

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN

1a. TYPE OF WORK DRILL  DEEPEN

1b. TYPE OF WELL

OIL  GAS  OTHER

SINGLE ZONE  MULTIPLE ZONE

5. LEASE DESIGNATION AND SERIAL NO.  
**ML-3453B**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**N/A**

7. UNIT AGREEMENT NAME  
**N/A**

8. FARM OR LEASE NAME  
**N/A**

9. WELL NO.  
**State 14-16T-9-17**

10. FIELD AND POOL OR WILDCAT  
**Monument Butte**

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
**SE/SW  
Sec. 16, T9S, R17E**

12. County  
**Duchesne**

13. STATE  
**UT**

2. NAME OF OPERATOR  
**Newfield Production Company**

3. ADDRESS AND TELEPHONE NUMBER:  
**Route #3 Box 3630, Myton, UT 84052 Phone: (435) 646-3721**

4. LOCATION OF WELL (FOOTAGE)  
At Surface **SE/SW 411' FSL 2021' FWL 584214X 40.624940**  
At proposed Producing Zone **44307824 -110.013072**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 15.6 miles southeast of Myton, UT**

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) <b>Approx. 411' f/lse line &amp; NA' f/unit line</b>	16. NO. OF ACRES IN LEASE <b>560.00</b>	17. NO. OF ACRES ASSIGNED TO THIS WELL <b>40</b>
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. <b>Approximately 290'</b>	19. PROPOSED DEPTH <b>15,903</b>	20. ROTARY OR CABLE TOOLS <b>Rotary</b>

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**5332' GL**

22. APPROX. DATE WORK WILL START\*  
**4th Quarter 2008**

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 1/2	10 3/4"	40.5	1,000'	See attachment
9 3/4 9 1/8	7 5/8"	39	10,000	See attachment
6 1/2	4 1/2"	15.1	TD	See attachment

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give date on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.  
**See Attached Drilling Program**

RECEIVED  
JUN 23 2008  
DIV. OF OIL, GAS & MINING

24. Name & Signature Mandie Crozier Title: Regulatory Specialist Date: 6/11/2008

(This space for State use only)

API Number Assigned: 43013-34008 APPROVAL: \_\_\_\_\_

Approved by the  
Utah Division of  
Oil, Gas and Mining

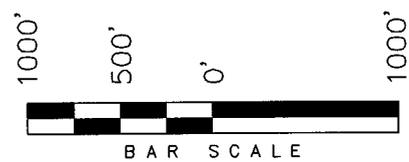
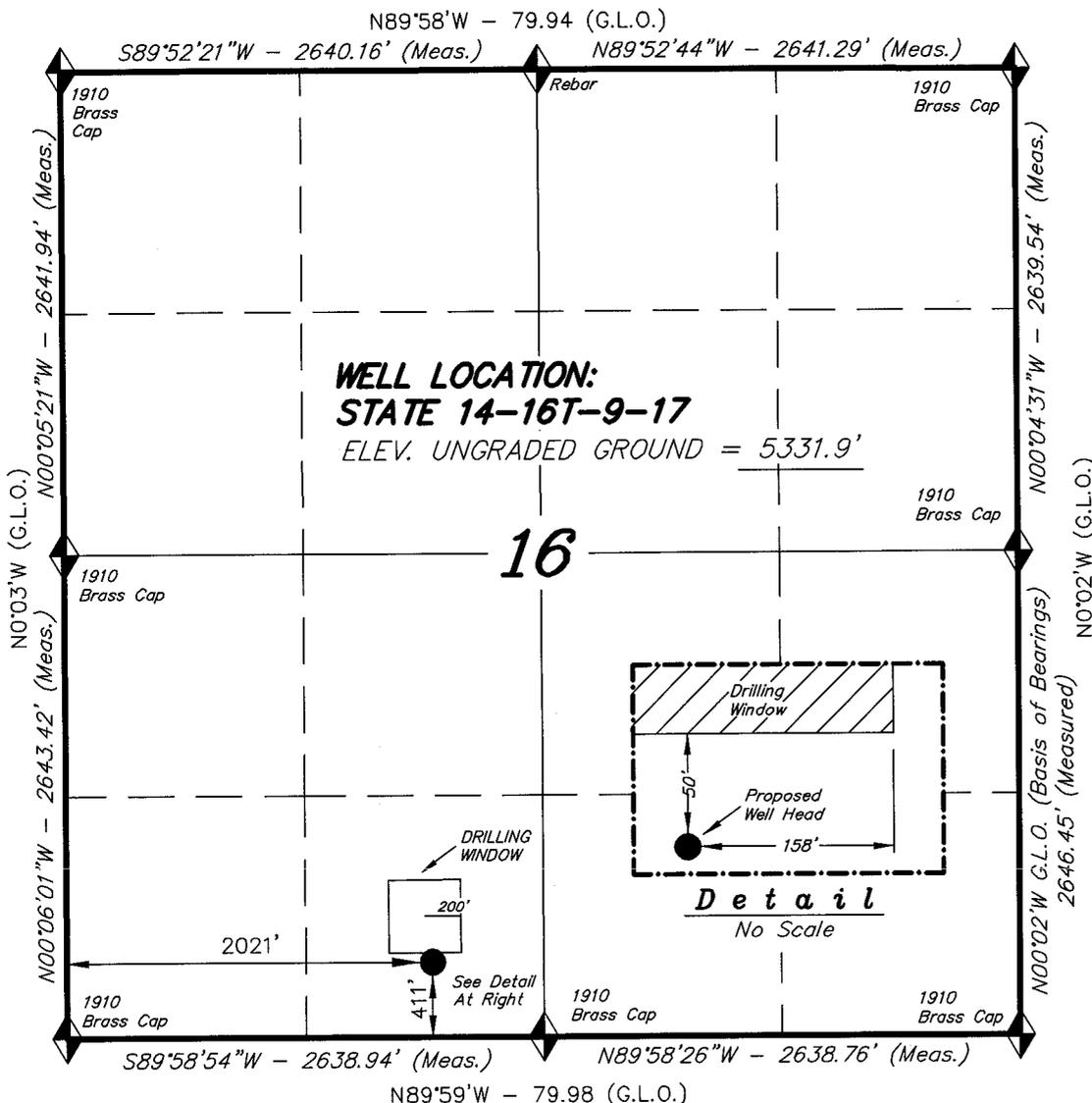
Date: 09-02-08  
By: [Signature]

\*See Instructions On Reverse Side

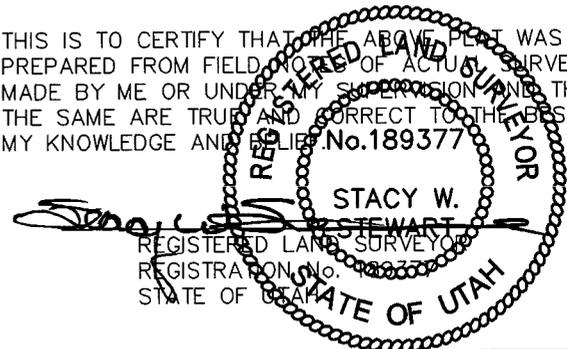
# T9S, R17E, S.L.B.&M.

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, STATE 14-16T-9-17,  
 LOCATED AS SHOWN IN THE SE 1/4 SW  
 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M.  
 DUCHESNE COUNTY, UTAH.



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. No. 189377



**TRI STATE LAND SURVEYING & CONSULTING**  
 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
 (435) 781-2501

DATE SURVEYED: 2-14-08	SURVEYED BY: C.M.
DATE DRAWN: 02-15-08	DRAWN BY: M.W.
REVISED:	SCALE: 1" = 1000'

◆ = SECTION CORNERS LOCATED

**STATE 14-16T-9-17**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 01' 29.40"  
 LONGITUDE = 110° 00' 49.68"

BASIS OF ELEV;  
 U.S.G.S. 7-1/2 min QUAD (MYTON SE)

**NEWFIELD PRODUCTION COMPANY  
STATE 14-16T-9-17  
SE/SW SECTION 16, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**TEN POINT DRILLING PROGRAM**

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Wasatch	5,842'
Mesaverde	10,212'
Blackhawk	13,046'
Mancos	13,703'
Proposed TD	15,903'

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Wasatch/Mesaverde/Blackhawk/Mancos (Gas)      5,842' - TD

4. **PROPOSED CASING AND CEMENT PROGRAM:**

Casing Design:

Description	Hole Size	Interval		Weight (lb/ft)	Grade	Coupling	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Design Factors		
		Top	Btm							Burst	Collapse	Tension
Conductor 16"	20"	0'	40'	65.0	H-40	STC	--	--	--	--	--	--
Surface 10-3/4"	13.5"	0'	1,000'	40.5	J-55	STC	8.33	8.33	13.0	5.11	4.97	10.37
Interm 7-5/8"	9.875"	0'	10,000'	39.0	N-80	LTC	9.5	10.0	16.0	2.30	2.18	2.05
Prod 4-1/2"	6.5"	0'	15,903'	15.1	P-110	LTC	12.5	13.0	18.0	1.72	1.53	1.61

Cement Design:

Job	Fill	Description	Sacks FT <sup>3</sup>	Excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
Conductor	60'	Class G w/ 2% CaCl <sub>2</sub> , 0.25 lbs/sk Cello Flake	40 47	50%	15.8	1.17
Surface Casing Lead	500'	Prem Lite II w/ 3% KCl, 2% Bentonite (or equivalent cement)	72 236	30%	11.0	3.26
Surface Casing Tail	500'	50/50 Poz Class G w/ 3% KCl, 2% Bentonite (or equivalent cement)	202 236	30%	14.3	1.27
Interm Casing Lead	5,500'	Prem Lite II w/ 3% KCl, 2% Bentonite (or equivalent cement)	471 1536	30%	11.0	3.26
Interm Casing Tail	1,000'	50/50 Poz Class G w/ 3% KCl, 2% Bentonite (or equivalent cement)	220 279	30%	14.3	1.27
Prod Casing	6,903'	50/50 Poz Class G w/ 3% KCl, 2% Bentonite (or equivalent cement)	847 1077	30%	14.3	1.27

\*Actual cement volumes will be 15% over caliper volume.

\*Cement slurries will be equal to or greater in strength than the slurries listed above.

5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

<u>Section</u>	<u>BOP equipment</u>
Surface	Diverter head
Intermediate	11" 5M double ram, 11" 5M annular, rotating head
Production	11" 10M double ram, 11" 5M annular, rotating head

BOP equipment will be function tested daily. Choke manifold pressure rating will be equal to or greater than the pressure rating of the BOP rams. Refer to Exhibit C for a diagram of BOP equipment.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

A fresh water system will be utilized to drill the well. When necessary, to control formation fluids, the system will be weighted with the addition of bentonite gel and barite. This fresh water system typically will contain Total Dissolved Solids (TDS) of less than 3000 PPM. No chromates will be utilized in the fluid system.

In the event that the surface hole is to be drilled with air, Newfield requests a variance to regulations requiring a straight run blooie line. Newfield proposes that the flowline will contain two (2) 90-degree turns. Newfield also requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. Newfield requests authorization to ignite as needed, and the flowline at 80°.

Newfield Production Company requests that the spark arrest, exhaust, or water cooled exhaust be waived under the Special Drilling Operations of Onshore Order #2.

<b>MUD PROGRAM</b>	<b>MUD TYPE</b>	<b>MAX MUD WEIGHT</b>
Surface -1,000'	air/fresh water system	8.33 ppg
1,000' - 10,000'	fresh water based system	10.0 ppg

10,000 – TD

fresh water based system

13.0 ppg

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a kelly cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Compensated Neutron-Formation Density Log, Dual Induction, Gamma Ray and Caliper log from TD to base of the Green River @ 6,298' +/- . A cement bond log will be run from PBTD to cement top in the production casing. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum pressure is equal to a 0.65 psi/ft gradient. It is not anticipated that abnormal temperatures will be encountered; or that any other abnormal hazards such as H<sub>2</sub>S will be encountered in this area.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence upon approval of the APD, and take approximately sixty (60) days from spud to rig release.

NEWFIELD PRODUCTION COMPANY  
STATE 14-16T-9-17  
SE/SW SECTION 16, T9S, R17E  
DUCHESNE COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. **EXISTING ROADS**

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site State 14-16T-9-17 located in the SE¼ SW¼ Section 16, T9S, R17E, S.L.B. & M., Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles ± to the junction of this highway and UT State Hwy 53; proceed southwesterly along Hwy 53 - 1.7 miles ± to its junction with an existing road to the southeast; proceed southeasterly - 9.6 miles ± to its junction with an existing road to the southwest; proceed southwesterly - 0.9 miles ± to its junction with an existing road to the south; proceed southeasterly - 1.7 ± to its junction with an existing road to the east; proceed northeasterly - 0.3 miles ± to its junction with the beginning of the access road to the exiting #14-16-9-17 well location.

The highways mentioned in the foregoing paragraph are bituminous surfaced roads to the point where Highway 216 exists to the South, thereafter the roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. **PLANNED ACCESS ROAD**

No access road is proposed for the State 14-16T-9-17. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. **LOCATION OF EXISTING WELLS**

Refer to **EXHIBIT B**.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted Desert Tan. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Fresh water purchased from the Johnson Water District will be used for drilling. A temporary poly pipeline may be used for water transportation from our existing supply line from Johnson Water District, or trucked from Newfield Production Company's injection facilities – **EXHIBIT A**.

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

**Fencing Requirements**

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

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** State of Utah

12. **OTHER ADDITIONAL INFORMATION:**

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #01-03, 1/17/01 and JBR Cultural Resource Report #00-04. Paleontological Resource Survey prepared by, SWCA Environmental Consultants. See attached report cover pages, Exhibit "D".

**Additional Surface Stipulations**

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

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the State 14-16T-9-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the State 14-16T-9-17. Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**

Representative

Name: Dave Allred  
Address: Newfield Production Company

Route 3, Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

Certification

Please be advised that Newfield Production Company is considered to be the operator of well #14-16T-9-17, SE/SW Section 16, T9S, R17E, LEASE #ML-3453B, Duchesne County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Hartford Accident #4471291.

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

6/11/08  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

CULTURAL RESOURCE INVENTORIES OF 400 ACRES  
IN THE WELLS DRAW AND PARIETTE BENCH  
LOCALITIES FOR INLAND PRODUCTION COMPANY  
DUCHESNE COUNTY, UTAH

by

Keith R. Montgomery

Prepared For:

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

Prepared Under Contract With:

Inland Production Company  
2507 Flintridge Place  
Fort Collins CO 80521

Prepared By:

Montgomery Archaeological Consultants  
P.O. Box 147  
Moab, Utah 84532

MOAC Report No. 01-03

January 17, 2001

United States Department of Interior (FLPMA)  
Permit No. 00-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-01-MQ-0010b,s

✓

## INTRODUCTION

In January 2001, cultural resource inventories were conducted by Montgomery Archaeological Consultants (MOAC) of 400 acres situated in the Wells Draw and Pariette Bench localities, Duchesne County, Utah. During this project 10 adjoining or separate 40 acre blocks were surveyed. Inland Production Company proposes to develop oil/gas well locations, access roads, and pipelines in these 40-acre blocks. The project area occurs on Bureau of Land Management (BLM), Vernal Field Office and State of Utah, Trust Land Administration (SITLA) land.

The objective of the inventories were to locate, document and evaluate any cultural resources within the project area. This project is carried out in compliance with a number of 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 directed by Keith R. Montgomery (Principal Investigator) and assisted by Jacki Montgomery, Joe Pachak, Greg Nunn, and Tom Lanford. The inventories were conducted under the auspices of U.S.D.I. (FLPMA) Permit No. 00-UT-60122 and State of Utah Antiquities Project (Survey) No. U-01-MQ-0010b,s.

