernal Field Office, Vernal Utah.
- Holmer, R.
1986 Projectile Points of the Intermountain West. In *Anthropology of the Desert West: Essays in Honor of Jesse D. Jennings*, edited by Carol J. Condie and Don D. Fowler, pp. 89-116. *University of Utah Anthropological Papers* No. 110. Salt Lake City.
- Horn, J.C., A.D. Reed, and S.M. Chandler
1994 Grand Resource Area Class I Cultural Resource Inventory. Alpine Archaeological Consultants, Inc. Montrose. Bureau of Land Management, Moab, Utah.
- Marwitt, J.P.
1970 Median Village and Fremont Culture Regional Variation. *University of Utah Anthropological Papers* No. 95. Salt Lake City.

- Montgomery K. and J. Taylor
 2005 Cultural Resource Inventory of Mak-J Energy's Main Pipeline for Big Pack Mtn Well Locations, T 11S, R 20E and T 11S, R 21E, Uintah County, Utah. Project No. U-05-MQ-0096b.
- Reed A.D.
 1988 Ute Cultural Chronology. In *Archaeology of the Eastern Ute: A Symposium* edited by Paul R. Nickens, pp 79-101. Colorado Council of Professional Archaeologists Occasional Papers No. 1 Denver.
- 1994 The Numic Occupation of Western Colorado and Eastern Utah during the Prehistoric and Protohistoric Periods. In *Across the West: Human Population Movement and the Expansion of the Numa*, edited by D.B. Madsen and D. Rhode, pp. 188-199. University of Utah Press, Salt Lake City.
- Reynolds, W.E., C.ella N., Schandler M.
 1983 Cultural Resource Study on the White River Oil Shale Lease Lands in the Vernal District, Utah. Project No. U-83-CE-0499b
- Shields, W.F.
 1970 The Fremont Culture in the Uinta Basin. Paper presented at the Fremont Culture Symposium, 35th Annual Meeting of the Society for American Archaeology, Mexico City.
- Spangler, J.D.
 1995 Paradigms and Perspectives, A Class I Overview of Cultural Resources in the Uinta Basin and Tavaputs Plateau, Volume II. Uinta Research, Salt Lake City, Utah.
- Stokes, W.L.
 1986 *Geology of Utah*. Utah Museum of Natural History, University of Utah, Salt Lake City.
- Tate, M.J.
 1981a Cultural Resource Management Report of Lafkas Federal 1-3. Project No. U-81-PA-0715b.
- 1981b Summary Report of Inspection for Cultural Resources Hill Federal 1-10. Project No. U-81-PA-0663b.
- Tucker, G.C. Jr.
 1986 Results of Archaeological Investigations Along the Chevron CO-2/PO-4 Pipelines in Northeastern Utah and Northwestern Colorado. Manuscript on file, Bureau of Land Management, Vernal, Utah.

APPENDIX A

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM (IMACS)
SITE INVENTORY FORMS

On File At:

Utah Division of State History
Salt Lake City, Utah
and
Bureau of Land Management
Vernal Field Office

Paleontological Reconnaissance Report

Mak-J Energy's Proposed Well Pads, Access Roads, and Pipelines for Big Pack Units #21-15, 12-15, 14-15, 23-20, 14-20, 21-22, 32-22, 34-22, 21-27, 24-27, 32-29, 22-33, 31-34, & 34-34, (Sec. 15, 20, 22, 27, 29, 32-34 & 35, T 11 S, R 20 E); Big Pack #12-2 & 41-3 (Sec. 2-4 & 9-10, T 12 S, R 20 E); & Pipeline (Sec. 10-11 & 13-15, T 11 S, R 20 E) & (Sec. 17 & 18, T 11 S, R 21 E)

**Big Pack Mtn, & Big Pack Mtn, SE
Topographic Quadrangles
Uintah County, Utah**

March 31, 2005

Prepared by Stephen D. Sandau
Paleontologist for
Montgomery Archaeological Consultants
Box 147, 322 East 100 South
Moab, Utah 84532

INTRODUCTION

At the request of Todd McDonald of Mak-J Energy Company, and authorized by John Mayers of the BLM Vernal Field Office and James Kirkland of the Office of the State Paleontologist, a paleontological reconnaissance survey of Mak-J's proposed pipelines, well pads, and access roads for "Big Pack Units #21-15, 12-15, 14-15, 23-20, 14-20, 21-22, 32-22, 34-22, 21-27, 24-27, 32-29, 22-33, 31-34, & 34-34" (Sec. 15, 20, 22, 27, 29, 32-34 & 35 T 11 S, R 20 E); "Big Pack #12-2 & 41-3" (Sec. 2-4 & 9-10, T 12 S, R 20 E); and pipeline (Sec. 10-11 & 13-15, T 11 S R 20 E) & (Sec. 17 & 18, T 11 S, R 21 E) was conducted by Stephen Sandau on March 29 & 30, 2005. The reconnaissance survey was conducted under the Utah BLM Paleontological Resources Use Permit #UT-S-05-033 and the Utah Paleontological Investigations Permit #04-345. This survey to locate, identify and evaluate paleontological resources was done to meet requirements of the National Environmental Policy Act of 1969 and other State and Federal laws and regulations that protect paleontological resources.

FEDERAL AND STATE REQUIREMENTS

As mandated by the Federal and State government, paleontologically sensitive geologic formations on State lands that are considered for exchange or may be impacted due to ground disturbance require paleontological evaluation. This requirement complies with:

- 1) The National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321.et. Seq., P.L. 91-190);
- 2) The Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2743, 43 U.S.C. § 1701-1785, et. Seq., P.L. 94-579);
- 3) The National Historic preservation Act.16 U.S.C. § 470-1, P.L. 102-575 in conjunction with 42 U.S.C. § 5320; and
- 4) The Utah Geological Survey. S. C. A.: 63-73-1. (1-21) and U.C.A.: 53B-17-603.

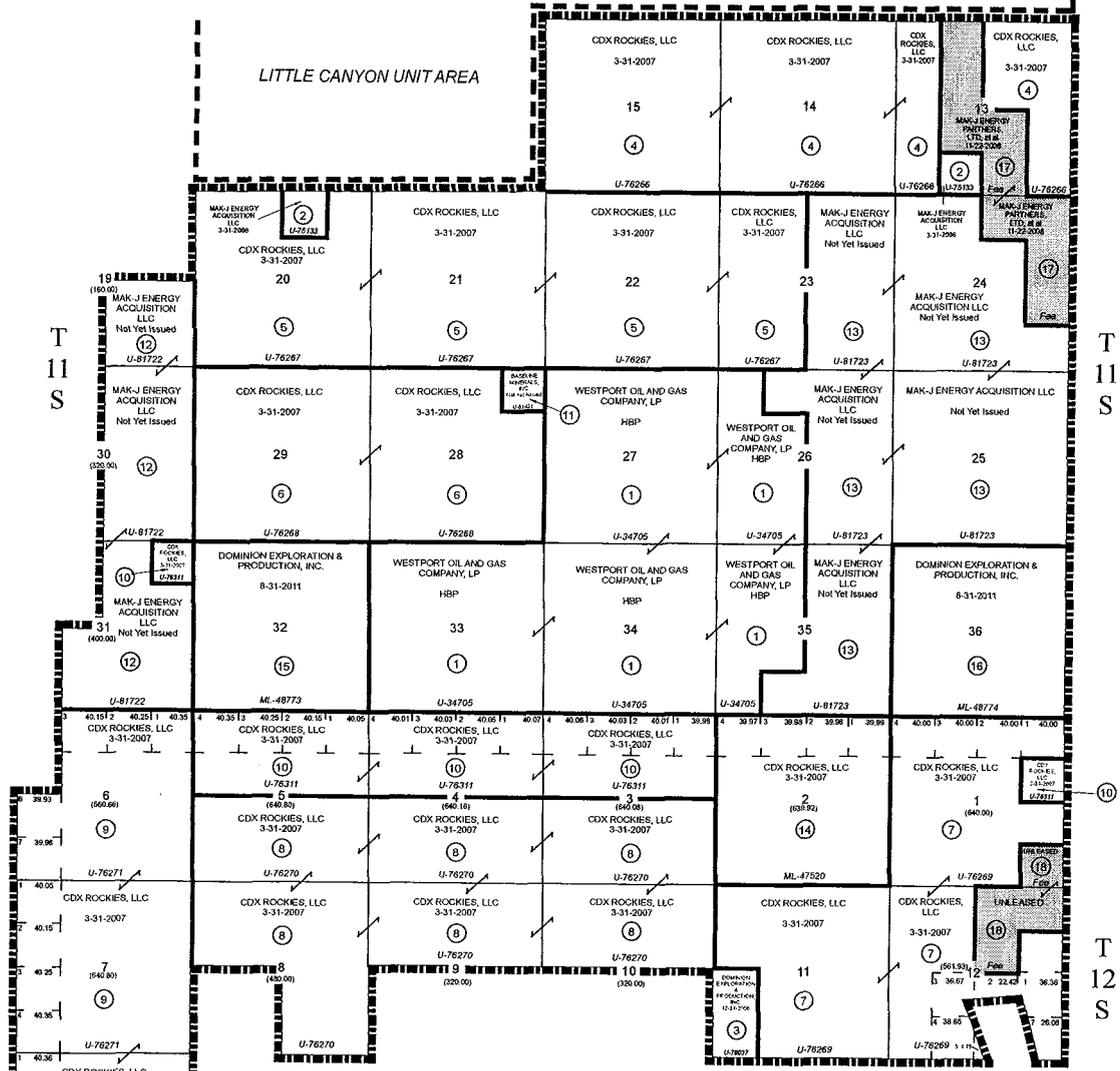
Under policy dictated by the BLM Manual and Handbook H-8270-1 (July, 1998) formations are ranked according to their paleontological potential:

- *Condition 1* is applied to those areas known to contain fossil localities, and special consideration of the known resources is in need of evaluation.
- *Condition 2* is applied to areas that have exposures of geologic rock units known to have produced fossils elsewhere.
- *Condition 3* is applied to areas unlikely to produce fossils based on surficial geology.