A file search for previous projects and documented cultural resources was conducted by the author at the BLM Vernal Field Office on January 8, 2001. This consultation indicated that a number of archaeological projects have been conducted in the areas surrounding the project area. Archeological-Environmental Research Corporation (AERC) inventoried a gas pipeline in 1984 in the Wells Draw area and recorded two sites (Hauck 1984). AERC completed several oil/gas archaeological surveys on Pariette Bench and along Wells Draw, locating a number of prehistoric and historic sites (Hauck 1996, 1998; Hauck and Hadden 1997). Eligible sites in these project areas include prehistoric sand dune sites and rockshelters. In 1998, JBR Environmental Consultants surveyed six 40-acre well pad locations for Inland Production (Crosland and Billat 1998). Seven historic sites were documented. Sagebrush Archaeological Consultants conducted a block survey for Inland Resources in 1998, locating six sites mainly prehistoric affiliated (Cowie, Diamond and Weymouth 1998). In summary, previous inventories near the project area have located a variety of prehistoric (rockshelters, quarries, rock art panels, and lithic scatters) and historic (structures, trash scatters, and roads) sites. However, no cultural resources have been documented in the immediate project area.

## DESCRIPTION OF PROJECT AREA

The project area lies in the southern Pleasant Valley area of the Uinta Basin, southwest of the town of Myton, Utah. Ten well locations are proposed to be built in the 400 acre inventory area by Inland Production (Table 1). The ten 40 acre parcels will give Inland Production Company an area to situate the final well placement and associated facilities during development. Two of the 40 acre blocks (Wells Draw 5-32 and Wells Draw 8-32 ) are situated along the west side of Wells Draw (Figure 1). One 40 acre block (Jonah 4-11) is located on the north side of Castle Peak Draw (Figure 2). Three contiguous 40 acre blocks (Beluga 11-7, 12-7 and 13-7) occur on Pariette Bench near Castle Peak Draw (Figure 3). Three contiguous 40 acre blocks (Lone Tree 2-16, 7-16 and 8-16) and a single 40 acre parcel (Beluga 14-16) occur on Pariette Bench (Figure 4).

Table 1. Legal Descriptions and Cultural Resources.

Well Number	Legal Location	Area Surveyed Ownership	Cultural Resources
Wells Draw 5-32-8-16	T8S, R16E, S. 32 SW, NW	40 acres SITLA	None
Wells Draw 8-32-8-16	T8S, R16E, S. 32 SE, NE	40 acres SITLA	42Dc1356 IF-A, IF-B
Jonah 4-11-9-16	T9S, R16E, S. 11 NW, NW	40 acres BLM	None
Beluga 1-7-9-17	T9S, R17E, S. 7 NE, SW	40 acres BLM	None
Beluga 12-7-9-17	T9S, R17E, S. 7 NW, SW	40 acres BLM	IF-D, IF-E
Beluga 13-7-9-17	T9S, R17E, S. 7 SW, SW	40 acres BLM	IF-C
Lone Tree 2-16-9-17	T9S, R17E, S. 16 NW, NE	40 acres SITLA	None
Lone Tree 7-16-9-17	T9S, R17E, S. 16 SW, NE	40 acres SITLA	IF-G
Lone Tree 8-16-9-17	T9S, R17E, S. 16 SE, NE	40 acres SITLA	None
Beluga 14-16-9-17	T9S, R17E, S. 16 SE, SW	40 acres SITLA	IF-F

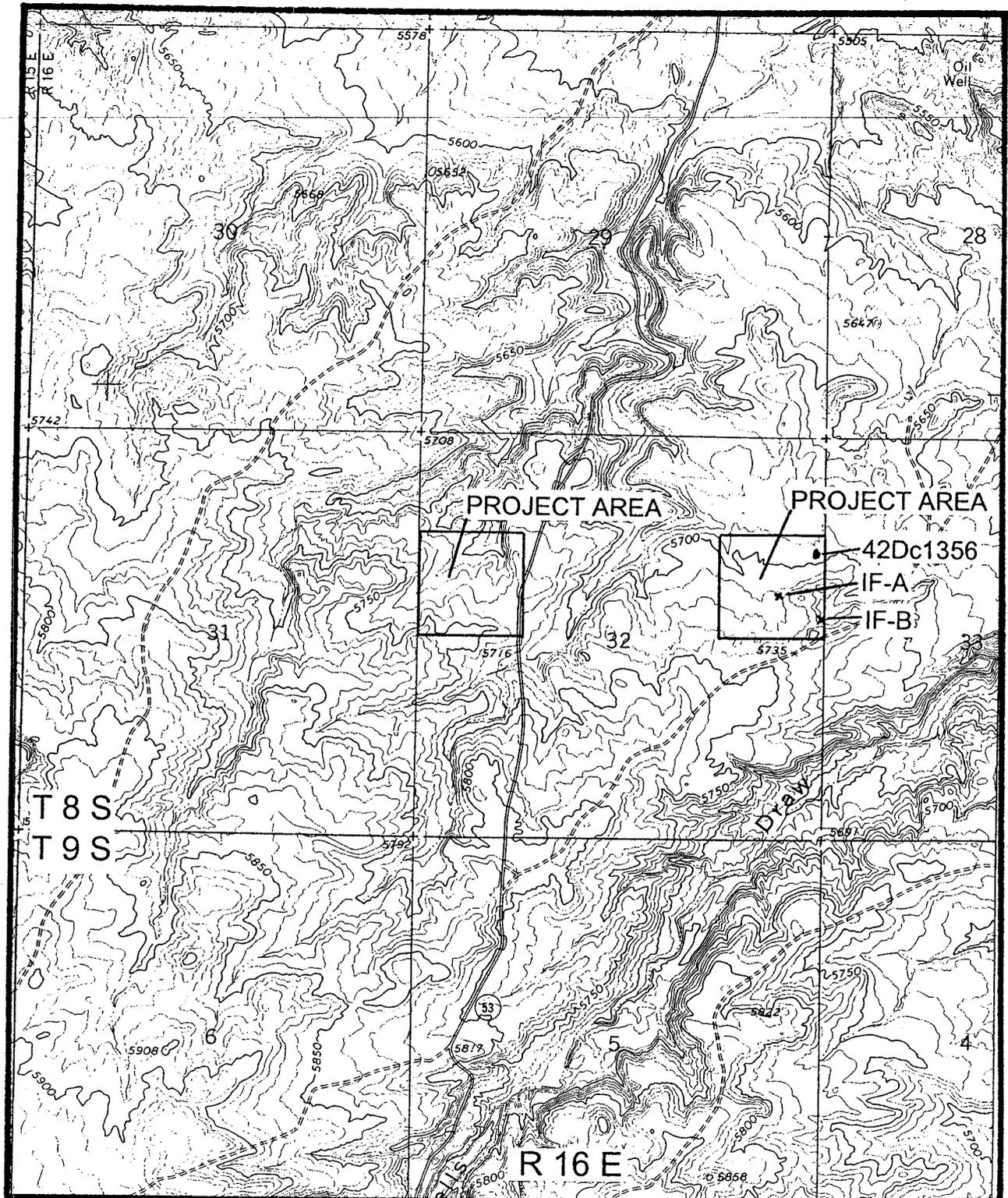


Figure 1. Inventory Area of Inland Production Company's 400 Acres in the Wells Draw and Pariette Bench Localities showing Cultural Resources. USGS 7.5' Myton SW, UT 1964.

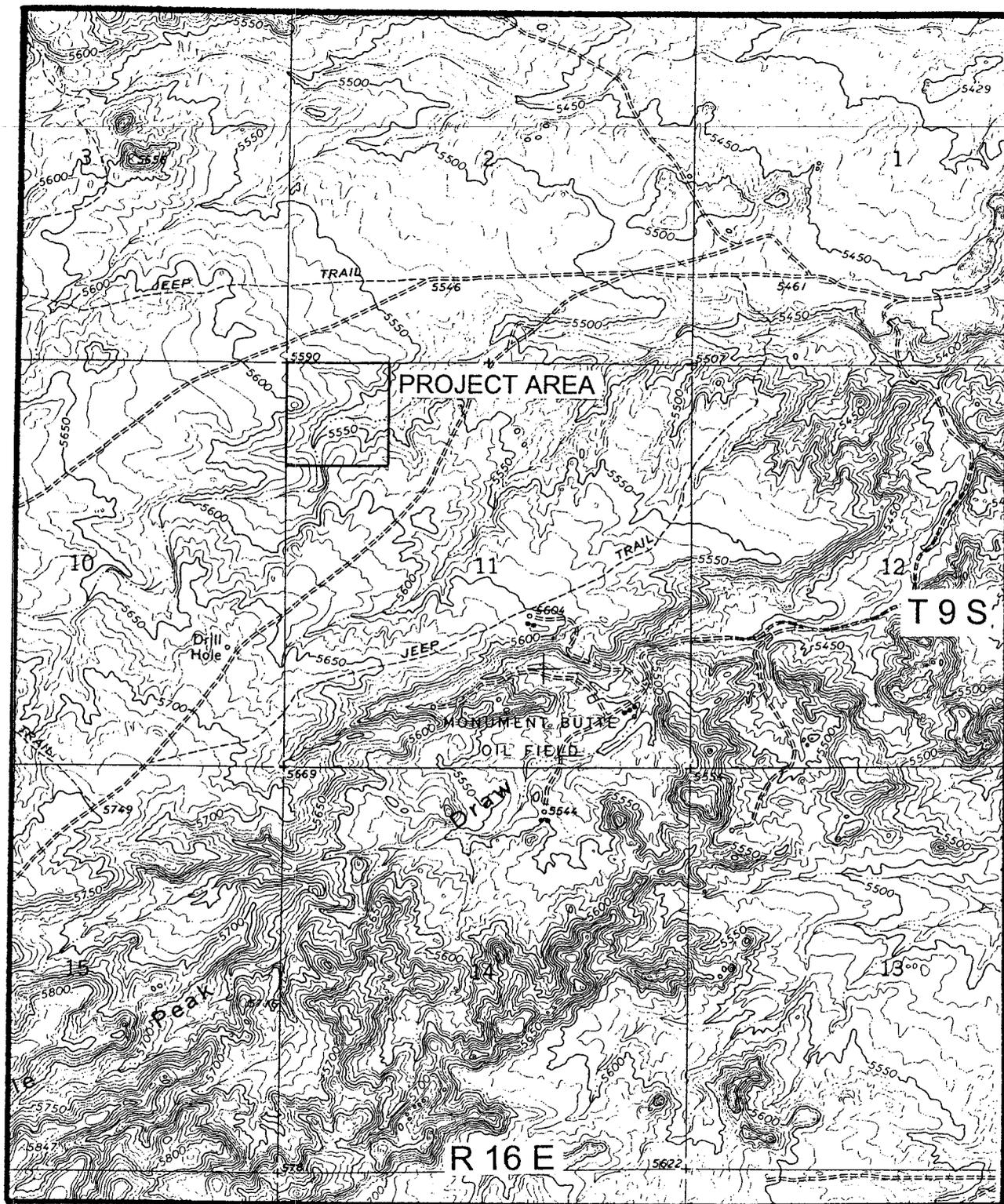


Figure 2. Inventory Area of Inland Production Company's 400 Acres in the Wells Draw and Pariette Bench Localities. USGS 7.5' Myton SE, UT 1964.

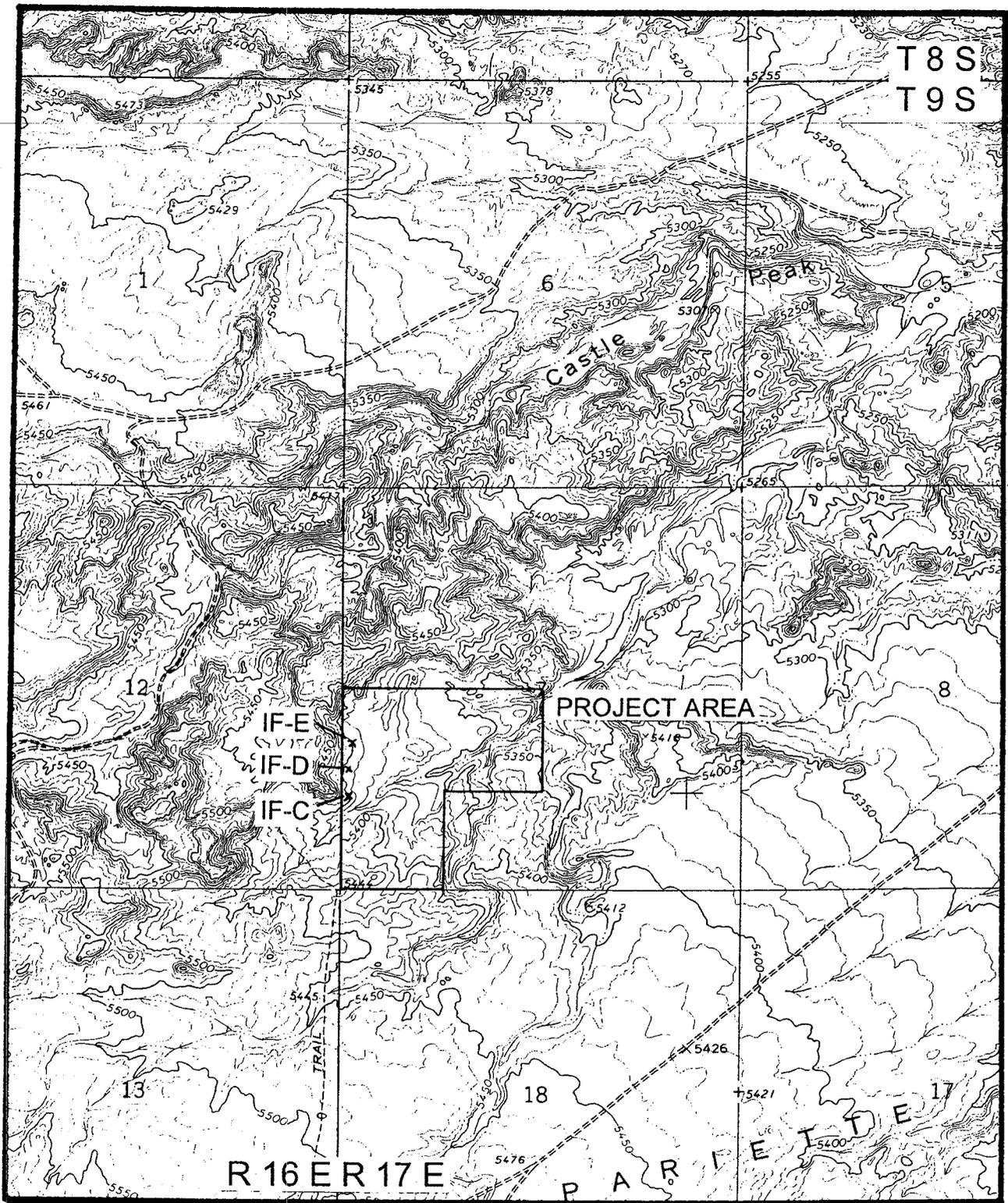


Figure 3. Inventory Area of Inland Production Company's 400 Acres in the Wells Draw and Pariette Bench Localities showing Cultural Resources. USGS 7.5' Myton SE, UT 1964.



Topographically, this area consists of highly dissected sandstone and mudstone rock formations and broad sandy silt ridges (Stokes 1986). Geology includes the recent alluvial deposits, the older alluvial terrace deposits, and rock outcrops of the Upper Eocene Uinta Formation. The Uinta Formation occurs as eroded outcrops formed by fluvial deposited stream laid interbedded sandstone and mudstone. This formation is known for its fossil vertebrate turtles, crocodylians, fish, and mammals. The elevation ranges from 5230 to 5750 feet a.s.l. The primary water source in the area is Pariette Draw and intermittent drainages include Wells Draw and Castle Peak Draw. The project area lies within the Upper Sonoran life zone, dominated by a shadscale community intermixed with low sagebrush, mat saltbrush, greasewood, rabbitbrush, snakeweed, prickly pear cactus, pincushion cactus, and grasses. A riparian zone exists along the washes, and includes cottonwood, Russian olive, and tamarisk. Modern disturbances to the landscape include well locations, access roads, pipelines, and livestock grazing.

The cultural-chronological sequence represented in the study 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, late paleoindian Alberta and Midland variety projectile point has been documented (Hauck 1998).

The Archaic stage (ca. 8,000 B.P.-1,500 B.P.) is characterized by peoples depending on a foraging subsistence strategy, 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 perhaps reflecting the development of the atlatl in response to a need to pursue smaller and faster game (Holmer 1986). In the Uinta Basin, evidence of widespread Early Archaic exploitation 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 clustered mainly in the lower White River drainage (Spangler 1995:373). 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 plateau (Spangler 1995:374). The Middle Archaic (ca. 3000-500 B.C.) is characterized by improved climatic conditions and increased human populations 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 atlatl 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 Cockleburr Wash Site (42Un1476) where a temporary structure, probably a brush shelter, yielded a date of 316 B.C. The structure was probably associated with seasonal procurement of wild floral resources gathered along Cliff Creek (Tucker 1986).

The Formative stage (A.D. 500-1300) is recognized in the area by the Uinta Fremont as first termed by Marwitt (1970). This stage is characterized by 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 surface 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. 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 hunter and gatherers exploiting 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 (Ibid 191).

The settlement of the Duchesne County is unique in the state in that it was not settled by Mormon pioneers, since early scouting parties had deemed the area unfit for settlers. The area was settled in 160 acre parcels under the Homestead Act. 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).

## SURVEY METHODOLOGY

An intensive pedestrian survey was performed for this project which is considered 100% coverage. The 400 acres were examined for cultural resources by the archaeologists walking parallel transects spaced no more than 10 m (30 ft) apart. Ground visibility was considered good. Acreage for the project area totals 400 acres and includes 160 acres on BLM administered property (Vernal Field Office) and 240 occurs on SITLA land.

Cultural resources were recorded as an archaeological site or isolated find of artifacts. Archaeological sites were defined as spatially definable areas with features and/or ten or more artifacts. Sites were documented by the archaeologists walking transects across the site, spaced no more than 3 m 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 Brunton compass 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, with site data entered on an Intermountain Antiquities Computer System (IMACS, 1990 version) inventory form (Appendix A). Isolated finds are defined as individual artifacts or light scatter of items lacking sufficient material culture to warrant IMACS forms, or to derive interpretation of human behavior in a cultural and temporal context. All isolated artifacts were plotted on a 7.5' USGS map and are described in this report.

## INVENTORY RESULTS

The inventory of Inland Production Company's 400 acres resulted in the documentation of one prehistoric site (42Dc1356) and seven isolated finds of artifacts (IF-A through IF-G).

Smithsonian Site No.: 42Dc1356  
Temporary Site No.: MOAC 0010-1  
Legal Description: T 8S, R 16E, Sec. 32  
Jurisdiction: State of Utah, Trust Lands Administration  
NRHP Eligibility: Not Eligible

Description: This is a low density, lithic scatter of unknown temporal affiliation. It is situated at a base of a low ridge, north of Wells Draw. The site measures approximately 45 m north-south by 35 m east-west. Vegetation cover is dominated by shadscale, rabbitbrush and grasses. Lithic debitage consists of 10 decortication and 3 secondary flakes. Six chipped stone tools were documented: a knife, side scraper, three utilized flakes and an unprepared core. Lithic material is a local opaque chert that varies from tan to brownish-gray. The site may have functioned as a butchering or resource processing locale. No temporal diagnostic artifacts or cultural features were found.

### Isolated Finds of Artifacts

Isolated Find A (IF-A) is located in the NW/SE/SE/NE of S. 32, T 8S, R 16E. It consists of two unprepared tan opaque chert cores. One exhibits 5+ flakes detached from narrow and wide margins (7x3x2cm), and the other displays 7 flakes removed from wide margins (8x5x3cm).

Isolated Find B (IF-B) is located in the SE/SE/SE/NE of S. 32, T 8S, R 16E. It is a rusted log cabin syrup container.

Isolated Find C (IF-C) is located in the NW/NW/SW/SW of S. 7, T 9S, R 17E. It consists of a core reduction episode represented by four large secondary flakes and one decortication flake of fine-grain brown quartzite.

Isolated Find D (IF-D) is situated in the NW/NW/SW/SW of S. 7, T 9S, R 17E. It consists of three tan opaque chert secondary flakes.

Isolated Find E (IF-E) is situated in the NW/SW/NW/SW of S. 7, T 9S, R 17E. The artifact is a tan opaque chert secondary flake.

Isolated Find F (IF-F) is situated in the NW/SW/SW/NE of S. 16, T 9S, R 17E. It is a yellow opaque chert decortication flake.

Isolated Find G (IF-G) is located in the NW/SW/SW/NE of S. 16, T 9S, R 17E. The artifact is a tan opaque chert decortication flake.

## 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 inventory of the Inland Production Company's 400 acre project resulted in the documentation of a limited activity lithic scatter (42Dc1356) and seven isolated finds of artifacts. Site 42Dc1356 lies on residual soil and contains a low density of lithic debitage and an assortment of chipped stone tools. The site lacks temporal indicators, features, and spatial patterning. It is evaluated as not eligible to the NRHP because it fails to possess additional information relevant to the prehistoric research domains of the area. The isolated finds of artifacts consists of small debitage clusters, single flakes, and a historic syrup can. These cultural resources are considered to be insignificant other than their description in this report.

### MANAGEMENT RECOMMENDATIONS

The inventory resulted in the documentation of one prehistoric site (42Dc1356) and seven prehistoric and historic isolated finds. These cultural resources are considered not eligible to the NRHP. Based on the findings, a determination of "no historic properties affected" is recommended for this project pursuant to Section 106, CFR 800.

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**Paleontological Assessment for  
Newfield Exploration Co. 40-Acre  
Parcel around Proposed Well Beluga  
14-16T-9-17 and Access Road in  
SWSE Quarter-Quarter**

**Myton SE Quadrangle  
Duchesne County, Utah**

Prepared for

**Newfield Production Co.  
and  
School and Institutional Trust Land  
Administration**

Prepared by

**SWCA Environmental Consultants**

June 18, 2008  
SWCA #UT08-14273-17

**Paleontological Assessment for Newfield Exploration Co. 40-Acre Parcel around  
Proposed Well Beluga 14-16T-9-17 and Access Road in SWSE Quarter-Quarter**

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Prepared for

**Newfield Production Co.**  
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and

**State of Utah**  
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**June 18, 2008**

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<u>Appendix</u>
A Fossil Localities Within One Mile of the Project Area of Potential Effect (Confidential)

## 1.0 PROJECT SUMMARY

- Paleontological assessment conducted at the request of Newfield Production Co. and the State of Utah School & Institutional Trust Lands Administration (SITLA). Performed by SWCA Environmental Consultants.
  - Utah State Permit 07-363
- Paleontological records search and field survey for 40-acre parcel around Beluga 14-16T-9-17 and ~0.25 mile long access route in adjacent quarter-quarter (SWSE).
- Field survey on May 10, 2008 of the entire SESW quarter-quarter and the proposed road and pipeline within SWSE in T9S-R17E-Sec16, Duchesne County, Utah (USGS 7.5 Minute Myton SE quadrangle).
  - Pedestrian survey of all outcrops within the project area
- Geology
  - Geologic Units
    - Alluvium and colluvium (PFYC Class 2)
    - Eolian Deposits (PFYC Class 2)
    - Lower unit of the Uinta Formation (PFYC Class 5)
- Paleontology
  - Six previously recorded localities within one-mile radius, none within the project area.
  - No new localities were recorded.
- Recommendation
  - Clearance without further mitigation for all construction within the entire SESW quarter-quarter and along the proposed access route in the SWSE quarter-quarter.
  - However, if any subsurface bones or other potential fossils are encountered during construction anywhere within the project area, work in the immediate vicinity should cease, the SITLA should be notified, and a qualified and Utah State-permitted paleontologist should inspect the location before work continues.
- Distribution of Survey Report
  - Hard copies sent SITLA and Newfield Production Co. Hard copy and electronic copies on file at the SWCA Vernal office.

## **2.0 INTRODUCTION**

At the request of Newfield Production Co. and the State of Utah School & Institutional Trust Lands Administration (SITLA), SWCA Environmental Consultants conducted a paleontological records search and field survey of the 40-acre parcel around Beluga 14-16T-9-17 and a ~0.25 mile long access route in adjacent quarter-quarter (SWSE).

The surveyed area includes the entire SESW quarter-quarter and the proposed road within SWSE in T9S-R17E-Sec16, Duchesne County, Utah (USGS 7.5 Minute Myton SE quadrangle; see Map 1).

## **3.0 METHODS**

The paleontological survey and evaluation procedures for this assessment were conducted according to State guidelines under Utah State Permit 07-363.

### **3.1 Personnel**

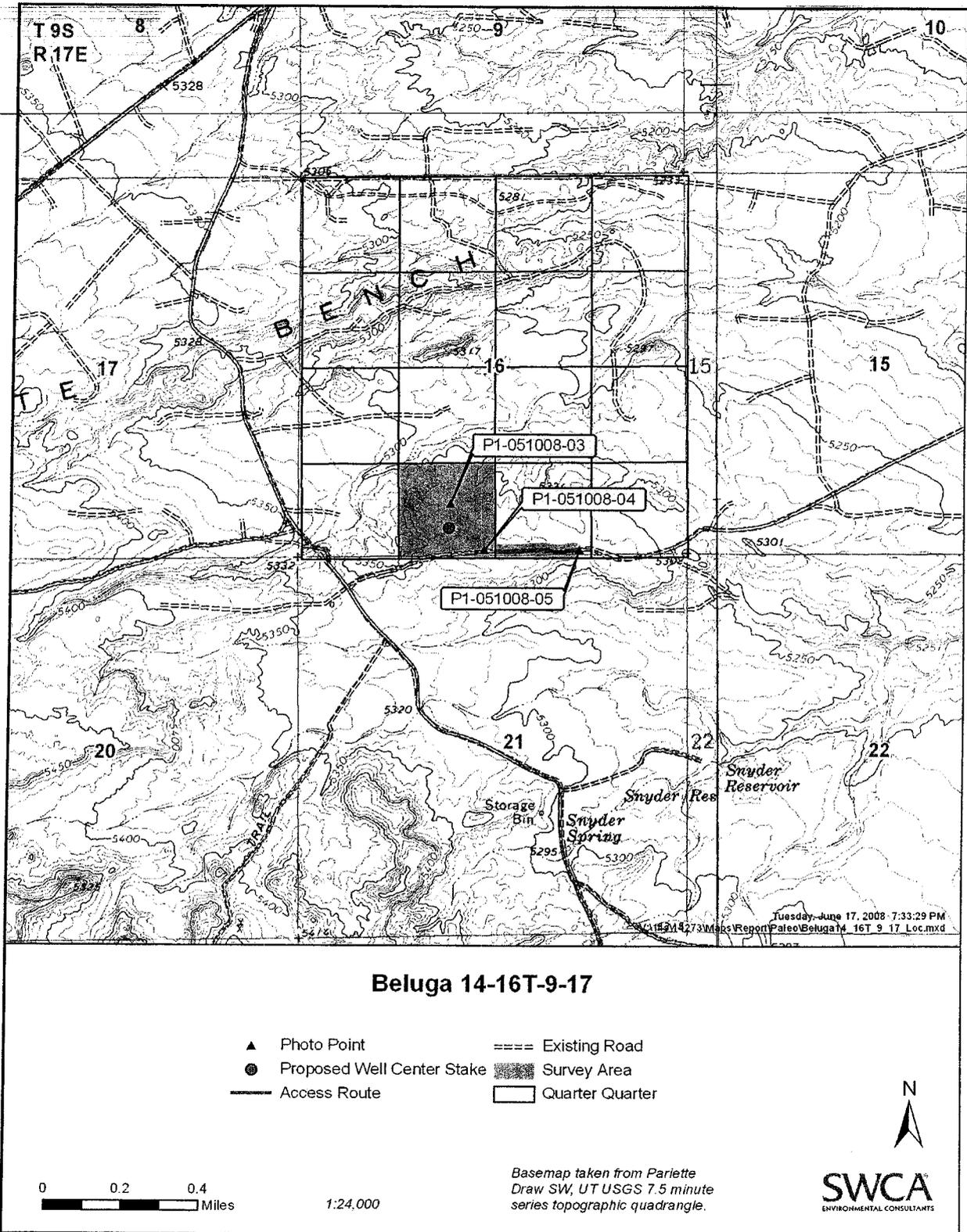
William Gelnaw completed the field work and assisted with the final report. Margaret Imhof, M.S. conducted the file searches and prepared the final report. Dr. Paul C. Murphey, Principal Investigator on the Utah State permit under which this survey was conducted, supervised the research, field work, and reviewed the final report. Allen Stutz produced the maps.

### **3.2 Records Search Methods**

Records searches were conducted in order to 1) determine whether any previously recorded fossil localities occur within the project areas; 2) assess the potential for disturbance of these localities during construction; and 3) evaluate the paleontological sensitivity within the area of potential effect (APE). Electronic paleontological records maintained by the Utah Geological Survey, Paleontology Department were searched in order to determine the presence of previously documented fossil localities within the project APE.

### **3.3 Resource Assessment Methods**

The paleontological sensitivity of each geologic unit to be impacted was evaluated using the Potential Fossil Yield Classification System (PFYC), originally developed by the U.S. Forest Service (1996) and recently significantly revised and adopted as policy by the BLM (BLM IM 2008-009) to replace its previous resource management classification system (BLM *Conditions 1-3*). The PFYC utilizes the close relationship between paleontological resource occurrences and the geologic units in which they are preserved. The PFYC designations for the affected geologic units for this project were assigned by the BLM Regional Paleontologist.



Map 1. Location of 40-acre parcel survey area around Beluga 14-16T-9-17 and road to the east, in the SWSE qtr-qtr, for Newfield Production Co.

### **3.4 Field Methods**

The survey was designed to 1) determine the surface presence of previously unknown significant vertebrate fossils and/or noteworthy occurrences of invertebrate, plant, or trace fossils; 2) evaluate the condition of documented paleontological localities and the potential for disturbance of these localities during the proposed construction; and 3) evaluate potential adverse impacts to subsurface paleontological resources during construction.

The paleontological field survey consisted of inspection for 1) surface fossils; 2) exposures of potentially fossiliferous rocks; and 3) areas in which fossiliferous rocks will be exposed or otherwise impacted during construction. The survey was 100% pedestrian of all bedrock exposures unless to steep to safely traverse.

A paleontological locality documents the location, identification and description of a scientifically significant fossil(s) along with its geologic context. In addition, however, we record the presence of highly weathered, fragmentary or otherwise unidentifiable fossils as non-significant fossil occurrences which typically consist of fragments of turtle shell, unidentifiable bone and tooth fragments, and unidentifiable plant fossils in order to communicate the presence of fossils in a manner that does not trigger mitigation measures. Typically, fossil locality forms and maps are provided only for significant fossil localities which are either collected at the time of discovery or recommended for avoidance and/or later mitigation.

### **3.5 Distribution of Data**

Copies of this report will be submitted to SITLA and Newfield Production Co. Any newly recorded locality data will be submitted to the Utah Geological Survey, State Paleontologist. A hard-copy file will be retained at SWCA Environmental Consultants, Vernal office, along with relevant field notes, maps, and other data. No fossils were collected during this project.