Although these guidelines apply mostly to vertebrate fossils on lands under the direction of the BLM, they are equally designed to help protect rare plant and invertebrate fossils and will be used here with reference to State managed lands. It should be noted that many fossils, though common and unimpressive in and of themselves, can be important paleo-environmental, depositional, and chronostratigraphic indicators.

R 20 E

LITTLE CANYON UNIT AREA



R 20 E

| | ACREAGE | PERCENTAGE |
|----------------|------------------|----------------|
| FEDERAL LANDS | 17,325.31 | 87.66% |
| STATE LANDS | 1,919.92 | 9.71% |
| PATENTED LANDS | 520.00 | 2.63% |
| TOTALS | 19,765.23 | 100.00% |

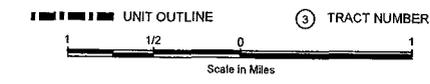


EXHIBIT "A"
BIG PACK UNIT AREA
 UINTAH COUNTY, UTAH

NOTE: UNLESS OTHERWISE NOTED HEREIN THE SECTIONS ON THIS PLAT CONTAIN 640.00 ACRES

MAK-J ENERGY PARTNERS, LP
 DENVER, COLORADO

MAK J ENERGY
BIG PACK UNIT 24-27
 LOCATED IN UINTAH COUNTY, UTAH
 SECTION 27, T11S, R20E, S.L.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



- Since 1964 -

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

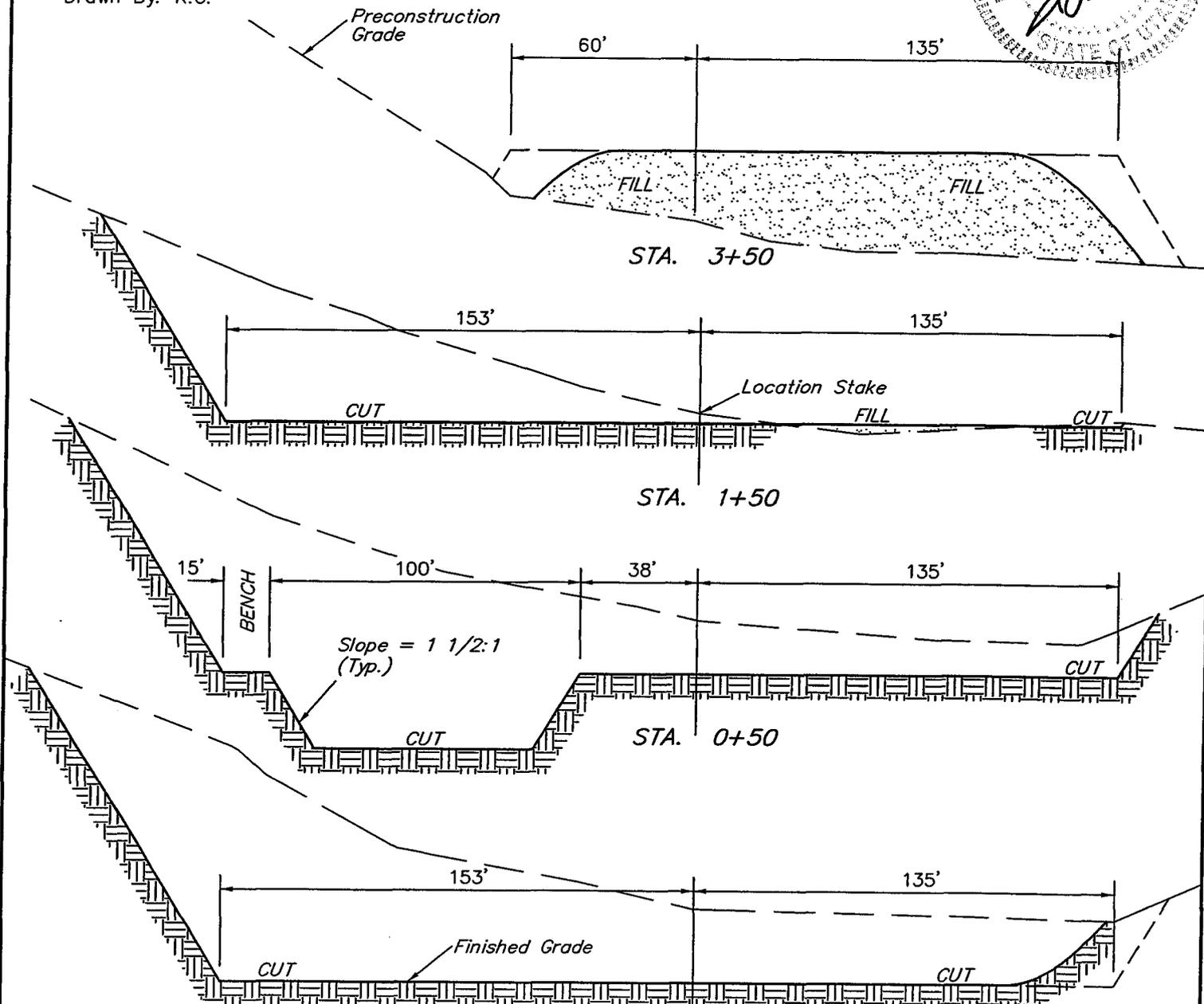
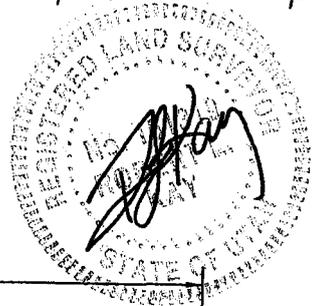
| | | | | | | |
|------------------------|----------------|-------------------|-----------|-----------|-----------|--------------|
| LOCATION PHOTOS | | | 02 | 03 | 05 | PHOTO |
| | | | MONTH | DAY | YEAR | |
| TAKEN BY: A.F. | DRAWN BY: C.H. | REVISED: 00-00-00 | | | | |

MAK J ENERGY

FIGURE #2

TYPICAL CROSS SECTIONS FOR
BIG PACK UNIT #24-27
SECTION 27, T11S, R20E, S.L.B.&M.
851' FSL 2057' FWL

1" = 20'
X-Section Scale
1" = 50'
DATE: 1-26-05
Drawn By: K.G.



NOTE:

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

* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

| | |
|------------------------|-------------------------|
| CUT | |
| (6") Topsoil Stripping | = 2,220 Cu. Yds. |
| Remaining Location | = 26,630 Cu. Yds. |
| TOTAL CUT | = 28,850 CU.YDS. |
| FILL | = 9,680 CU.YDS. |

| | |
|--|-------------------|
| EXCESS MATERIAL | = 19,170 Cu. Yds. |
| Topsoil & Pit Backfill (1/2 Pit Vol.) | = 4,180 Cu. Yds. |
| EXCESS UNBALANCE (After Rehabilitation) | = 14,990 Cu. Yds. |

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

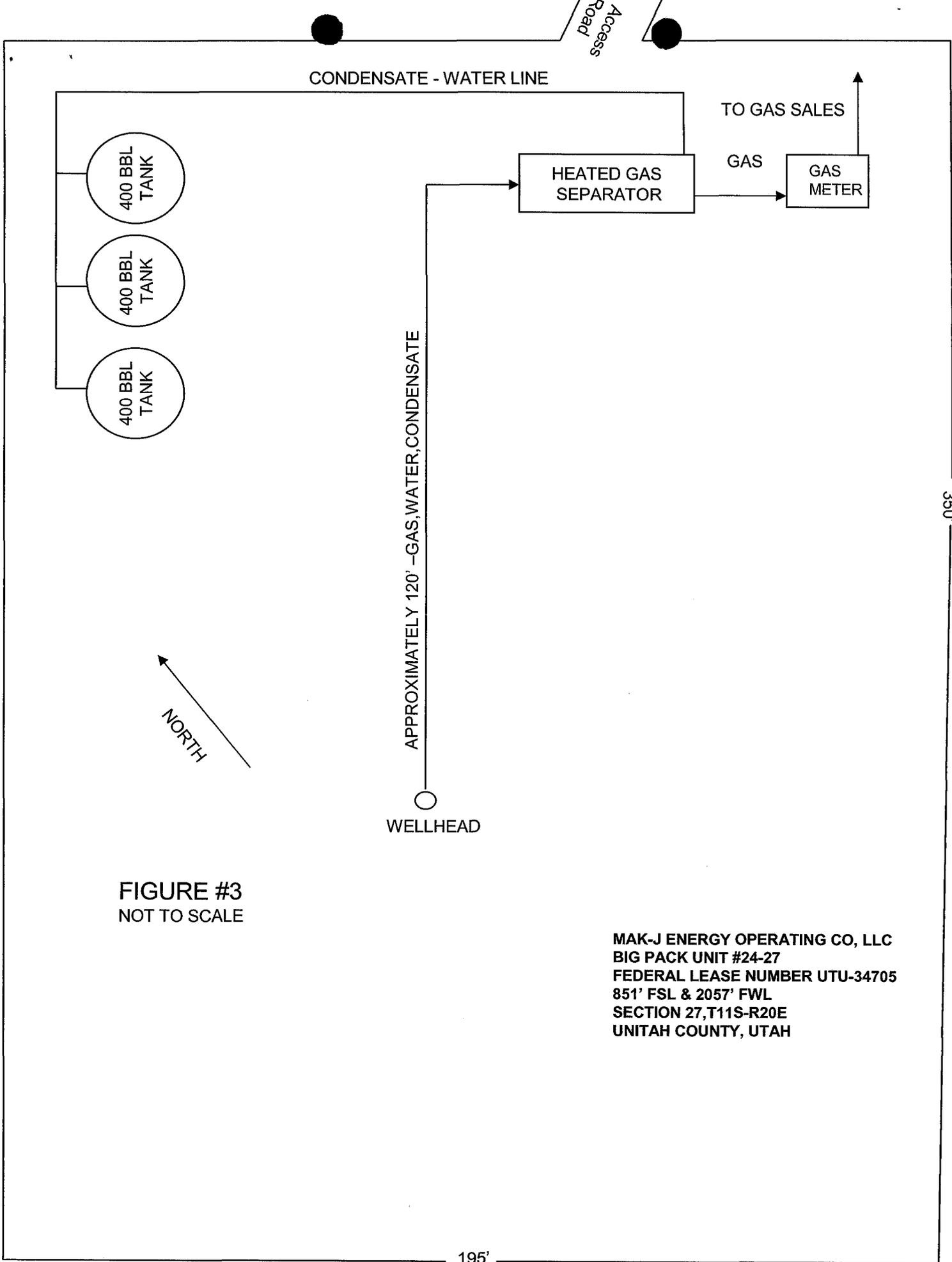
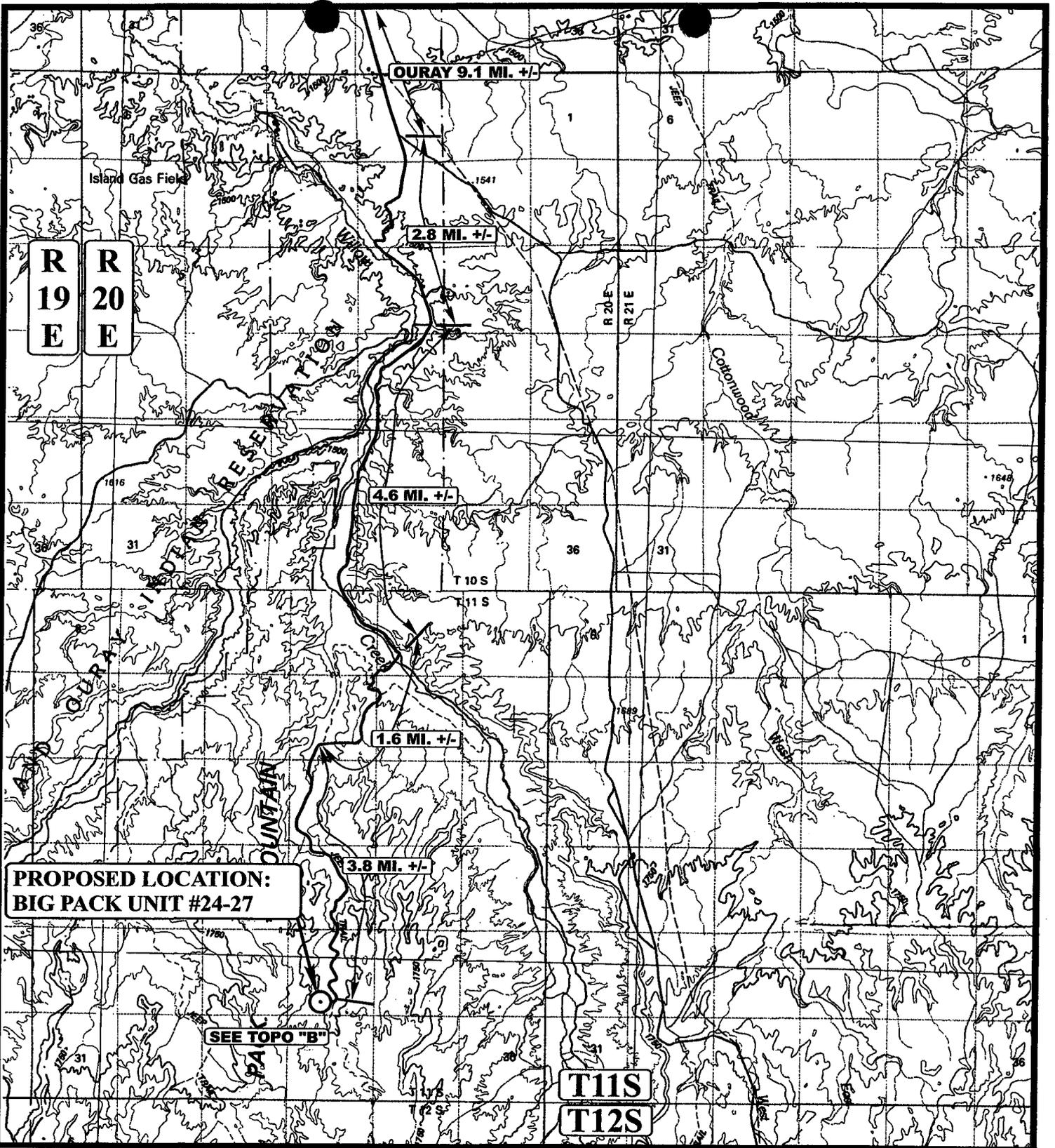


FIGURE #3
NOT TO SCALE

**MAK-J ENERGY OPERATING CO, LLC
BIG PACK UNIT #24-27
FEDERAL LEASE NUMBER UTU-34705
851' FSL & 2057' FWL
SECTION 27, T11S-R20E
UNITAH COUNTY, UTAH**



**PROPOSED LOCATION:
BIG PACK UNIT #24-27**

SEE TOPO "B"

**T11S
T12S**

LEGEND:

⊙ PROPOSED LOCATION



MAK J ENERGY

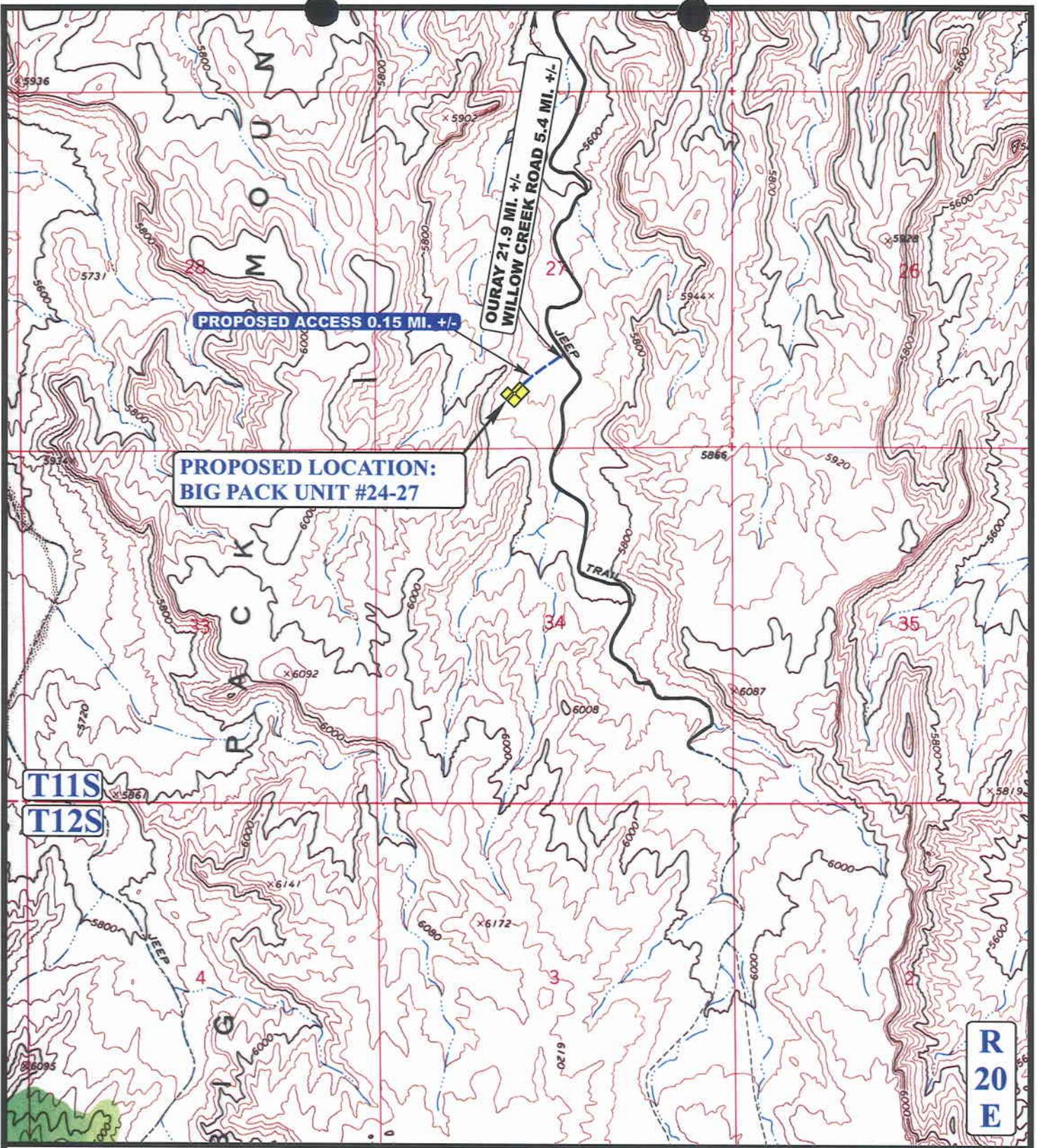
**BIG PACK UNIT #24-27
SECTION 27, T11S, R20E, S.L.B.&M.
851' FSL 2057' FWL**