## **4.0 GEOLOGY AND PALEONTOLOGY**

The East-West trending Uinta Mountains were uplifted during the Rocky Mountain-forming Laramide orogeny (Rasmussen et al. 1999) in the Paleocene Epoch (Stokes 1986), exposing the Paleozoic-age rocks in the core of the mountains and Mesozoic-age rocks along their flanks. In conjunction with the uplift, the southerly-adjacent synclinal Uinta Basin formed (Rasmussen et al. 1999). From the Paleocene to the middle Eocene, sediments from freshwater lakes and later from river channels, river deltas and floodplains filled the basin with sediments and accompanying fossils (Stokes 1986, Townsend 2004). From oldest to youngest, these rock units include the Wasatch, Green River, Uinta and Duchesne River formations. Collectively, these units represent the primary source of middle Eocene-aged vertebrate, invertebrate and plant fossils from Utah and Colorado, and are thus of great scientific importance. Locally, Pleistocene- and Holocene-aged sediments deposited by rivers, streams, gravity, and wind overlie the bedrock geologic units.

The project APE contains one mapped geologic unit (Bryant 1992): Eocene-age lower Uinta Formation. In addition to this unit, Holocene-age alluvium and colluvium and Holocene-age eolian deposits were also observed during the survey.

## **4.1 Uinta Formation**

In the Uinta Basin, the Uinta Formation consists of greenish-gray, reddish-brown, yellow, grayish-orange, and purple fluvial and lacustrine shale marlstone, siltstone, and sandstone beds which are locally tuffaceous (Cashion 1973; Dane 1954; Rowley et al. 1985). The Uinta Formation is scientifically important because it is the stratotype for the Uintan NALMA and represents nearly all of Uintan time (46.5-40.0 Ma) (Murphey and Evanoff 2007; Townsend 2004; Walsh 1996). In general terms, the Uinta Formation conformably overlies and interfingers with the Green River Formation in the Uinta and Piceance Creek Basins, and is overlain by the Duchesne River Formation in the Uinta Basin. Despite its historical and scientific importance to vertebrate paleontology, the detailed stratigraphy of the Uinta Formation is complex and not yet fully understood.

The Uinta Formation was named by O. C. Marsh in 1871. Based on lithologic differences, O. A. Peterson (as quoted in Osborn 1895:72-74) was the first worker to subdivide the Uinta Formation, from stratigraphically lowest to highest, into Horizons A, B, and C. The Wood Committee (Wood et al. 1941) formally divided the Uinta Formation into the older Wagonhound Member (Horizons A and B) and younger Myton Member (Horizon C), and discarded the older tripartite subdivision. However, the older terminology is still widely used because 1) the Wagonhound Member combined two lithologically distinct units: the sandstone-dominated Uinta A, which contains few fossils, and the mudstone and claystone-dominated Uinta B, which contains locally abundant fossils; and 2) fossil collections made prior to the recommendations of the Wood Committee were made using the tripartite scheme. The specific location of the subunit boundaries has shifted slightly with almost each successive publication on the stratigraphy of the area, resulting in a well-understood broad picture for which the stratigraphic details are hazy and the biostratigraphy unresolved (Walsh 1996). The most recent stratigraphic and paleontologic work in the Uinta Formation has included important efforts to better characterize and document the lithostratigraphy, biostratigraphy paleoecology, and paleoenvironments of the Uinta Formation and time-equivalent strata (see Rasmussen et al. 1999; Townsend 2004; Walsh 1996; Townsend et al. 2006).

Approximately 31 percent of modern mammalian families appear in the fossil record of North America during the Uintan NALMA (Black and Dawson 1966). Many of the new taxa are thought to have either originated in North America or emigrated in from Asia (Black and Dawson 1966; Stucky 1992; Beard 1998). The distinctive shift in the composition and diversity of mammalian communities which occurred during the Uintan is marked by the disappearance or decline of more archaic groups such as condylarths, some types of insectivores and marsupials, plesiadapoids, and oxyaenid creodonts. At the same time, more modern groups including lagomorphs, selenodont artiodactyls, advanced carnivorans, and non-ischyromyine rodents began to dominate mammalian communities. See Rasmussen et al. (1999), Townsend (2004), Murphey and Daitch (2007), and Walsh (1996) for further discussions of the mammalian faunas and biostratigraphy of the Uinta Formation.

## **4.2 Holocene Eolian Deposits**

Eolian deposits consist of unconsolidated to very poorly consolidated silt and sand deposited by wind, and are highly variable in thickness. Sediment sources are mostly local, with the sandstone beds of the Uinta Formation being a major contributor. Eolian sediments are deposited on sides of slopes or on top of benches and other flat surfaces, and is often sparsely vegetated. Surficial

deposits of Holocene age such as eolian sand may contain the unfossilized remains of modern taxa but are too young to contain in situ fossils.

### 4.3 Holocene Alluvium and Colluvium

Holocene-age alluvium is composed primarily of poorly consolidated silt, sand, and cobbles derived from eroded bedrock and older alluvial and colluvial deposits. These sediments are deposited by rivers and streams in stream channels and on active alluvial floodplains.

Holocene-age colluvium consists of earthflow, mudflow, landslide, and talus deposits (Cashion 1973, Rowley et al. 1985). Both colluvium and landslide deposits consist of rock material that has moved under the influence of gravity. Lithologies of these units vary and are dependent upon the type of source rock. They form on unstable slopes and on older colluvial deposits. In general, colluvium is much less likely to contain well-preserved animal and plant remains than intact native sediments. Surficial deposits of Holocene age such as alluvium and colluvium may contain the unfossilized remains of modern taxa but are too young to contain in situ fossils.

## 5.0 RESULTS

The following section presents the results of the records search and field survey conducted for the Newfield Production Co. leased quarter-quarter section and adjacent access route.

### 5.1 Previously Documented Localities

Six previously documented fossil localities are known within a one-mile radius of the project area. None are within the project area. Further information on all the previously recorded localities within a one-mile radius is provided in Appendix A.

### 5.2 Paleontological Sensitivities

The paleontological sensitivities of the one mapped geologic unit (Bryant 1992) and two observed units in the project APE have been classified according to the PFYC by the BLM and are summarized in Table 1.

**Table 1. Paleontological Sensitivities of Geologic Units Within the Project APE.**

Geologic Unit	Map Symbol*	Age	Typical Fossils	PFYC
Alluvium and colluvium	Qa	Holocene	Unfossilized remains of modern taxa, too young to contain fossils.	Class 2
Eolian Deposits	Qe	Holocene	Unfossilized remains of modern taxa, too young to contain fossils.	Class 2
Uinta Formation, lower part	Tul	Eocene	Locally abundant plants (leaves, seeds, wood); invertebrates (insects, mollusks); and a highly diverse and scientifically important vertebrate fauna (reptiles, mammals)	Class 5

\* Bryant 1992

### 5.3 Field Survey

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<b>Project Name</b>	<b>Beluga 14-16T-9-17</b>
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<b>Quarter-Quarter Surveyed:</b>	T9S-R17E-Sec16 SESW, and access route in SWSE		
<b>Surveyed on:</b>	05/10/08	<b>By:</b>	William Gelnaw
<b>Infrastructure Staked:</b>	<input checked="" type="checkbox"/> Well pad	<input checked="" type="checkbox"/> Access road	<input checked="" type="checkbox"/> Surface pipeline
<b>Survey Description:</b>	A pedestrian survey was conducted of the entire quarter-quarter to delineate bedrock exposures and survey them for paleontological resources.		
<b>Topography:</b>	The quarter-quarter is mostly flat, with a small rise at the western edge of the quarter-quarter and is highest in its southwest corner.		
<b>Bedrock Exposure Status:</b>	There is a small outcrop of the Uinta Formation that comprises the rise at the west edge of the quarter-quarter. The remainder of the quarter-quarter is covered in sandy soil and vegetation.		
<b>Geologic Formation(s):</b>	Alluvium and Colluvium	Holocene	PFYC Class 2
	Eolian Deposits	Holocene	PFYC Class 2
	Uinta Fm, lower member	Eocene	PFYC Class 5
<b>Reference:</b>	Bryant 1992		
<b>Geologic Description:</b>	The exposed rock in the southwest part of the quarter-quarter is sandstone overlying mudstone		
<b>Fossil Status:</b>	No Fossils Observed		
<b>Fossil Description:</b>	• N/A		
<b>Recommendations:</b>	Clearance without further mitigation for all construction within the entire SESW quarter-quarter and along the proposed access route in the SWSE quarter-quarter.  However, if any potential fossils are encountered during construction anywhere within the project area, work in the immediate vicinity should cease, SITLA should be notified, and a qualified and SITLA-permitted paleontologist should inspect the location before work continues		

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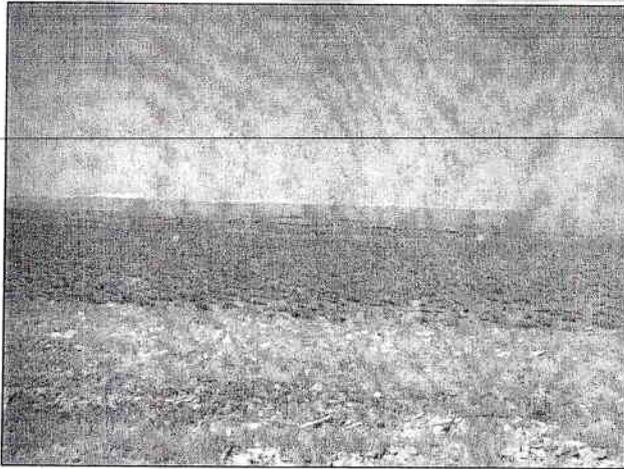


Figure 1. Photo Point P1-051008-03. View to North of vegetated flats of northern half of qtr-qtr.

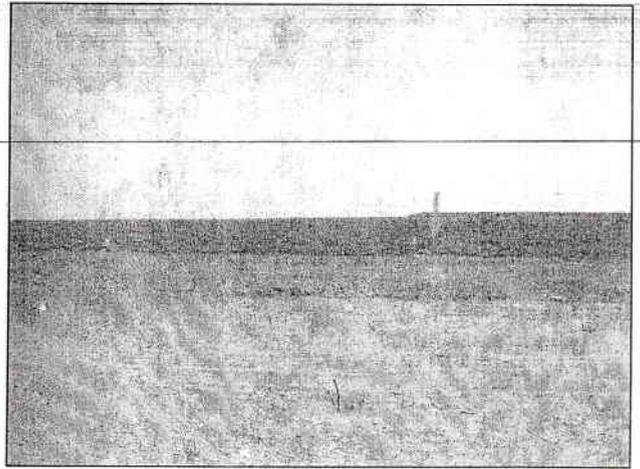


Figure 2. Photo Point P1-051008-03. View to South from existing pad showing vegetated flats on which proposed well (arrow) is staked.

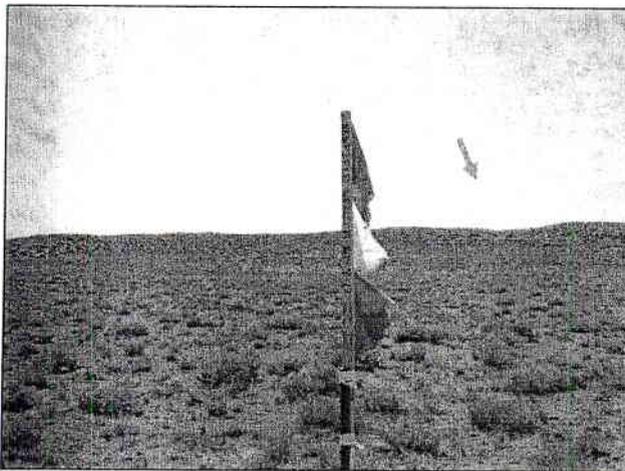


Figure 3. View to west from center stake showing small western rise with sandstone outcrop (arrow).

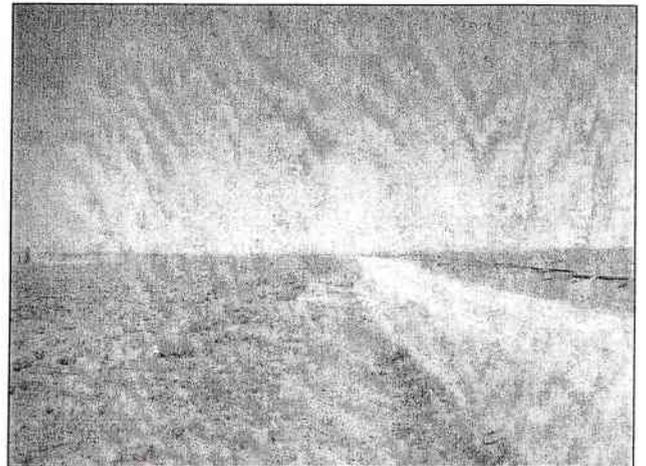


Figure 4. Photo Point P1-051008-04. View to East showing access route survey in SWSE qtr-qtr.



Figure 5. Photo Point P1-051008-04. Close up of sandy, grassy soil.

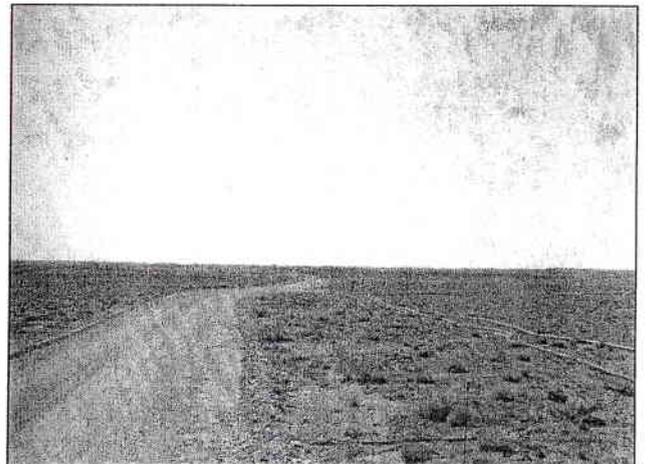


Figure 6. Photo Point P1-051008-05. At east end of pipeline in SWSE qtr-qtr, looking west at vegetated flats.

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**CULTURAL RESOURCE INVENTORY OF  
SIX WELL PAD LOCATIONS IN THE  
SOUTH WELLS DRAW AND  
LONE TREE UNITS  
DUCHESNE COUNTY, UTAH**

*JBR Cultural Resource Report 00-04*

*by*

*Richard Crosland*

*Reviewed by Scott Billat  
Cultural Resource Director*

prepared for  
**Inland Resources Inc.**  
**Denver, Colorado**

*submitted by*

***JBR Environmental Consultants Inc.***  
***Springville, UT***

February 25, 2000

Federal BLM Permit No. 99UT55134  
Utah State Project Authorization No. U-99-JB-0725s

## MANAGEMENT SUMMARY

**Agencies:** School and Institutional Trust Lands Administration (SITLA), Utah State Historic Preservation Office (SHPO), Bureau of Land Management (BLM).

**Project Number:** Utah State Project Authorization No. U-99-JB-0725s

**Project Description:** The project consists of a cultural resource inventory of six 40 acre well pad locations in the Lone Tree (15-16, 16-16), and South Wells Draw Units (4-2, 2-2, 1A-2, 6-2.). A total of 240 acres were completed for the project, all of which are administered by SITLA.

**Location:** Inventoried well pads in the Lone Tree Unit are located approximately 12 miles SSW of Myton, Utah, while the inventoried areas in the South Wells Draw Unit are located approximately 9.5 miles SW of Myton, Utah.