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

TOPOGRAPHIC 02 03 05
MAP MONTH DAY YEAR
SCALE: 1:100,000 DRAWN BY: C.H. REVISED: 00-00-00





LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD

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



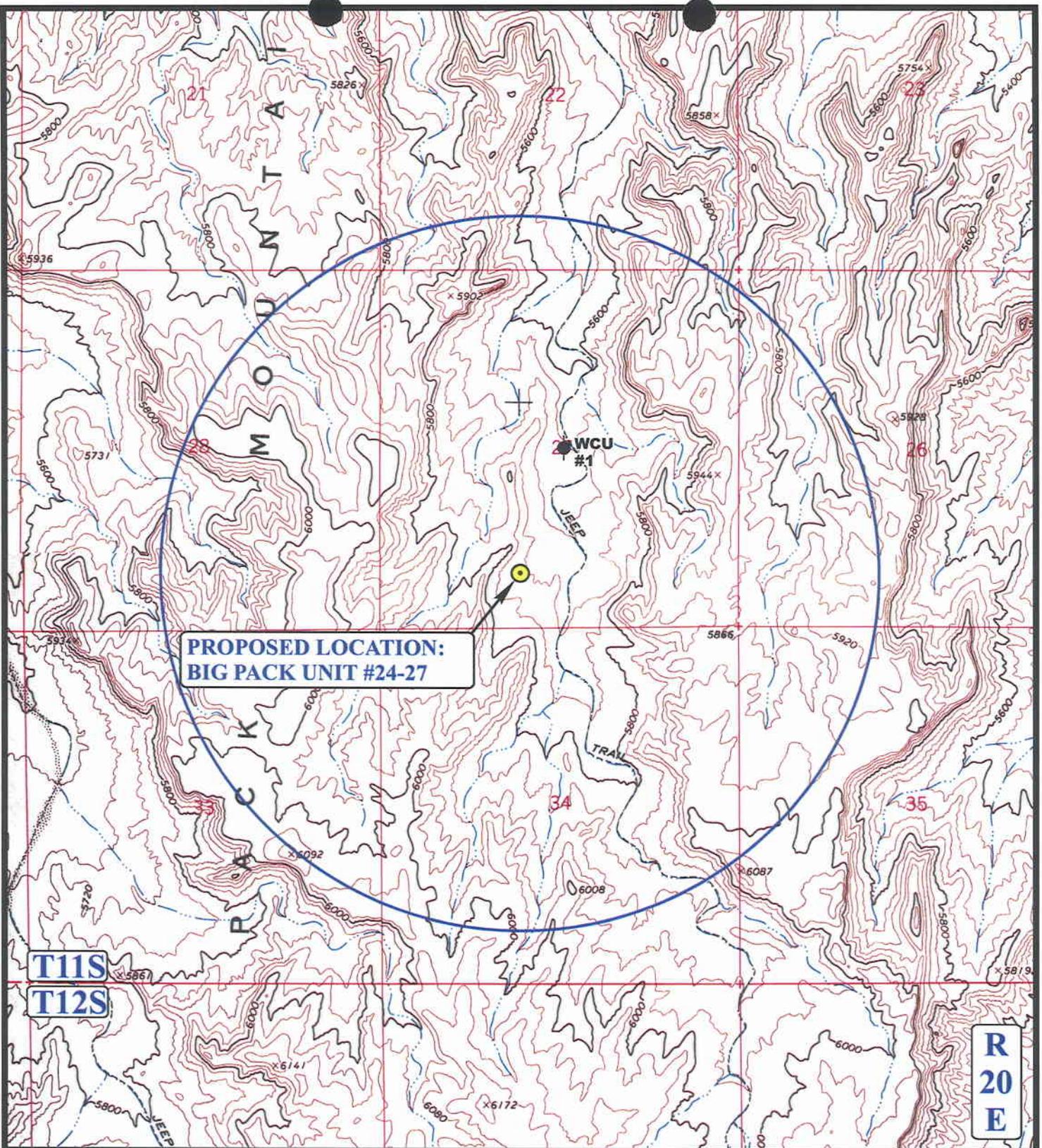
MAK J ENERGY
BIG PACK UNIT #24-27
 SECTION 27, T11S, R20E, S.L.B.&M.
 851' FSL 2057' FWL

TOPOGRAPHIC MAP

| | | |
|-------|-----|------|
| 02 | 03 | 05 |
| MONTH | DAY | YEAR |

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





**PROPOSED LOCATION:
BIG PACK UNIT #24-27**

**T11S
T12S**

**R
20
E**

LEGEND:

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



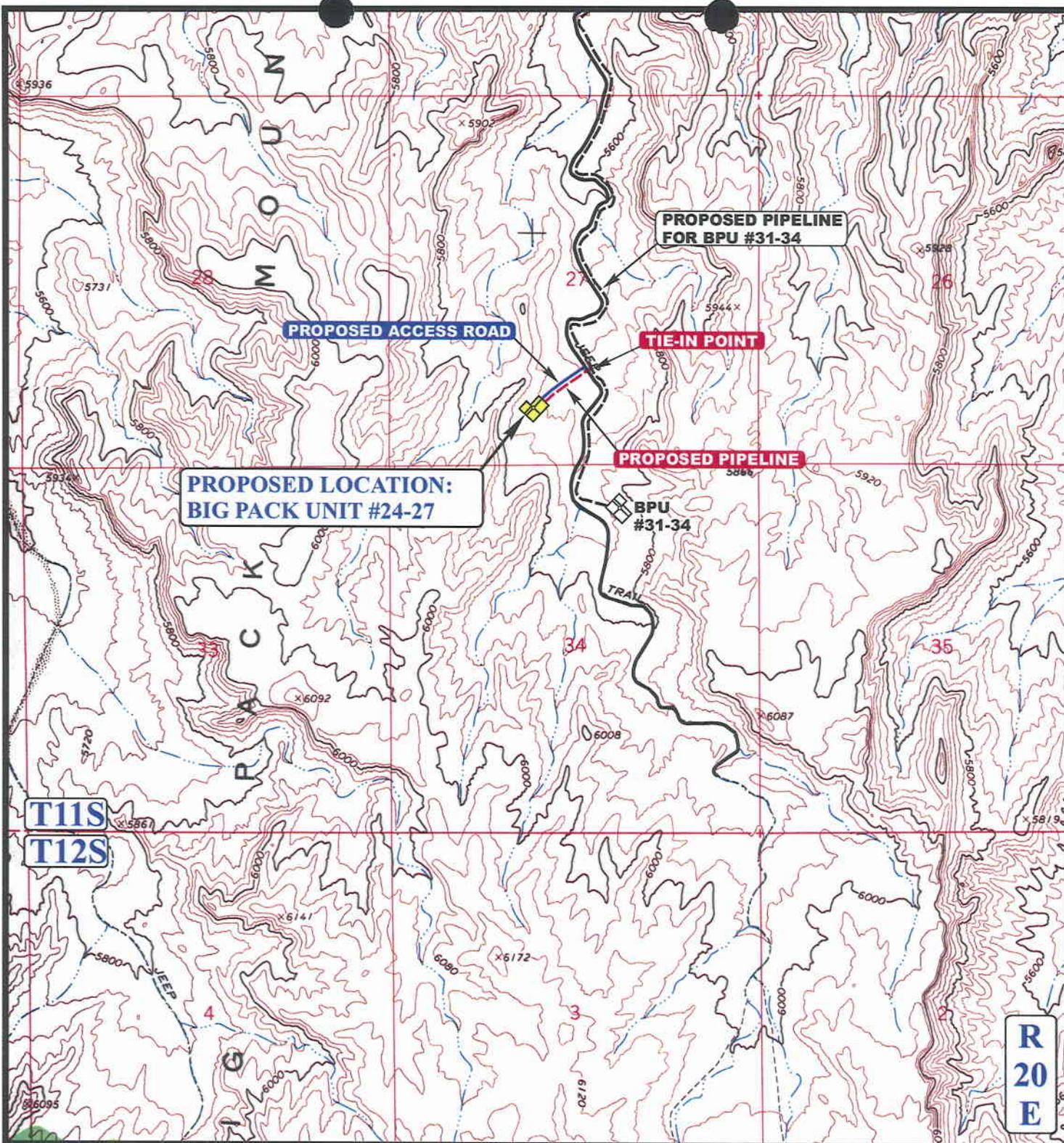
MAK J ENERGY

**BIG PACK UNIT #24-27
SECTION 27, T11S, R20E, S.L.B.&M.
851' FSL 2057' FWL**

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

TOPOGRAPHIC MAP 02 03 05
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: C.H. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 701' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE

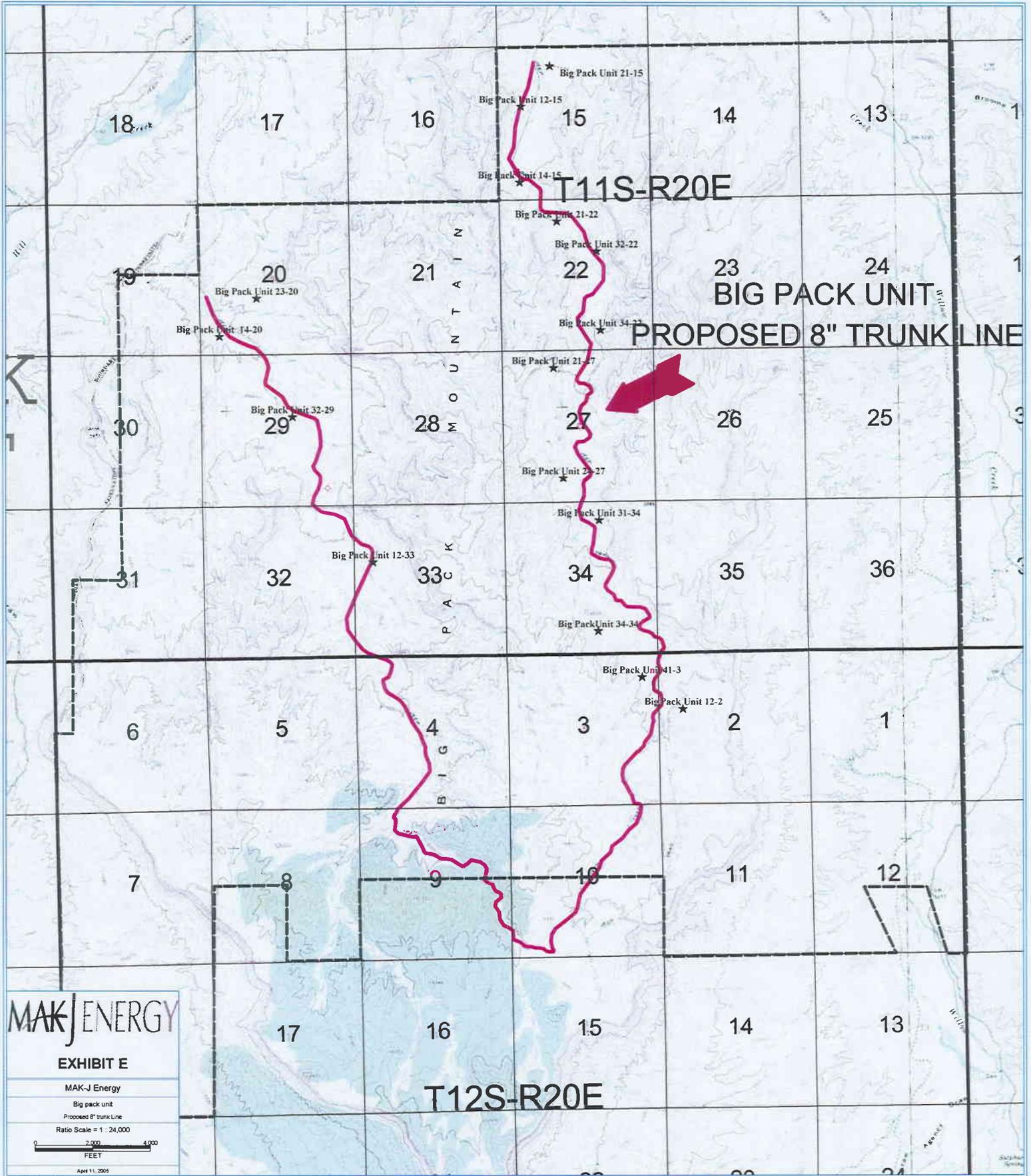


MAK J ENERGY

BIG PACK UNIT #24-27
SECTION 27, T11S, R20E, S.L.B.&M.
851' FSL 2057' FWL

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

TOPOGRAPHIC MAP **02 03 05**
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: C.H. REVISED: 00-00-00 **D TOPO**



MAK ENERGY

EXHIBIT E

MAK-J Energy

Big pack unit

Proposed 8" trunk line

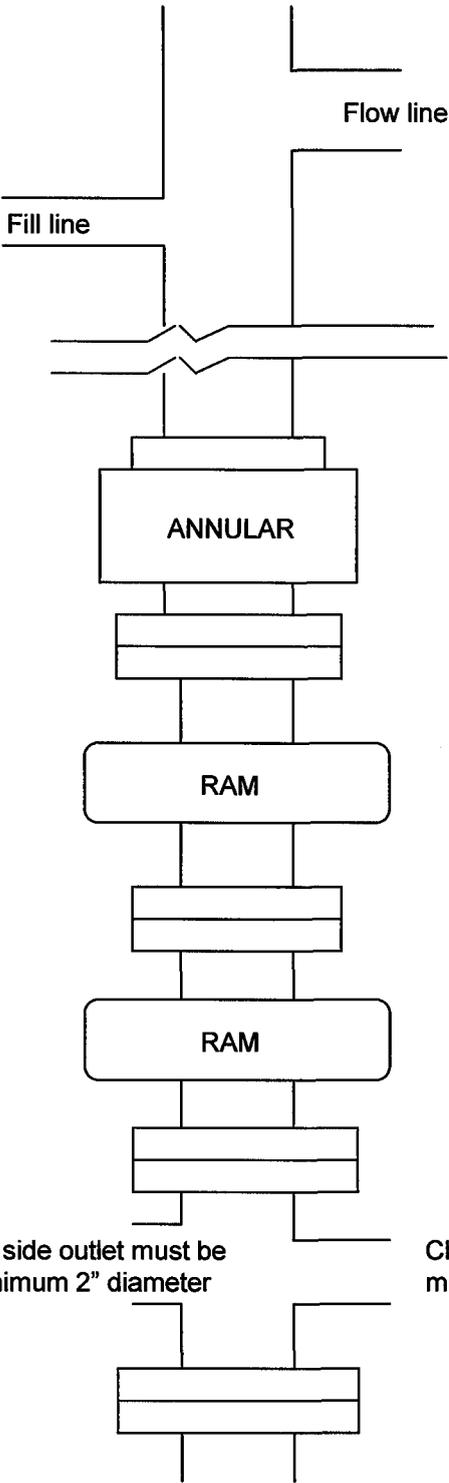
Ratio Scale = 1 : 24,000



APR 11, 2005

3M BLOWOUT PREVENTION STACK

Big Pack Unit #24-27
Federal Lease #UTU-34705
851' FSL & 2057' FWL
Section 27, T11S-R20E
Uintah County, Utah



Upper kelly cock will have handle available.
Safety valve and subs will fit all drill string connections in use
All BOPE connections subjected to well pressure will be flanged, welded, or clamped

Kill side outlet must be minimum 2" diameter

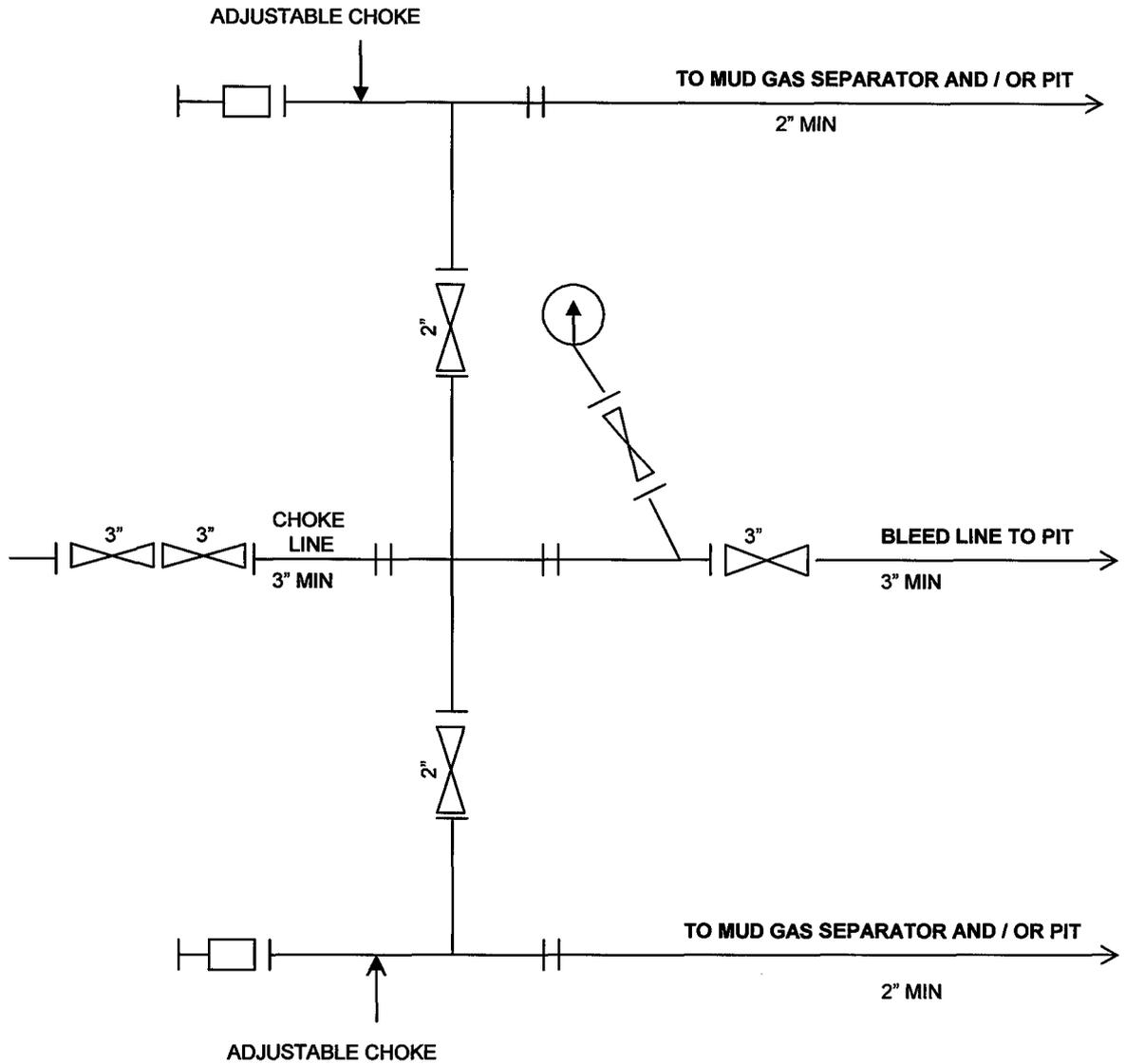
Choke side outlet must be minimum 3" diameter

Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve

EXHIBIT #1

3M Choke Manifold Equipment
(Configuration of chokes may vary)

EXHIBIT #1A



Upper kelly cock will have handle available.
Safety valve and subs will fit all drill string connections in use
All BOPE connections subjected to well pressure will be flanged, welded, or clamped

Big Pack Unit #24-27
Federal Lease #UTU-34705
851' FSL & 2057' FWL
Section 27, T11S-R20E
Uintah County, Utah



WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 06/23/2005

API NO. ASSIGNED: 43-047-36794

WELL NAME: BIG PACK U 24-27
OPERATOR: MAK-J ENERGY PARTNERS (N2670)
CONTACT: TODD MCDONALD

PHONE NUMBER: 303-339-5873

PROPOSED LOCATION:

SESW 27 110S 200E
SURFACE: 0851 FSL 2057 FWL
BOTTOM: 0851 FSL 2057 FWL
UINTAH
WILDCAT (1)

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

LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU-34705
SURFACE OWNER: 1 - Federal
PROPOSED FORMATION: MNCS
COALBED METHANE WELL? NO

LATITUDE: 39.82661
LONGITUDE: -109.6666

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]
(No. UTB000160)
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit
(No. 49-2179)
- RDCC Review (Y/N)
(Date: _____)
- Fee Surf Agreement (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit _____
- R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit
Board Cause No: _____
Eff Date: _____
Siting: _____
- R649-3-11. Directional Drill