**Cultural Resources:** The Class III inventory identified one previously recorded site, ten newly recorded sites, and 23 isolated finds. Seven of the newly recorded sites are prehistoric, two sites with both prehistoric and historic components, and one rock cairn. Previously recorded site 42DC341 was relocated and reinventoried. Site 42DC341 is located on both SITLA and BLM lands and was recommended as ineligible. Nine of the ten newly identified sites are recommended as eligible for NRHP inclusion (42DC1292, 42DC1293, 42DC1294, 42DC1295, 42DC1296, 42DC1297, 42DC1298, 42DC1299, and 42DC1300). The remaining site, the rock cairn (42DC1301), is recommended unevaluated pending further research.

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## 1.0 INTRODUCTION

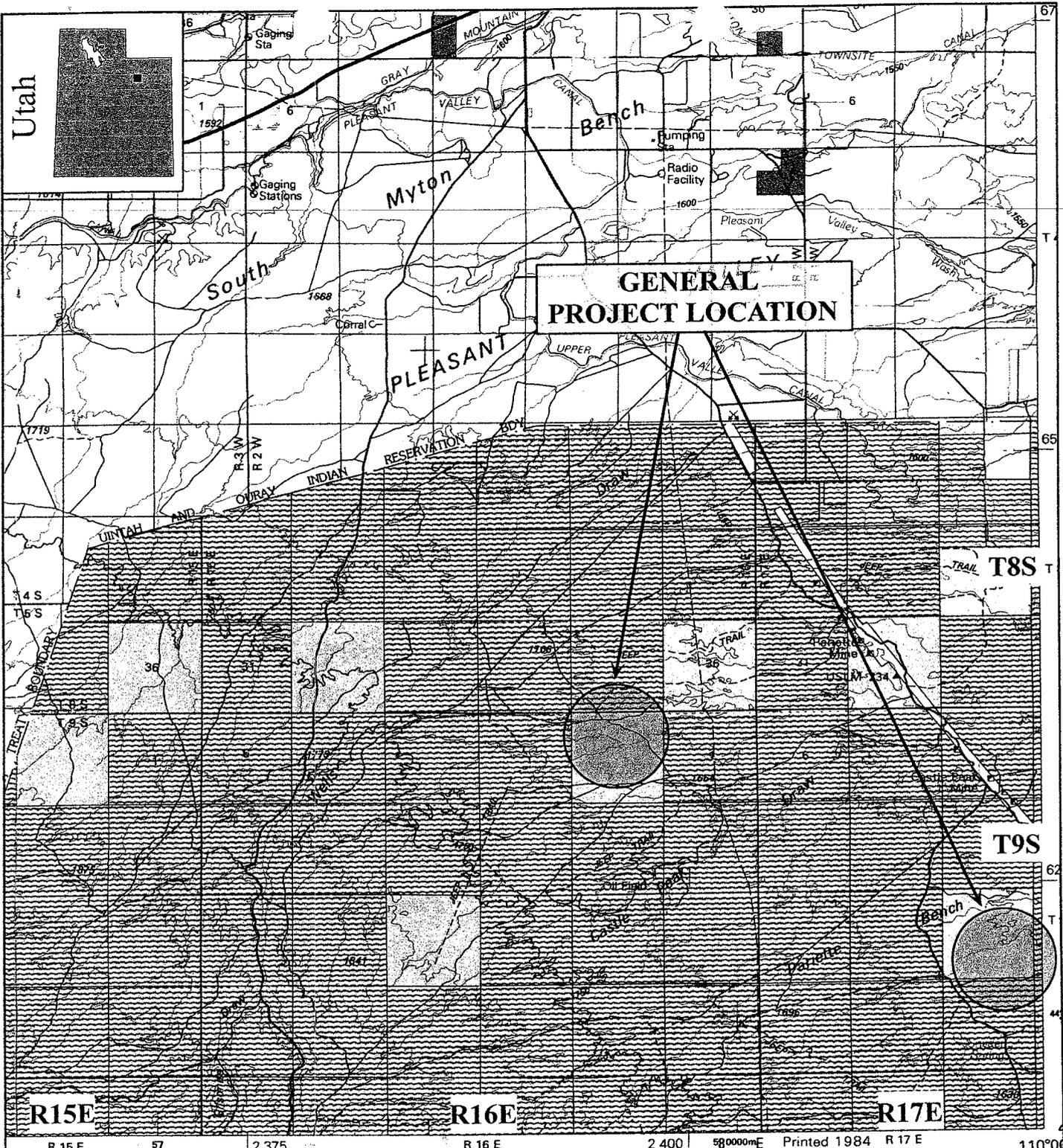
JBR Environmental Consultants, Inc. of Springville, Utah, completed a cultural resource inventory of six well pad locations in the Lone Tree and Wells Draw Expansion Units for Inland Resources Inc. The well pad locations surveyed for the present project consist of 4-2, 2-2, 1A-2, and 6-2 in the Lone Tree Unit and 16-15 and 16-16 in the Wells Draw Expansion Unit.

The cultural resource inventory of the six well pad locations encountered eight prehistoric sites, two prehistoric/historic sites, one rock cairn, and 23 isolated finds. The project inventory was conducted on December 29<sup>th</sup> and 30<sup>th</sup>, 1999, and January 3<sup>rd</sup> and 4<sup>th</sup>, 2000 by JBR personnel Richard Crosland, Jenni Prince-Mahoney, and Aaron Fergusson. One of the prehistoric sites (42DC341) had been previously recorded in 1981 and was found to extend on both SITLA and BLM lands. The site forms were updated and a copy sent to the BLM office in Vernal for their records.

The project area was inventoried in December of 1999 for paleontological resources Dr. Wade Miller of Paleontological Consultants. His findings are covered under a separately submitted report.

## 2.0 PROJECT LOCATION

All of the proposed project areas are located on lands administered by the School and Institutional Trust Lands Administration (SITLA). The Lone Tree Unit and the Wells Draw Expansion Unit are located to the southwest of Myton, Utah approximately 12 miles and 9.5 miles respectively (Figure 1). The legal locations for the project parcels are listed in Table 1.



**KEY:**

BASE FROM DUCHESNE, UT - 1:100,000 MAP



**INLAND RESOURCES  
SIX WELLS IN THE LONE TREE  
AND SOUTH WELLS DRAW UNITS**

**FIGURE 1  
GENERAL PROJECT LOCATION**



environmental consultants, inc.  
Salt Lake City, Utah • Springville, Utah • Reno, Nevada • Elko, Nevada

Table 1. Project Area Legal Locations

Well Locations	Township/Range Section	Legal Locations	USGS Quad
4-2 Lone Tree	T9S R17E Sec.2	NE <sup>W</sup> / <sub>4</sub> NW <sub>4</sub>	Myton SE, UT
2-2 Lone Tree	T9S R17E Sec. 2	NW <sub>4</sub> NE <sub>4</sub>	Myton SE, UT
1A-2 Lone Tree	T9S R17E Sec. 2	NE <sub>4</sub> NE <sub>4</sub>	Myton SE, UT
6-2 Lone Tree	T9S R17E Sec. 2	SE <sub>4</sub> NW <sub>4</sub>	Myton SE, UT
15-16 Wells Draw Expansion	T9S R17E Sec. 16	SW <sub>4</sub> SE <sub>4</sub>	Myton SE, UT
16-16 Wells Draw Expansion	T9S R17E Sec. 16	SE <sub>4</sub> SE <sub>4</sub>	Myton SE, UT

### 3.0 NATURE OF PROPOSED IMPACTS

Inland Resources proposes to develop six well locations within the identified project area. Less than 10 acres per well pad will be impacted by Inland during drilling operations. The completion of 40 acre well tracts will give Inland an area to situate the final well placement and associated facilities during development. Also, access roads can be adjusted into the 40 acre well tracts. Many of these proposed wells will be accessed from existing well roads.

### 4.0 ENVIRONMENTAL SETTING

The well pads in the Lone Tree Unit are located approximately two miles southwest of Castle Peak Draw along the Pariette Bench. The terrain consists of dissected tableland with the Pariette Bench located just to the north. Much of the inventoried area is situated on a low bench-like feature that gently slopes up from the south and drops off more steeply to the north. The inventory areas in the Wells Draw Expansion Unit are situated just to the north of Castle Peak Draw in an area dissected by two large intermittent drainages and a high bench feature.

## 4.1 Geology

The area is characterized by low rolling tablelands dissected by deep draws and low eroding bedrock outcrops of sandstone and limestone. Soils in the area are a fine light tan to medium brown silty sands. The surface sediments consist of an inter-fingering of fluvial deposits and thinly bedded Pleistocene lake bed deposits. Sediments contain a moderate amount of Pleistocene gravels and some small areas of Eocene Green River Formation are visible in eroded areas. Aeolian sand deposits are also present in some areas.

## 4.2 Flora/Fauna

The project area is within the Upper Sonoran Life Zone. Vegetation within the project area includes four-wing saltbrush, winterfat, narrow leafed yucca, greasewood, and a variety of forbs and low grasses. Fauna noted in the project area includes antelope, jackrabbit, cottontail rabbit, and ground squirrel.

## 5.0 PREVIOUS RESEARCH

The Class I file search conducted at the State Historic Preservation Office indicated that fifteen previous projects had been conducted in or near the current project area. The majority of these inventories have been associated with the gas and oil industry and include well pads, access roads, and pipeline projects. A listing of these cultural resource inventories conducted within or immediately adjacent to the proposed project blocks is incorporated below in Table 2. General Land Office (GLO) maps for the area were reviewed in an effort to identify any historic features in the area that may still be visible on the ground.

Table 2. Previous Cultural Inventories Near the Current Project Areas

Report No.	Project	Date	Firm	Sites
U-81-UB-0849b	Well pad inventory	1981	UTARC	None
U-82-UB0588b	Well pad inventory	1982	UTARC	None
U-82-EC-0674b	Well pad inventory	1982	Environmental Consultants	None
U-83-EC-0599bs	Pipe line inventory	1983	Environmental Consultants	Two
U-84-GC-2641	Pipe line inventory	1985	Grand River Consultants	None
U-85-AF-709s	Well pad inventory	1985	AERC	None
U-95-AF-0664s	Inventory of four well pads and associated access routes	1996	AERC	None
U-81-GC-0816b	Well pad inventory	1981	GRC	One
U-81-GC-0820	Inventory of three well pads	1981	GRC	One
U-81-GC-0821b	Well pad inventory	1981	GRC	None
U-83-GC-0624bs	Pipe line inventory	1983	GRC	One
U-87-BL-211b	Reservoir inventory	1987	Bureau of Land Management	Unknown
U-93-NP-0632bs	Power line inventory	1993	A.K. Nielson	Three
U-96-AF-0218	Inventory of three pipeline complexes	1996	AERC	None
U-96-SJ-0011bs	Pipe line inventory	1996	Sagebrush Consultants	None

The majority of the projects located near the current project encountered few if any cultural resource sites. The Class I Inventory at the State Historic Preservation Office indicated that only five sites were located within ¼ mile of the project areas and are listed below in Table 3. Only one of these sites (42DC341) was located within the current project area. Site 42DC341 was originally recorded by Grand River Consultants on April 13, 1981. The site consisted of a lithic quarry spanning over an area of 125 meters by 35 meters. Artifacts included over twenty flakes and a single biface. Upon revisiting site 42DC341, in addition to the previously recorded

assemblage, a unifacially worked knife and a bifacially worked knife were observed just outside of the original site boundary. Therefore the site was re-recorded as the boundary of the site was extended up the low bench approximately 35 meters to the north.

Table 3. Cultural Resource Sites within ¼ Mile of Current Project.

Site #	Site Type	Cultural Affiliation	Eligibility	Location
42DC341	Lithic Quarry	Unknown Aboriginal	Ineligible	NE NE of Sec. 2
42DC106	Unknown	Unknown	Unknown	SE NW of Sec. 16
42DC428	Sheep Herder's Camp	European/American	Ineligible	NW SW of Sec. 1
42DC503	Lithic Scatter	Unknown Aboriginal	Eligible	NE SW of Sec. 35
42DC1021	Lithic Scatter	Unknown Aboriginal	Ineligible	SW SW of Sec. 15

## 6.0 CULTURE HISTORY

A number of overviews have been written for the region and adjacent regions including Jennings (1974, 1978, 1986), Aikens (1970), Madsen (1980), and Aikens and Madsen (1986).

### 6.1 Prehistoric Overview

Jennings (1986) and Aikens and Madsen (1986), proposed a chronology for the eastern Great Basin that divides the cultural sequence into three periods that are somewhat equivalent to the general Basin-wide chronological sequence: Bonneville period (11,000-9,500 B.P.), Wendover period (9,500-6,000 B.P.), and the Black Rock period (6,000-1,500 B.P.). Madsen (1982) also presents a model of the prehistory of the region that include the following: Paleoindian (12,000-9,000 B.P.), Archaic (8,500-1,600 B.P.), Formative Fremont (1,600-650 B.P.), and Numic (700 B.P.-present). Below is a brief summary and overview of these periods.

The Paleoindian period (12,000-9,000 B.P.) was first defined on the high plains east of the Rocky Mountains as a time of specialized hunting of large game animals such as mammoth, bison, horse, etc. (Jennings 1974). Tools associated with this culture include a series of diagnostic projectile points known as Clovis, Folsom, and Plano points. The Great Basin Stemmed points and crescents are considered by Hester (1973) to be diagnostic of the pre-Archaic Western Pluvial Lakes Tradition in the Great Basin as well, but few have been noted in Utah.

In Utah, significant Paleoindian sites were found in the Sevier Lake region, in the Escalante Desert, south of Green River, and in southeastern Utah. Clovis, Folsom, Dalton-Meserve, Plainview, and Great Basin Stemmed projectile points and crescents have been recovered from these areas (Davis 1986; Janetski and Holmer 1982). Folsom and Plano points and crescents from this period have been reported in Millard County, near the Beaver and Sevier river areas (Janetski and Holmer 1982), and near Delta (Simms and Lindsay 1984). To date, no Paleoindian sites have been formally reported in Uinta County, although at least two Folsom points have been recovered to the west in Duchesne County.

The Archaic period (8,500-1,600 B.P.) is well represented in Utah. The Archaic lifeway was highly adaptive, based on hunting and gathering subsistence practices. Archaic subsistence included a wide array of food sources. During the earlier stages of this period, Archaic people resided around pluvial lake margins and riverine environments. Later, in response to the decline of these ecozones, populations shifted to upland areas to take advantage of available resources. Cultural remains from this period include items such as metates, baskets, bone implements and a variety of diagnostic projectile points. Common point types include Elko and Humboldt series, Pinto, Sudden Side-notched and Gypsum.

Evidence of the Archaic is exhibited by recorded surface sites and rockshelters throughout the region. Rockshelters and cave sites have been the primary means for defining what we know about the culture. Some of these shelters include Walters and Cowboy Caves with C-14 dates of ca. 6875 BC and ca. 6690 BC, which marks the earliest known occupation of the Colorado Plateau (Schroedl 1976). Schroedl (1976) has subdivided the Archaic period into four different phases based on diagnostic point styles to provide temporal control.

The earliest phase is known as the Black Knoll Phase (6350-4250 BC), and is marked by the presence of Elko Corner-notched points, and Pinto series points. An early Pinto variant has been found on the same site as Folsom points, and together, the styles from the Moab Complex (Hunt

and Tanner 1960). The following phase is the Castle Valley Phase (4250-2550 BC). Point styles are more diversified during this period and include Rocker Base, Sudden and Hawken Side-notched points. During the later half of the period Humboldt points appear and become the dominate point style. The beginning of the Green River Phase (1550-1350 BC) coincides with the dichotomy in point styles between the western and eastern sections of the Plateau. The western variant includes San Rafael Side-notched and Gypsum points, while the eastern variant is predominated by Duncan Hanna Points. The final Archaic phase is the Dirty Devil Phase (1350 BC - AD 450) which exhibits a continuity from earlier phases with the Gypsum and Elko Series points. This phase is evidenced more from unfired clay objects, basketry, and sandals rather than point styles as the previous phases (Madsen and Berry 1975). Significant excavated sites in the Uinta Basin that contain Archaic cultural material include Hells Midden (Lister 1951), Thorne Cave (Day 1964), Deluge Shelter, and Swelter Shelter (Leach 1966).

The Fremont inhabited the region between 1600-650 B.P. (Jennings 1978). They were horticulturalists with varying dependencies on corn, beans and squash. The Fremont also hunted small and large game animals and utilized wild plant foods. They built semi-subterranean pit houses, surface jacal and masonry habitation units and coursed adobe granaries. The remains of the structures often appear as low lying mounds in valleys, and on alluvial fans and ridge tops. Diagnostic artifacts from this period include small to medium size corner-notched and side-notched projectile points and ceramics. Ceramics consist mostly of graywares, but also include some corrugated, incised, and black-on-white styles. The Turner-Look site exhibited semi-subterranean houses of dry laid masonry, cultivating corn and possibly squash. The diagnostic Uinta Gray ceramics at the site, place occupation at AD 1050 or later (Wormington 1955; Jennings 1978).

Numic speaking groups (Ute and Gosiute) appear to have replaced the Fremont after about 700 B.P., during the Late Prehistoric period. These groups relied on a hunter-gatherer lifestyle, similar to that of the Archaic. They lived in temporary brush wickiups and rockshelters (Steward 1938). These groups depended on a variety of wild plants, and employed seasonal movements; gathering resources produced in various ecological zones. Evidence of the Late Prehistoric period comes from surface sites, containing light artifact remains, and shallow rockshelter deposits. Diagnostic artifacts include non-painted brownware ceramics and the Desert Side-notched point.

## 6.2 History

The first European contact with Native Americans of the region was the 1776 Dominguez-Escalante expedition in Colorado, Utah and Arizona (Fowler 1986). Detailed descriptions of the dress, weapons and manner of the groups they encountered were recorded. The Dominguez-Escalante expedition traversed the territory of the Utes, Western Shoshone, Southern Paiute and the Navajo. After the Dominguez-Escalante expedition, the Spanish continued to return to Utah to trade for horses, slaves and gold.

In 1805, the Lewis and Clark expedition encountered Northern Shoshone groups in the Snake River region and kept detailed records of their political organization, dress, territory and subsistence. Beginning in the 1820s, fur trappers from Canada, eastern U.S. and Taos entered Utah and began trapping beaver. By 1840, the beaver were gone. However, these mountain men, Jedediah Smith (1826-1829), Etienne Provost (1824-1825), Peter Skene Ogden (1825-1829) and William Ashley (1825-26) had managed to explore much of the state and had encountered numerous Native American peoples.

The first U.S. Government explorers arrived in Utah in the 1840s and recorded some encounters with Native Americans. These included Fremont in 1845, Stansbury in 1852, Simpson in 1876, and Gunnison-Beckwith in 1856. In 1847, the first Mormon settlers arrived in the Salt Lake Valley. From this point the pioneers were almost in constant contact with Native American cultures and people. A result of this continuing contact was armed conflict and four major battles or wars: The Provo River Battles (1850), Walker War (1853), Gosiute War (1860-1863), and the Black Hawk War (1865-1867).

By the 1870s, Native American cultures were receiving attention as ethnographic resources. In 1876, John Wesley Powell documented the language, territory, culture, religion and social organization of the Shoshone and Southern Paiute. This body of material has been used to classify and reconstruct the ethnohistory of these cultures by other ethnographers; A.L. Kroeber (1907), Julian Steward (1938), Isabel Kelly (1964), Catherine and Don Fowler (1971), and others.

The establishment of an Indian reservation of the remoteness of the Uinta Basin contributed to its isolation for much of the 19<sup>th</sup> century. In 1882, the U.S. Army constructed the first wagon road to serve Fort Thornburg. Other early wagon roads were constructed for freighting purposes to meet the needs of the army. Other inroads in the Uintah County were the result of the discovery

of Gilsonite which led to the expanded use of the Nine Mile route which was used by the army to connect Fort Duchesne and the railroad.

The 1887 General Allotment Act (Dawes Act) opened the Uintah Basin for homesteading and by 1905, approximately 1,004,200 acres of land was made available for homesteading (Barton 1998). By 1910 3,800 homesteaders had settled in the county the towns of Myton, Theodore, and Roosevelt were newly surveyed. The Dry Gulch Irrigation Company was incorporated in 1905 by William H. Smart and Reuben S. Collett to help individual farmers obtain water rights from the state (Powell 1994). The county's economy is based primarily on the livestock industry, but rich oil and gas reserves are also present.

Myton is an historical community located to the north of the project area. The settlement was built at the only bridge crossing on the Duchesne River and had the early name of Bridge City. For many years the town functioned as a river crossing and trading post. The community received its present name from Major H. P. Myton who was assigned to the area in 1905 as the region was opened to settlers (Van Cott 1990). Another version names the 4th assistant Post Master General as changing the name of "Briston," as found on the petition for a post office, and writing in "Myton." A building boom commenced with the construction of a new bridge as the old bridge was lost with flooding. By 1912 several businesses, an opera house, and a school could be found in Myton. The economic role began to shift in 1915 and with a series of fires in the commercial district in 1915, 1925, and again in 1930, the population of the county began to shift to other communities (Barton 1998).

## 7.0 ARCHAEOLOGICAL METHODS

A Class III inventory was completed for the project by four JBR cultural resource personnel, walking parallel transects at fifteen meter intervals. Some portions of the project parcels contained aeolian deposits and blow out areas or seemed to have higher site potential because of proximity to water sources or geologic features. When these areas were encountered during the inventory, transect intervals were changed to five meters. When cultural resources were encountered during the survey, they were recorded on IMACS site forms. Notes were taken on isolated finds and their locations plotted on USGS 7.5 min quad maps. Each site was plotted on a USGS topographic map, site sketches were drawn, tools or diagnostic artifacts were drawn, photographs taken, and

18-inch white PVC pipe datums with aluminum tag were placed on site. Isolated finds were also plotted on a USGS topographic map. All field notes are on file at JBR Environmental Consultants Inc., Springville, Utah.

### 7.1 Archaeological Expectations

Previous projects indicate that the potential for historic properties would be greatest near the Wells Draw Expansion and relatively low in the remaining project areas. Gas and oil exploration activities have occurred in the area for the past three decades but rarely date prior to 1950. Prehistoric site potential was expected to vary with the terrain. Terraces and edges of large drainages were expected to have a relatively high prehistoric site potential. Other areas of undulating open spaces were expected to have a relatively low site potential.

## 8.0 INVENTORY RESULTS

### 8.1 Cultural Resource Inventory

The class III inventory identified one previously recorded site, ten newly recorded sites, and 23 isolated finds. The cultural resource sites consist of one prehistoric campsite, five lithic scatters, a site with two slab lined hearths, one lithic scatter and possible historic inscriptions, and one lithic scatter and historic can scatter, and one rock cairn of unknown affiliation. The previously recorded site (42DC341) was recorded as a quarry site with some tools being noted. A summary of the cultural resource sites can be found in Table 4 and a description of each of the eleven encountered sites is included in the following pages. The isolated finds are summarized in Table 5. Site locations and isolated finds are shown on Figures 2 and 3.

Table 4. Summary of Cultural Resource Sites.

Site Number	Site Type	Cultural Affiliation	Evaluation
42DC341	Lithic scatter	Unknown aboriginal	Ineligible
42DC1292	Lithic scatter and Historic Inscriptions	Unknown Aboriginal EuroAmerican	Eligible Ineligible

Table 4. Continued

Site Number	Site Type	Cultural Affiliation	Evaluation
42DC1293	Lithic scatter and Can scatter	Unknown aboriginal EuroAmerican	Eligible Ineligible
42DC1294	Lithic scatter	Unknown aboriginal	Eligible
42DC1295	Slab lined hearths	Unknown aboriginal	Eligible
42DC1296	Lithic scatter	Unknown aboriginal	Eligible
42DC1297	Lithic scatter	Unknown aboriginal	Eligible
42DC1298	Lithic scatter	Unknown aboriginal	Eligible
42DC1299	Campsite	Unknown aboriginal	Eligible
42DC1300	Lithic scatter	Unknown aboriginal	Eligible
42DC1301	Rock Cairn	EuroAmerican	Unevaluated

Table 5. Summary of Isolated Finds.

Isolate Number	Artifact Description	Township Range and 1/4 Sections
IF-1	1 "Punch Here Can", Simonis Type 17 (1935-1945)	9S. 17E. NWSESESESE
IF-2	2 Grey Chert Secondary Flakes	9S. 17E. NWNESESWSE
IF-3	1 Simonis Type 3 Tin Can (1885-1903)	9S. 17E. SWSWNWSESE
IF-4	1 Hole-in-Top, Simonis Type 4 Tin Can (1903-1908), with punch hole opening	9S. 17E. NWSWNWSESE
IF-5	1 Grey Chert primary Flake	9S. 17E. NENESESESE
IF-6	1 Simonis Type 15 Condensed Milk Can with ice pick opening, 1 Hole-in-Top can measuring 2 14/16" x 4 12/16" with knife cut opening and 1 Primary Grey Chert Flake	9S. 17E. NESENESESE
IF-7	1 Tan Chert Secondary Flake	9S. 17E. SENENESESE
IF-8	1 Purple Glass Fragment from a paneled bottle (ca.1880-1920)	9S. 16E. NESENESESE
IF-9	1 Tan Chert Primary Flake	9S. 16E. NWNENENWNE
IF-10	1 Tan Silt Stone, Utilized, Primary Flake	9S. 16E. NWNENWNWNE
IF-11	1 Tan Chert Primary Flake	9S. 16E. SWSWNENWNE

Table 5. Continued

Isolate Number	Artifact Description	Township Range and 1/4 Sections
IF-12	1 Secondary White Chert Flake	9S. 16E. SENWSWNENE
IF-13	1 Tan Chert, Utilized, Primary Flake	9S. 16E. SENWSENWNE
IF-14	1 Tan Silt Stone Biface Fragment	9S. 16E. SWNENESENW
IF-15	1 Silt Stone, Utilized, Primary Flake	9S. 16E. NESENWSENW
IF-16	2 Secondary Grey Chert Flakes	9S. 16E. NWNWNESENW
IF-17	1 Primary White Chert Flake and 1 Tan Silt Stone Biface	9S. 16E. SESWSWNWNW
IF-18	1 White Chert Secondary Flake	9S. 16E. SWSWNWNWNW
IF-19	1 Brown Silt Stone Biface	9S. 16E. NWSWNWNWNW
IF-20	2 Secondary White Chert Flakes	9S. 16E. NENENWNWNW
IF-21	3 Primary Grey Chert Flakes	9S. 16E. SENWNWNWNW
IF-22	1 Grey Chert, Utilized, Primary Flake	9S. 16E. SWNENWNWNW
IF-23	1 Enamelware Basin with Handles measuring 12-15" in diameter, 2 Simonis Type 3 Tin Cans (1885-1903) and 1 Single Serving Food Can with cut around opening	9S. 16E. NWSWNENWNW

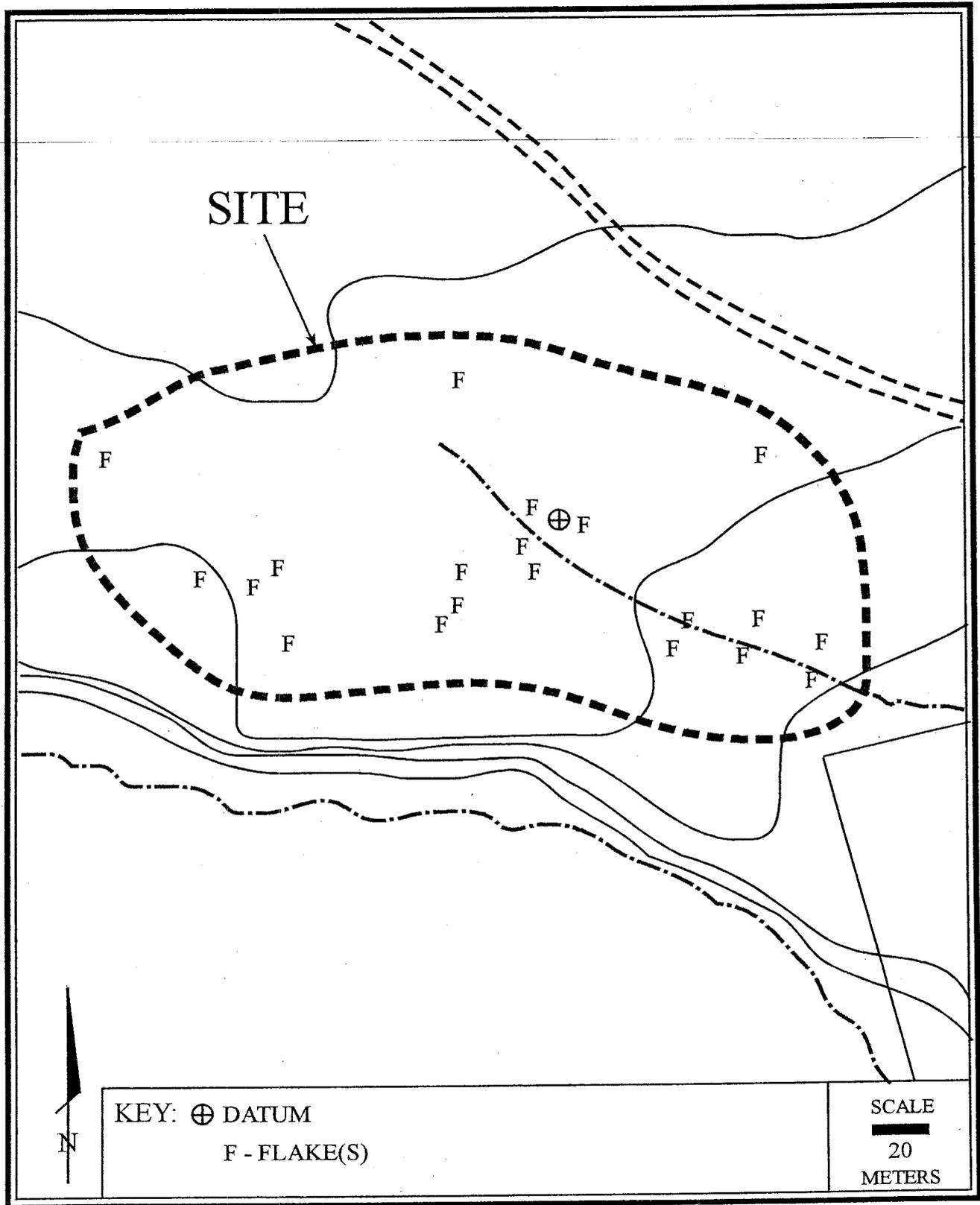


Figure 9. Plan map of site 42DC1296.

**Site Number:** 42DC1297  
**Temp Number:** 1-2-1  
**Figure Numbers:** 2 and 10

**Site Type:** Lithic Scatter

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located on an exposed ridge top.

**Description:** The site is a lithic scatter that extends over a 90 by 60 meter area and contains 50-75 artifacts. Lithic debitage is mostly primary flakes with very few secondary flakes noted. A few tested cobbles were also noted. Lithic material includes tan siltstone and grey chert. The maximum density of flakes is three per square meter. One early stage biface was the only tool noted. The flakes are present in an area of exposed cobbles which appear to be sedimentary rock with a desert varnish. Some areas of desert pavement or blowouts are present with vegetated areas retaining some soil. No debitage concentrations, diagnostics, or FCR were found.