COMMENTS: _____

STIPULATIONS: _____

1- Federal Approval
2- Spacing Stip

LITTLE CANYON UNIT

BIG PACK U 14-15

T11S R20E

BIG PACK U
32-22

BIG PACK U
34-22

WILLOW CREEK
UNIT 1
27

BIG PACK U
24-27

BIG PACK U
31-34

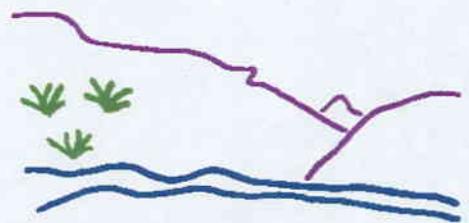
OPERATOR: MAK-J ENERGY OPER (N2670)

SEC: 27 T. 11S R. 20E

FIELD: WILDCAT (001)

COUNTY: UINTAH

SPACING: R649-3-2 / GENERAL SITING



Utah Oil Gas and Mining

Wells

- ⊕ GAS INJECTION
- GAS STORAGE
- × LOCATION ABANDONED
- ⊕ NEW LOCATION
- ⊕ PLUGGED & ABANDONED
- ⊕ PRODUCING GAS
- PRODUCING OIL
- ⊕ SHUT-IN GAS
- ⊕ SHUT-IN OIL
- × TEMP. ABANDONED
- TEST WELL
- ▲ WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL

Units.shp

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

Fields.shp

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



PREPARED BY: DIANA WHITNEY
DATE: 23-JUNE-2005

**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

June 27, 2005

Mak-J Energy Operating Company, LLC
370 17th St., Suite 2710
Denver, CO 80202

Re: Big Pack Unit 24-27 Well, 851' FSL, 2057' FWL, SE SW, Sec. 27,
T. 11 South, R. 20 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 43-047-36794.

Sincerely,

Gil Hunt
Acting Associate Director

pab
Enclosures

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

Operator: Mak-J Energy Operating Company, LLC
Well Name & Number Big Pack Unit 24-27
API Number: 43-047-36794
Lease: UTU-34705

Location: SE SW **Sec.** 27 **T.** 11 South **R.** 20 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.

RECEIVED

JUN 23 2005

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BLM WERNAL, UTAH

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

| | | |
|--|---|--|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. UTU-34705 |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name na |
| 2. Name of Operator Mak-J Energy Operating Company, LLC | | 7. If Unit or CA Agreement, Name and No. na (proposed Big Pack Unit) |
| 3a. Address 370 17th Street, Suite 2710 Denver, Colorado 80202 | | 8. Lease Name and Well No. Big Pack Unit #24-27 |
| 3b. Phone No. (include area code) 303-339-5873 | | 9. API Well No. 43-047-3679A |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 851' FSL & 2057' FWL SESW At proposed prod. zone same as above | | 10. Field and Pool, or Exploratory Unnamed |
| 14. Distance in miles and direction from nearest town or post office* 22 miles to Ouray, Utah | | 11. Sec., T. R. M. or Blk. and Survey or Area Section 27, T11S-R20E, S.L.B. &M. |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2057' | 16. No. of acres in lease 2,480 | 12. County or Parish Uintah |
| 17. Spacing Unit dedicated to this well 40 | 13. State Ut | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1921' | 19. Proposed Depth 9,200' | 20. BLM/BIA Bond No. on file UTB000160 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5715' graded ground level | 22. Approximate date work will start* 08/15/2005 | 23. Estimated duration 8 days |
| 24. Attachments | | |

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

| | | |
|---|--|--------------------|
| 25. Signature | Name (Printed/Typed) Todd S. McDonald | Date 06/22/2005 |
| Title Vice President | | |
| Approved by (Signature) | Name (Printed/Typed) | Date 11/12/05 |
| Title Assistant Field Manager Mineral Resources | Office | |

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

*(Instructions on page 2)

NOTICE OF APPROVAL

RECEIVED

NOV 22 2005

DIV. OF OIL, GAS & MINING

UDOGM

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Operator/Company: Mac-J Energy Operating Co.

Well Name/Number: Big Pack Unit 24-27

API Number: 43-047-36794

Location: SESW Sec. 27 T. 11S R. 20E

Lease Number: U-34705

Agreement Name (If Applicable): Big Pack Unit

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware that fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

Please submit an electronic copy of all logs run on this well in LAS format. This submission will supersede the requirement for submittal of paper logs to the BLM. The cement bond log must be submitted in raster format (TIF, PDF or other).

In the event after-hours approvals are necessary, you must contact one of the following individuals:

Michael Lee (435) 828-7875
Petroleum Engineer

Matt Baker (435) 828-4470
Petroleum Engineer

BLM FAX Machine (435) 781-4410

**SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.

The Willow Creek Trunkline will not be constructed.

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

CONFIDENTIAL FORM 9

| | | |
|--|---|---|
| SUNDRY NOTICES AND REPORTS ON WELLS | | 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-34705 |
| 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: NA |
| | | 7. UNIT or CA AGREEMENT NAME: BIG PACK UNIT |
| 1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____ | 8. WELL NAME and NUMBER: BIG PACK UNIT #24-27 | |
| 2. NAME OF OPERATOR: MAK-J ENERGY OPERATING COMPANY, LLC | | 9. API NUMBER: 4304736794 |
| 3. ADDRESS OF OPERATOR: 370 17TH STREET, STE 271 <small>CITY</small> DENVER <small>STATE</small> CO <small>ZIP</small> 80202 | PHONE NUMBER: (303) 339-5871 | 10. FIELD AND POOL, OR WILDCAT: WILDCAT |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 851' FSL & 2057' FWL | | COUNTY: UINTAH |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 27 11S 20E | | STATE: UTAH |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|---|
| <input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____ | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
| | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> SIDETRACK TO REPAIR WELL |
| | <input type="checkbox"/> CASING REPAIR | <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> TEMPORARILY ABANDON |
| | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> TUBING REPAIR |
| | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> VENT OR FLARE |
| <input type="checkbox"/> SUBSEQUENT REPORT (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>APD extension</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.

Mak-J respectfully requests a one year extension to the approved State APD dated June 27, 2005. The Bureau of Land Management has required Mak-J to conduct an Environmental Assessment on a pipeline route to transport gas out of the Big Pack Unit. This process has been ongoing since late last summer. Anticipated completion and record of decision is anticipated in the fourth quarter of this year.

Approved by the
Oil, Gas and Mining
Date: 07-17-06
By: [Signature]

COPY SENT TO OPERATOR
Date: 8-22-06
Initials: [Signature]

| | |
|---|-----------------------------|
| NAME (PLEASE PRINT) <u>TODD S. MCDONALD</u> | TITLE <u>VICE PRESIDENT</u> |
| SIGNATURE <u>[Signature]</u> | DATE <u>7/13/2006</u> |

(This space for State use only)

RECEIVED
JUL 17 2006

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

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

API: 4304736794
Well Name: Big Pack Unit #24-27
Location: 851' FSL & 2057' FWL, Section 27, T11S-R20E
Company Permit Issued to: Mak-J Energy Operating Company, LLC
Date Original Permit Issued: 6/27/2005

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 SURFACE OWNERSHIP HAS NOT CHANGED

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

Paul A. McDowell
Signature

7/13/2006
Date

Title: Vice President

Representing: Mak-J Energy Operating Company, LLC

RECEIVED
JUL 17 2006
DIV. OF OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator **MAK-J ENERGY OPERATING COMPANY, LLC.**

3a. Address
370 17th Street, Suite 2710, Denver, CO 80202

3b. Phone No. (include area code)
303 339-5873

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SESW 851' FSL, 2057' FWL Sec 27 T12S, R20E SLB & M

5. Lease Serial No.
UTU34705

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
Big Pack Unit

8. Well Name and No.
Big Pack Unit 24-27

9. API Well No.
43-047-36794

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Uintah, UT

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|---|---|--|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other APD Extension |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Mak-J Energy Operating Company LLC. respectfully requests a one year extension to the Federal Approved Permit to Drill dated 11/12/2005 for the subject well.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

RECEIVED
DEC 01 2006

DIV. OF OIL, GAS & MINING

CONDITIONS OF APPROVAL ATTACHED

14. I hereby certify that the foregoing is true and correct
 Name (Printed/Typed)

TODD S. MCDONALD

Title **VICE PRESIDENT**

Signature

Todd S. McDonald

Date

10/24/2006

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Michael Lee

Petroleum Engineer

Approved by

Title

Date

11-1-2006

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

CONDITIONS OF APPROVAL

Mak-J Energy

Notice of Intent
APD Extension

Lease: U-34705
Well: Big Pack 24-27 (43-047-36794)
Location: SESW Sec. 27, T12S, R20E

An extension for the referenced APD is granted with the following condition(s):

1. The extension and APD will expire on 11/12/2007
2. No other extensions beyond that period will be granted or allowed.

If you have any other questions concerning this matter, please contact Michael Lee of this office at (435) 781-4432.