**National Register Assessment:** The site is a lithic scatter with one tool present. While no diagnostic tools or features are present on the surface, the presence of a tool suggests that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. There is a potential for the site to yield substantive information regarding spatial patterning and lithic technology, thus the site meets criterion D. The site is therefore recommended **eligible** for the NRHP.

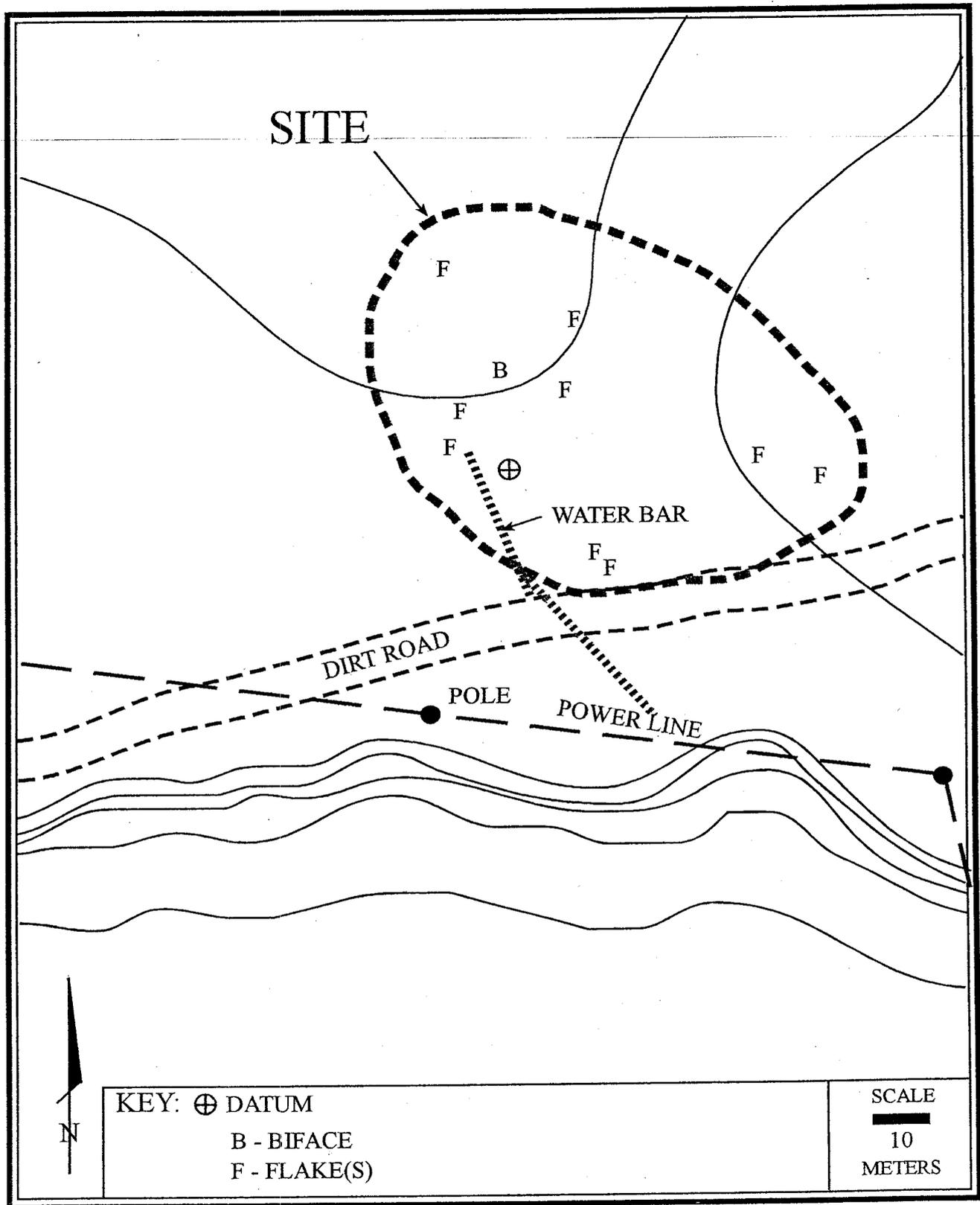


Figure 10. Plan map of site 42DC1297.

**Site Number:** 42DC1298

**Temp Number:** 1-2-2

**Figure Numbers:** 2 and 11

**Site Type:** Lithic scatter

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located on an alluvial plain bordered on the northwest by a finger ridge and on the south by a drainage.

**Description:** The site is a large, sparse lithic scatter extending over a 195 by 95 meter area. It contains 50-75 flakes, two bifaces, two scrapers, and a core. Two areas of artifact concentrations were noted. Area 1 measures 45 by 20 meters and contains 15-20 flakes, two bifaces, and a core with a maximum density of five flakes per square meter. Area 2 measures 15 meters in diameter and contains 15+ flakes and a scraper. The general site area contains an additional 15-20 flakes and an isolated scraper. Lithic debitage is dominated by secondary flakes with primary flakes common. Lithic shatter and a core were also noted. Lithic materials include local cherts, oolitic chert, and siltstone. Soils include aeolian sands and alluvial silts and sand with areas of desert pavement.

**National Register Assessment:** The lithic scatter contains two use areas or concentrations and four tools. While no diagnostic tools or features are present on the surface, the presence of tools suggests that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. The site is located on shifting aeolian sediments that may contain intact features or cultural material. There is a potential for the site to yield further substantive data concerning spatial patterning, lithic technology, and possibly chronology. The site is recommended as **eligible** under criterion D for NRHP inclusion.

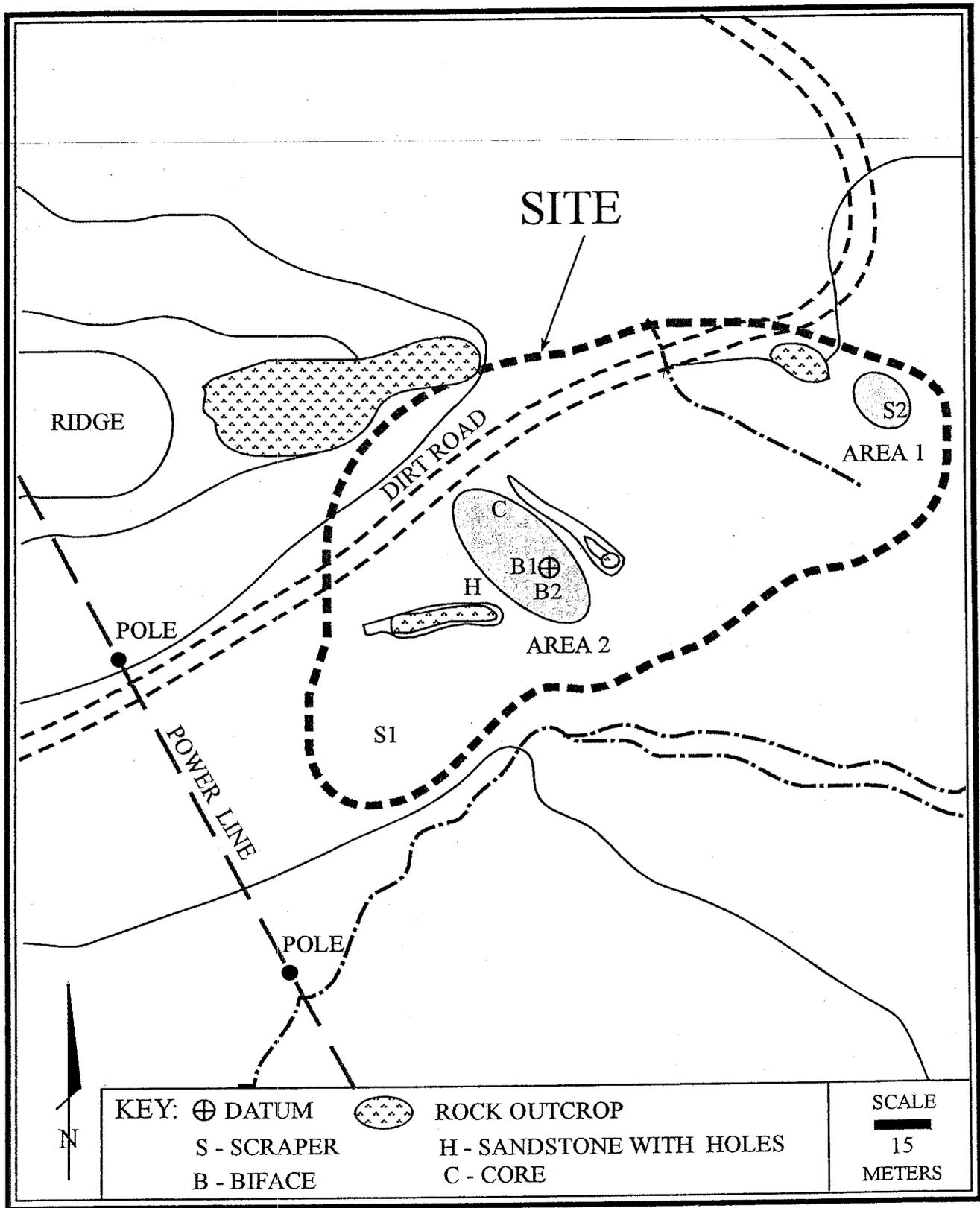


Figure 11. Plan map of site 42DC1298.

**Site Number:** 42DC1299

**Temp Number:** 16-1

**Figure Numbers:** 3 and 12

**Site Type:** Campsite

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located along an abrupt bench edge in linear outcrops of rock.

**Description:** The site is a prehistoric campsite that extends over a 70 by 50 meter area and contains about 25-30 artifacts. The lithic debitage consists mostly of secondary flakes of gray, tan, and brown chert. Maximum density is one flake per square meter. One tested siltstone cobble was found. Three tools were noted which include a complete mano of sandstone, a slate spall knife, and a quartzite scraper. Also noted was a possible manuport consisting of a smooth elongated rock. No features or lithic concentrations were noted at the site. The site located amongst linear outcrops along a bench edge that falls abruptly away to the west.

**National Register Assessment:** The site contains surface evidence in the form of tool diversity to indicate a short term campsite. While no diagnostic tools or features are present on the surface, the presence of tools suggests that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. Aeolian sediments located between the linear rock outcrops have the potential to contain buried intact deposits. There is potential for the site to yield substantive information regarding spatial patterning, lithic technology, and settlement patterns, thus the site meets criterion D. It retains integrity aspects of location, feeling, materials, and setting. The site is therefore recommended eligible for the NRHP.

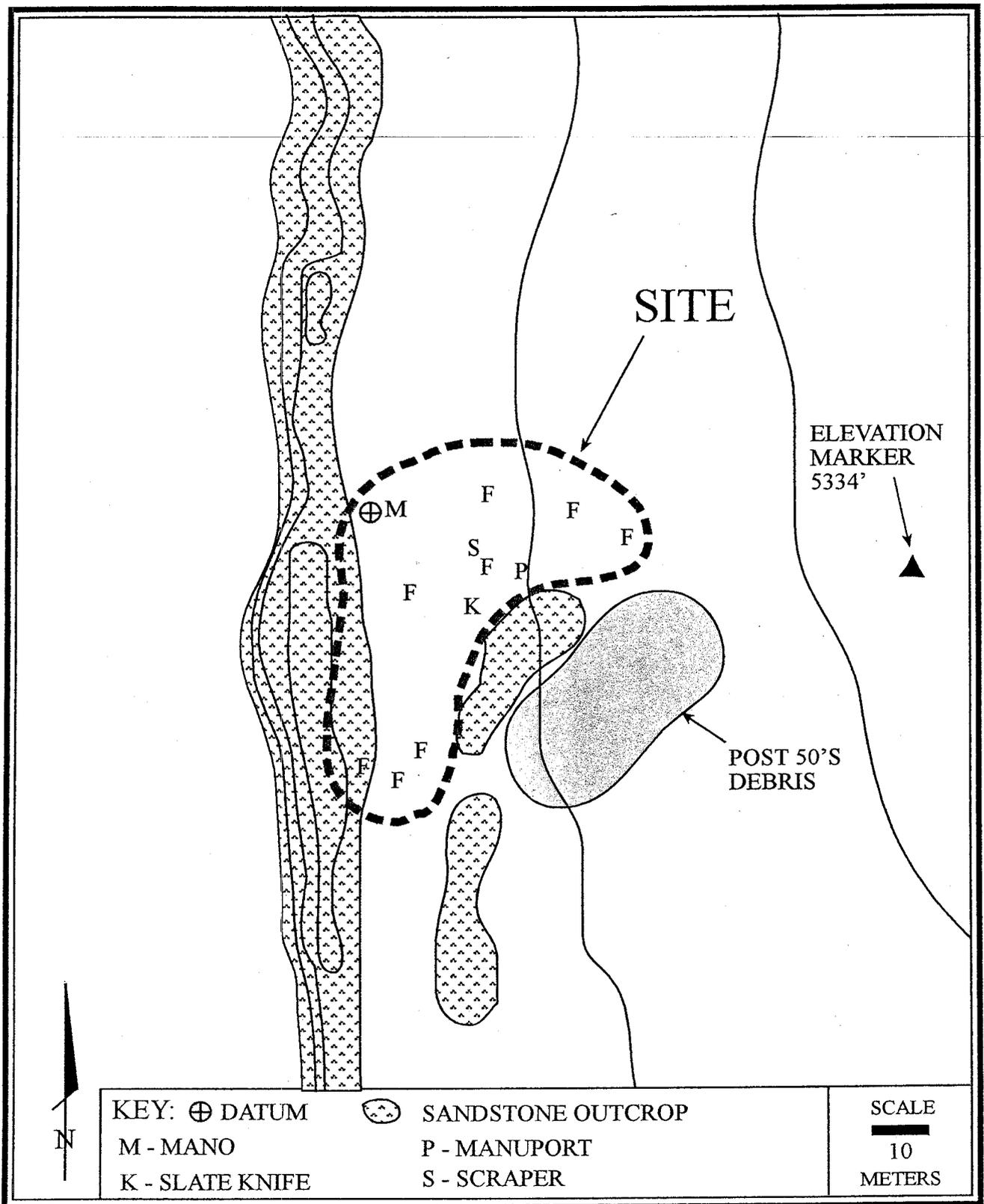


Figure 12. Plan map of site 42DC1299.

**Site Number:** 42DC1300  
**Temp Number:** 16-2  
**Figure Numbers:** 3 and 13

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**Site Type:** Lithic Scatter

**Cultural Affiliation:** Unknown aboriginal

**Setting:** The site is located on the slope of a ridge.

**Description:** The site is a lithic scatter extending over a 10 by 20 meter area. It contains 15-20 flakes consisting mostly of secondary flakes with a tertiary flake and a piece of shatter also noted. Lithic materials consist of siltstone, chert, and quartzite. The maximum flake density is two per square meter. No tools, features, or FCR were found. Soils include aeolian sands around deflated areas.

**National Register Assessment:** The site is a small lithic scatter located in an area of aeolian sands and deflated areas. The noted cultural material was found in the deflated areas of the site. While no diagnostic tools or features are present on the surface, the lithic debitage present suggests that lithic reduction activities were occurring on site, and the evidence of spatial patterning can be discerned from the artifacts that are present. The possibility exists that intact subsurface deposits exist and that intact features may be present. There is a potential for the site to yield substantive information regarding spatial patterning and lithic technology, thus the site meets criterion D. The site is recommended as **eligible** for the NRHP.