2006-11-01

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

| | |
|----------------|--|
| ROUTING | |
| 1. DJJ | |
| 2. CDW | |

X - Change of Operator (Well Sold)

Operator Name Change/Merger

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

1/25/2007

| | |
|--|--|
| FROM: (Old Operator): N2670-Mak-J Energy Operating Company, LLC 370 17th St., Suite 2710 Denver, CO 80202 Phone: 1 (303) 339-5871 | TO: (New Operator): N1095-Dominion Exploration & Production, Inc 14000 Quail Springs Pkwy, Suite 600 Oklahoma City, OK 73134 Phone: 1-(405) 749-1300 |
| CA No. | Unit: |
| | BIG PACK |

SEE ATTACHED FOR WELL LIST

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 2/14/2007
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 2/14/2007
3. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/27/2007
- 4a. Is the new operator registered in the State of Utah: Business Number: 852894-0143
- 5a. (R649-9-2)Waste Management Plan has been received on: IN PLACE
- 5b. Inspections of LA PA state/fee well sites complete on: n/a
- 5c. Reports current for Production/Disposition & Sundries on: 2/14/2007
6. **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 BIA
7. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: not yet
8. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 2/28/2007
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/28/2007
3. Bond information entered in RBDMS on: 2/28/2007
4. Fee/State wells attached to bond in RBDMS on: 2/28/2007
5. Injection Projects to new operator in RBDMS on: n/a
6. Receipt of Acceptance of Drilling Procedures for APD/New on: 2/14/2007

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: 76S630500330
2. Indian well(s) covered by Bond Number: n/a
- 3a. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 76S63050600
- 3b. The **FORMER** operator has requested a release of liability from their bond on: n/a

LEASE INTEREST OWNER NOTIFICATION:

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

COMMENTS:



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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



IN REPLY REFER TO
3180
UT-922

FEB 27 2007

Dominion Exploration & Production, Inc.
Attn: Pam Robbins
14000 Quail Springs Parkway, Suite 600
Oklahoma City, OK 73134-2600

Re: Big Pack Unit (UTU-82244X)
Uintah County, Utah

Gentlemen:

On February 20, 2007, we received an indenture dated January 25, 2007, whereby MAK-J Energy Operating Company, LLC resigned as Unit Operator and Dominion Exploration & Production, Inc. was designated as Successor Unit Operator for the Big Pack Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective February 23, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Big Pack Unit Agreement.

Your Wyoming nationwide oil and gas bond, No. WY3322 will be used to cover all Federal operations within the Big Pack Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ R. A. Mckee

R. A. Mckee
Acting Chief, Branch of Fluid Minerals

Enclosure

RECEIVED
MAR 01 2007
DIV. OF OIL, GAS & MINING

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

FORM 9

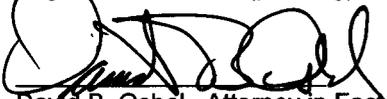
| | | |
|--|--|---|
| SUNDRY NOTICES AND REPORTS ON WELLS | | 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-76311 |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION 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 checked="" type="checkbox"/> OTHER _____ | | 7. UNIT or CA AGREEMENT NAME: Big Pack Unit |
| 2. NAME OF OPERATOR: MAK-J ENERGY OPERATING COMPANY, LLC | | 8. WELL NAME and NUMBER: See Attached List |
| 3. ADDRESS OF OPERATOR: 370 17TH STREET CITY Denver STATE CO ZIP 80202 | | 9. API NUMBER: |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: See Attached List | | 10. FIELD AND POOL, OR WILDCAT: Wildcat |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: | | COUNTY: Uintah |
| | | 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 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 checked="" 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 type="checkbox"/> OTHER: <u>Transfer of APD's</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.

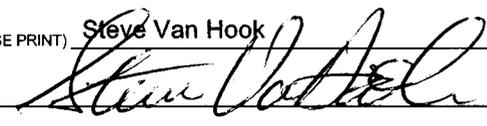
Mak-J Energy Partners, Ltd has sold its interest in the following referenced wells to Dominion Exploration & Production, Inc. effective: 01/25/2007. Dominion requests transfer of these approved APD's and any pending APDs

| | | | |
|------------------------------|---------------------|---------------------|---------------------|
| Big Pack Unit 12-15 | Big Pack Unit 14-15 | Big Pack Unit 21-15 | Big Pack Unit 21-22 |
| Big Pack Unit 34-22 | Big Pack Unit 21-27 | Big Pack Unit 24-27 | Big Pack Unit 34-34 |
| Big Pack Unit 12-2 (pending) | | | |

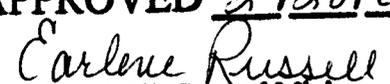

David B. Oshel, Attorney in Fact *RW*
Dominion Exploration & Production, Inc
14000 Quail Springs Parkway, Suite 600
Oklahoma City, OK 73134

1/24/07
Date

Above wells are covered by BLM Bond # 765630500330
UT Bond # WV3322

| | |
|---|-----------------------------|
| NAME (PLEASE PRINT) <u>Steve Van Hook</u> | TITLE <u>Vice President</u> |
| SIGNATURE  | DATE <u>1/25/2007</u> |

(This space for State use only)

APPROVED 3138106

Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(5/2000)

(See Instructions on Reverse Side)

RECEIVED
FEB 14 2007

DIV. OF OIL, GAS & MINING

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)

| | |
|---|--|
| Well name: | Big Pack Unit 24-27 |
| API number: | 4304736794 |
| Location: | Qtr-Qtr: SESW Section: 27 Township: 11S Range: 20E |
| Company that filed original application: | Mak-J Operating Co. LLC |
| Date original permit was issued: | 06/27/2005 |
| Company that permit was issued to: | Mak-J Operating Co. LLC |

| Check one | Desired Action: |
|-------------------------------------|---|
| <input type="checkbox"/> | Transfer pending (unapproved) Application for Permit to Drill to new operator |
| <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"/> | Transfer approved Application for Permit to Drill to new operator |
| <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 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. _____ | <input 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) ^{rw} David B Oshel Title Attorney in Fact
 Signature  Date 01/25/2007
 Representing (company name) Dominion Exploration & Production, Inc

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.

RECEIVED
FEB 14 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

| | | |
|---|--|---|
| 1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other | | 5. Lease Serial No. UTU-34705 |
| 2. Name of Operator Dominion Exploration & Production, Inc. | | 6. If Indian, Allottee or Tribe Name |
| 3a. Address 14000 Quail Springs Pkwy, Ste 600, OKC, OK 73134 | 3b. Phone No. (include area code) (405) 749-5237 | 7. If Unit or CA/Agreement, Name and/or No. Big Pack Unit |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 851' FSL & 2057' FWL, SE SW, Sec. 27-11S-20E | | 8. Well Name and No. BPU 24-27 |
| | | 9. API Well No. 43-047-36794 |
| | | 10. Field and Pool, or Exploratory Area Wildcat |
| | | 11. County or Parish, State Uintah, UT |

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|---|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Altering Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | Name Change |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Dominion requests permission to change the name and well number from BPU 24-27 to BPU 14-27H.

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

| | |
|--|---------------------------------------|
| Name (Printed/Typed) Barbara Lester | Title Regulatory Specialist |
| Signature  | Date 5/10/2007 |

| | | |
|---|--------|------|
| Approved by | Title | Date |
| Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. | Office | |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 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.

RECEIVED

MAY 14 2007

DIV. OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 Dominion Exploration & Production, Inc.

3a. Address
 14000 Quail Springs Pkwy, Ste 600, OKC, OK 73134

3b. Phone No. (include area code)
 (405) 749-5237

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 851' FSL & 2057' FWL, SE SW, Sec. 27-11S-20E

5. Lease Serial No.
 UTU-34705

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
 Big Pack Unit

8. Well Name and No.
 BPU 14-27H

9. API Well No.
 43-047-36794

10. Field and Pool, or Exploratory Area
 Wildcat

11. County or Parish, State
 Uintah, UT

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|---|---|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Altering Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal |
| | | | <input type="checkbox"/> Water Shut-Off |
| | | | <input type="checkbox"/> Well Integrity |
| | | | <input checked="" type="checkbox"/> Other APD Extension |

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The State APD for this well expires June 27, 2007. Dominion respectfully requests a one year extension.

Approved by the
Utah Division of
Oil, Gas and Mining

3:31 PM

Date: 05-30-07
By: [Signature]

RECEIVED
MAY 29 2007

DIV. OF OIL, GAS & MINING

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

Name (Printed/Typed) Barbara Lester Title Regulatory Specialist

Signature [Signature] Date 5/24/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office _____

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

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

API: 43-047-36794
Well Name: BPU 14-27H
Location: 851' FSL & 2057' FWL, Sec. 27-11S-20E
Company Permit Issued to: Dominion Exploration & Production, Inc.
Date Original Permit Issued: 6/27/2005

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

Barbara Gush
Signature

5/24/2007

Date

Title: Regulatory Specialist

Representing: Dominion Exploration & Production, Inc.

RECEIVED
MAY 25 2007

GAS & MINING

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

ROUTING

| |
|--------|
| 1. DJJ |
| 2. CDW |

X - Change of Operator (Well Sold)

Operator Name Change/Merger

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

7/1/2007

| | |
|--|--|
| FROM: (Old Operator): N1095-Dominion Exploration & Production, Inc 14000 Quail Springs Parkway, Suite 600 Oklahoma City, OK 73134 Phone: 1 (405) 749-1300 | TO: (New Operator): N2615-XTO Energy Inc 810 Houston St Fort Worth, TX 76102 Phone: 1 (817) 870-2800 |
|--|--|

| WELL NAME | CA No. | 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: 8/6/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 8/6/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 8/6/2007
- 4a. Is the new operator registered in the State of Utah: _____ Business Number: 5655506-0143
- 4b. If **NO**, the operator was contacted on: _____
- 5a. (R649-9-2)Waste Management Plan has been received on: IN PLACE
- 5b. Inspections of LA PA state/fee well sites complete on: n/a
- 5c. Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA
- Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: _____
- Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: _____
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: _____

DATA ENTRY:

- Changes entered in the **Oil and Gas Database** on: 9/27/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 9/27/2007
- Bond information entered in RBDMS on: 9/27/2007
- Fee/State wells attached to bond in RBDMS on: 9/27/2007
- Injection Projects to new operator in RBDMS on: 9/27/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: 9/27/2007

BOND VERIFICATION:

- Federal well(s) covered by Bond Number: UTB000138
- Indian well(s) covered by Bond Number: n/a
- 3a. (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 104312762
- 3b. The **FORMER** operator has requested a release of liability from their bond on: 1/23/2008
The Division sent response by letter on: _____

LEASE INTEREST OWNER NOTIFICATION:

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

COMMENTS:

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

| | | |
|---|--|--|
| | | 5. LEASE DESIGNATION AND SERIAL NUMBER: |
| | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| | | 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____ | | 8. WELL NAME and NUMBER: SEE ATTACHED |
| 2. NAME OF OPERATOR: XTO Energy Inc. <i>N2615</i> | | 9. API NUMBER: SEE ATTACHED |
| 3. ADDRESS OF OPERATOR: 810 Houston Street CITY Fort Worth STATE TX ZIP 76102 | | 10. FIELD AND POOL, OR WILDCAT: Natural Buttes |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: SEE ATTACHED | | COUNTY: Uintah |
| 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 checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____ | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
| | <input type="checkbox"/> ALTER CASING | <input type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> SIDETRACK TO REPAIR WELL |
| <input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____ | <input type="checkbox"/> CASING REPAIR | <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> TEMPORARILY ABANDON |
| | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input checked="" 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 type="checkbox"/> OTHER: _____ |
| | <input type="checkbox"/> CONVERT WELL TYPE | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION | |

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

Effective July 1, 2007, XTO Energy Inc. has purchased the wells listed on the attachment from:

Dominion Exploration & Production, Inc. *N1095*
14000 Quail Springs Parkway, Suite 600
Oklahoma City, OK 73134

James D. Abercrombie (405) 749-1300
James D. Abercrombie
Sr. Vice President, General Manager - Western Business Unit

Please be advised that XTO Energy Inc. is considered to be the operator on the attached list and is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands. Bond coverage is provided by Nationwide BLM Bond #104312750 and Department of Natural Resources Bond #104312762.

| | |
|---|---|
| NAME (PLEASE PRINT) <u>Edwin S. Ryan, Jr.</u> | TITLE <u>Sr. Vice President - Land Administration</u> |
| SIGNATURE <i>Edwin S. Ryan, Jr.</i> | DATE <u>7/31/2007</u> |

(This space for State use only)

APPROVED 9127107
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

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

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)

| | |
|--|--|
| Well name: | SEE ATTACHED LIST |
| API number: | |
| Location: | Qtr-Qtr: Section: Township: Range |
| Company that filed original application: | DOMINION E&P |
| Date original permit was issued: | |
| Company that permit was issued to: | DOMINION E&P |

| Check one | Desired Action: |
|-------------------------------------|---|
| <input type="checkbox"/> | Transfer pending (unapproved) Application for Permit to Drill to new operator |
| <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"/> | Transfer approved Application for Permit to Drill to new operator |
| <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"/> |
| 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>104312762</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) HOLLY C. PERKINS Title REGULATORY COMPLIANCE TECH
 Signature *Holly C. Perkins* Date 08/27/2007
 Representing (company name) XTO ENERGY INC.

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.

AUG 30 2007

N1095 DOMINION E and P, INC. to N2615 XTO ENERGY, INC.

| api | well_name | qtr_qtr | sec | twp | rng | lease_num | entity | Lease | well | stat |
|------------|-------------------|---------|-----|------|------|-----------|--------|---------|------|------|
| 4304736541 | BIG PACK U 5-15H | SWNW | 15 | 110S | 200E | UTU-76266 | | Federal | GW | APD |
| 4304736596 | BIG PACK U 13-15H | SWSW | 15 | 110S | 200E | UTU-76266 | | Federal | GW | APD |
| 4304736680 | BIG PACK U 15-22H | SWSE | 22 | 110S | 200E | UTU-76267 | | Federal | GW | APD |
| 4304736794 | BIG PACK U 14-27H | SESW | 27 | 110S | 200E | UTU-34705 | | Federal | GW | APD |
| 4304736816 | BIG PACK U 3-22H | NENW | 22 | 110S | 200E | UTU-76267 | | Federal | GW | APD |
| 4304736836 | BIG PACK U 15-34H | SWSE | 34 | 110S | 200E | UTU-34705 | | Federal | GW | APD |
| 4304736939 | BIG PACK U 3-27H | NENW | 27 | 110S | 200E | UTU-34705 | | Federal | GW | APD |
| 4304736675 | BIG PACK U 12-2 | SWNW | 02 | 120S | 200E | ML-47520 | | State | GW | NEW |



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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



IN REPLY REFER TO
3180
UT-922

Dominion Exploration & Production, Inc.
Attn: James D. Abercrombie
14000 Quail Springs Parkway, #600
Oklahoma City, OK 73134-2600

August 10, 2007

Re: Big Pack Bend Unit
Uintah County, Utah

Gentlemen:

On August 8, 2007, we received an indenture dated June 30, 2007, whereby Dominion Exploration & Production, Inc. resigned as Unit Operator and XTO Energy Inc. was designated as Successor Unit Operator for the Big Pack Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective August 15, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Big Pack Unit Agreement.

Your statewide oil and gas bond No. UTB000138 will be used to cover all operations within the River Bend Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble
Acting Chief, Branch of Fluid Minerals

Enclosure

RECEIVED

AUG 16 2007

DIV. OF OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well Oil Well Gas Well Other

2. Name of Operator **XTO Energy, Inc.**

3a. Address **PO Box 1360; 978 North Crescent, Roosevelt, UT 84066**

3b. Phone No. (include area code) **435-722-4521**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
851' FSL & 2,057' FWL, SE/4 SW/4, Section 27, T11S, R20E, SLB&M

5. Lease Serial No.
UTU-34705

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

7. If Unit or CA/Agreement, Name and/or No.
Big Pack Unit

8. Well Name and No.
BPU 14-27H

9. API Well No.
4304736794

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
Uintah County, Utah

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

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|---|---|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal |
| | | | <input type="checkbox"/> Water Shut-Off |
| | | | <input type="checkbox"/> Well Integrity |
| | | | <input type="checkbox"/> Other <u>Permit Extension</u> |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

XTO Energy hereby requests a one year extension of the federal permit for the referenced well that expires on 11-12-07.

This is the second extension that has been requested.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Don Hamilton

Title **Agent for XTO Energy, Inc.**

Signature

Don Hamilton

Date **10-10-2007**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

DENIED

Title

Date **OCT 22 2007**

Conditions of approval, if any, attached. Approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

RECEIVED

NOV 07 2007

DIV. OF OIL, GAS & MINING

UDOGM

REASON FOR DENIAL

XTO Energy, Inc.

Notice of Intent APD Extension

Lease: UTU-34705
Well: BPU 14-27H
Location: SESW Sec 27-T11S-R20E

An extension for the referenced APD is denied for the following reason:

1. The APD was extended from 11/12/06 to 11/12/07, and previous COA's stated that no other extensions would be granted.

If you have any other questions concerning this matter, please contact Ryan Angus of this office at (435) 781-4430

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

FORM 9

| | | | |
|--|--|--------------------------------|--|
| SUNDRY NOTICES AND REPORTS ON WELLS | | | 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-34705 |
| 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 N/A |
| 1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____ | | | 7. UNIT or CA AGREEMENT NAME Big Pack Unit |
| | | | 8. WELL NAME and NUMBER BIG PACK U 14-27H |
| 2. NAME OF OPERATOR XTO Energy, Inc. | | 9. API NUMBER 4304736794 | |
| 3. ADDRESS OF OPERATOR P.O. Box 1360 CITY Roosevelt STATE UT ZIP 84066 | | PHONE NUMBER (435) 722-4521 | 10. FIELD AND POOL, OR WLOCAT Undesignated |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 851' FSL & 2,057' FWL COUNTY: Uintah | | | |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESW 27 11S 20E S 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 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>Permit Extension</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.

XTO Energy, Inc. hereby requests a one year extension of the state permit for the referenced well

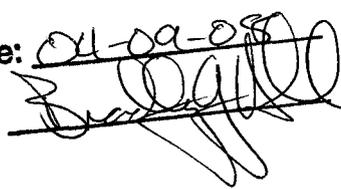
This is the third extension that has been requested.

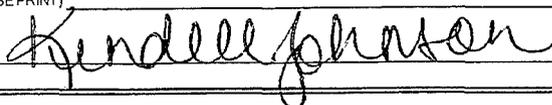
Approved by the
Utah Division of
Oil, Gas and Mining

COPY SENT TO OPERATOR

Date: 4-14-2008

Initials: KS

Date: 04-09-08
By: 

| | |
|---|---|
| NAME (PLEASE PRINT) <u>Kendell Johnson</u> | TITLE <u>Agent for XTO Energy, Inc.</u> |
| SIGNATURE  | DATE <u>4/7/2008</u> |

(This space for State use only)



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

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

API: 4304736794
Well Name: BIG PACK U 14-27H
Location: 851' FSL & 2,057' FWL SE SW Sec. 27, 11S-20E
Company Permit Issued to: XTO Energy, Inc.
Date Original Permit Issued: 6/27/2005

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

4/7/2008
Date

Title: Kendell Johnson

Representing: XTO Energy, Inc.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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

UT08300

June 6, 2008

Ken Secrest
XTO Energy, Inc.
PO Box 1360
Roosevelt, UT 84066

43-047-36794

Re: Notice of Expiration
Well No. BPU 14-27H
SESW, Sec. 27, T11S, R20E
Uintah County, Utah
Lease No. UTU-34705
Big Pack Unit

Dear Ken:

The Application for Permit to Drill (APD) the above-referenced well was approved on November 12, 2005. A one (1) year extension of the original APD was requested. The request was reviewed and the extension approved until November 12, 2007. Another request was received on October 15, 2007 and the extension request was denied on October 22, 2007 because the previous COAs stated that no other extensions would be granted. According to our records, no known activity has transpired at the approved location. In view of the foregoing, this office is notifying you that the approval of the referenced application has expired. If you intend to drill at this location in the future, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

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
Don Hamilton
Brenda Waller

RECEIVED

JUN 12 2008

DIV. OF OIL, GAS & MINING



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

July 1, 2009

XTO Energy, Inc.
PO Box 1360
Roosevelt, UT 84066

Re: APD Rescinded – BPU 14-27H, Sec. 27, T. 11S, R. 20E,
Uintah County, Utah API No. 43-047-36794

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on June 27, 2005. On July 17, 2006, May 30, 2007 and April 9, 2008, the Division granted a one-year APD extension.

No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective July 1, 2009. A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

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

Sincerely,


Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal