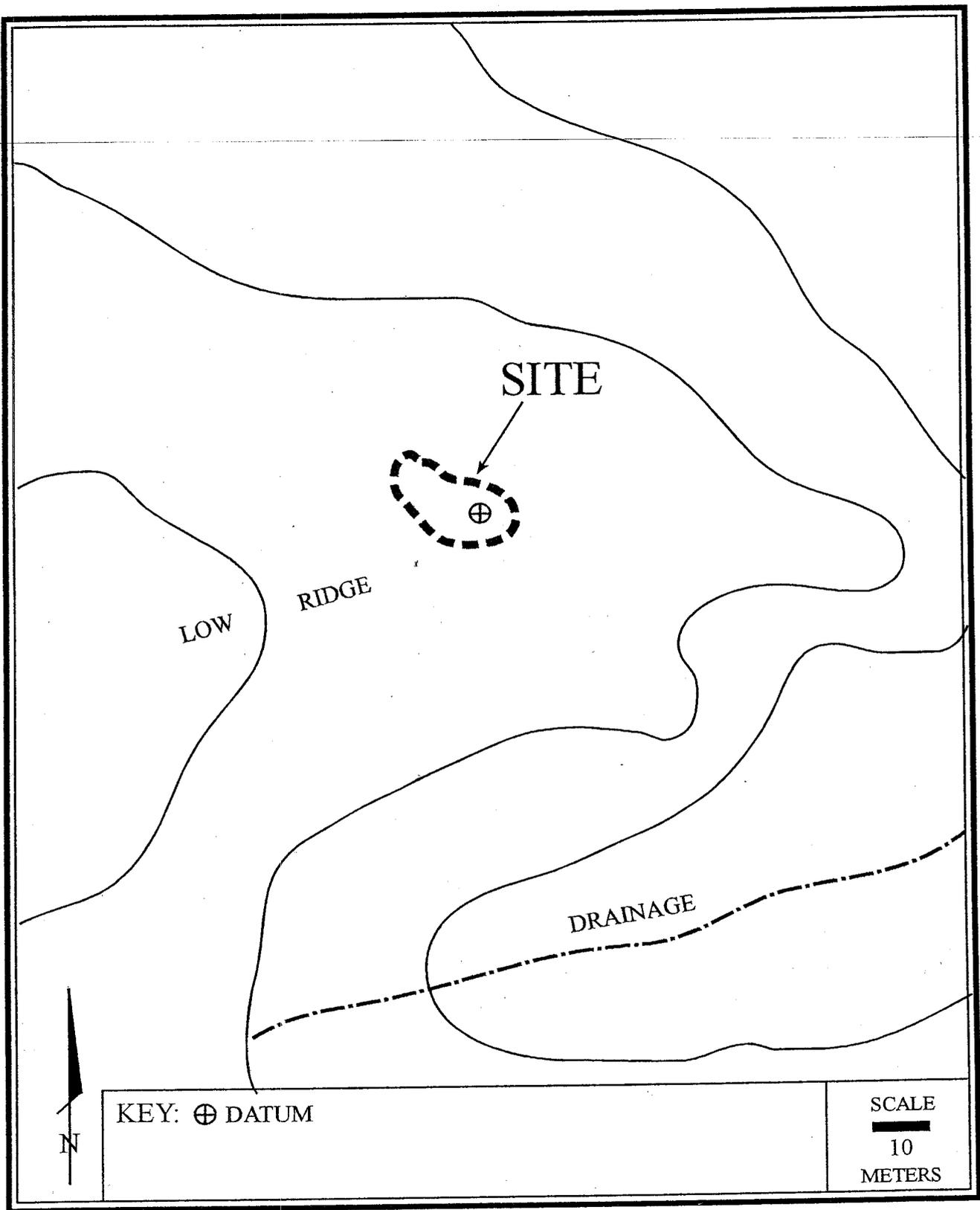


Figure 13. Plan map of site 42DC1300.

**Site Number: 42DC1301**

**Temp Number: 12**

**Figure Numbers: 3 and 14**

**Site Type: Rock Cairn**

**Cultural Affiliation: EuroAmerican**

**Setting:** The cairn is situated on a natural high point on a narrow finger ridge overlooking drainages to the north and the south.

**Description:** The cairn is constructed from 150-200 sandstone slabs that vary in thickness with a capping stone placed on the top. The cairn is generally cylindrical in shape and stands approximately 4½ feet tall and is 3 feet in diameter at the base. The diameter of the cairn is fairly consistent and is constructed on a natural outcrop of rock. The sandstone slabs utilized in construction appear to be from the surrounding ridge line and outcrops. The cairn was most likely constructed during the historic or possibly modern period and may be related to sheep herding in the area. No artifacts were found in association with the cairn.

**National Register Assessment:** The rock cairn was probably constructed in historic or possibly modern times as a visual marker for the area. It is not directly associated with any artifacts, structures, or other features. The physical components of the cairn are not specifically unique in themselves because they do not contain unique architectural or constructional attributes. The cairn is not directly associated with any diagnostic artifacts which could affiliate it with a specific temporal or cultural period at this time. The possibility exists that it may have been part of a series of rock cairns or markers denoting sheep herding ranges. Until further research is conducted the site is recommended **unevaluated** for the NRHP.

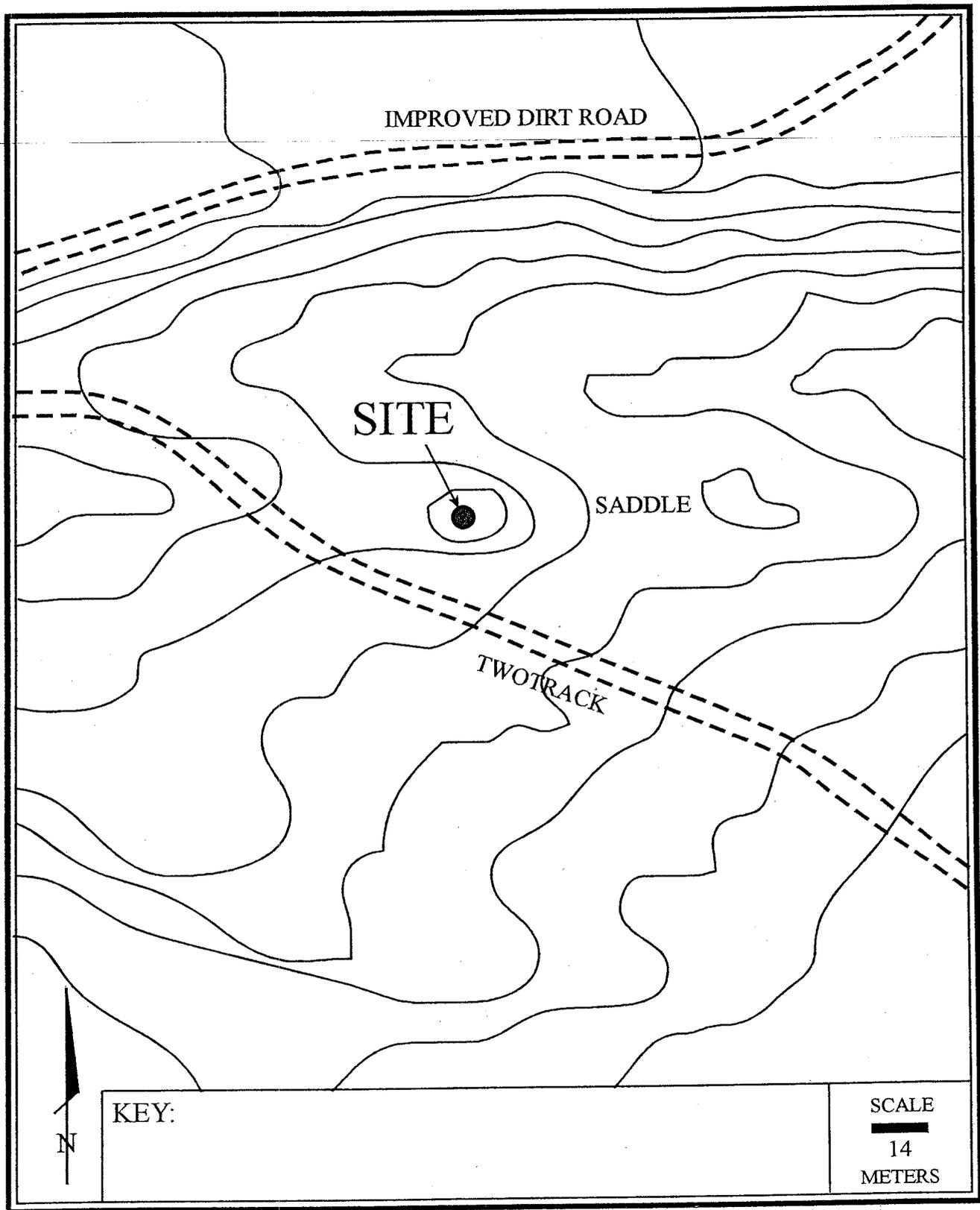


Figure 14. Plan map of site 42DC1301.

## 9.0 SUMMARY AND RECOMMENDATIONS

The Class III inventory identified one previously recorded cultural resource site and ten newly recorded sites. Of the ten newly recorded sites, nine are recommended as eligible for the National Register of Historic Places (42DC1292, 42DC1293, 42DC1294, 42DC1295, 42DC1296, 42DC1297, 42DC1298, 42DC1299, and 42DC1300). Site 42DC1301 is recommended as unevaluated pending further research. The previously recorded site (42DC341) was recommended as ineligible. Additionally 23 isolated finds were recorded and plotted during the inventory. Based on the literature search, it was expected that few cultural resource sites would be found. Expected site types would be small lithic scatters and possibly a few small historic debris scatters.

For the Inland Resources development, sites 42DC1292, 42DC1293, and 42DC1294 are located in Lone Tree 4-2; sites 42DC1296 and 42DC1297 and 42DC1301 are located in Lone Tree 2-2; site 42DC1296 is also located in Lone Tree 6-2; and site 42DC1298 is located in Lone Tree 1A-2. In the South Wells Draw unit site 42DC1299 is located in 15-16 while site 42DC1300 is located in 16-16. Site 42DC341 borders Lone Tree 1A-2.

It is recommended that the identified sites recommended as eligible for NRHP listing be avoided or a site testing program be implemented to determine the extent of subsurface features or cultural material. The nature and age of prehistoric cultural resources in the area indicates that there is always the possibility of encountering previously unidentified cultural resources during any ground disturbing activities. In order to protect any unidentified or unrecorded cultural properties which may exist, the following restrictions should apply during construction of the well pad:

1. Personnel and equipment associated with the project should be restricted to the area cleared for the project.
2. Personnel associated with the project should refrain from collecting or otherwise disturbing cultural materials that may be encountered during development.
3. If unrecorded cultural materials are encountered during the project, activities in the affected area(s) should cease, and the appropriate State office (SHPO), or SITLA should be notified before development in the area is resumed.
4. Human burials or other physical remains encountered during the project, require immediate cessation of activity in the affected area, as well as immediate notification of proper authorities. Native American burials or other remains must be reported to the BLM, Utah SHPO and appropriate Native American groups.

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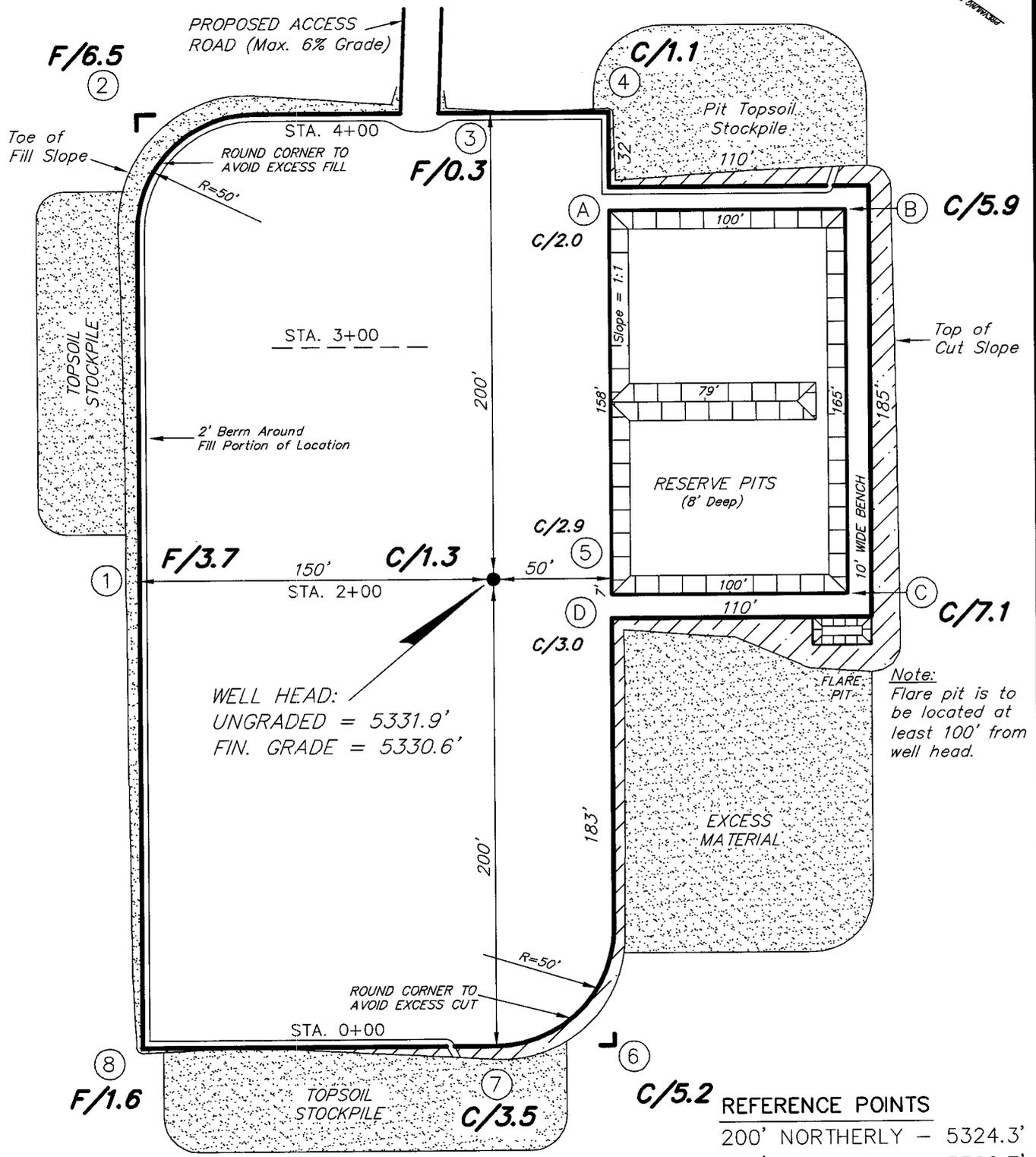
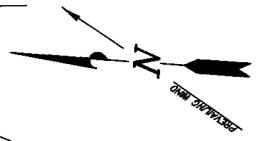
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# NEWFIELD PRODUCTION COMPANY

STATE 14-16T-9-17  
SECTION 16, T9S, R17E, S.L.B.&M.



**REFERENCE POINTS**

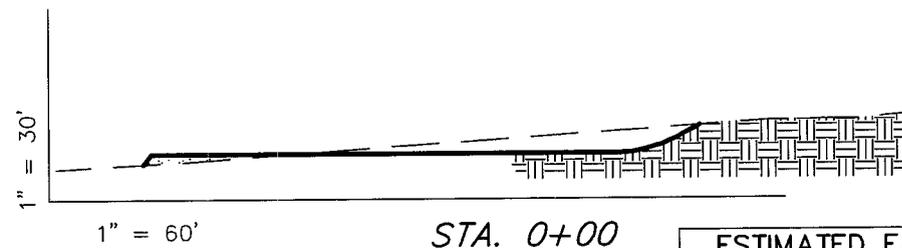
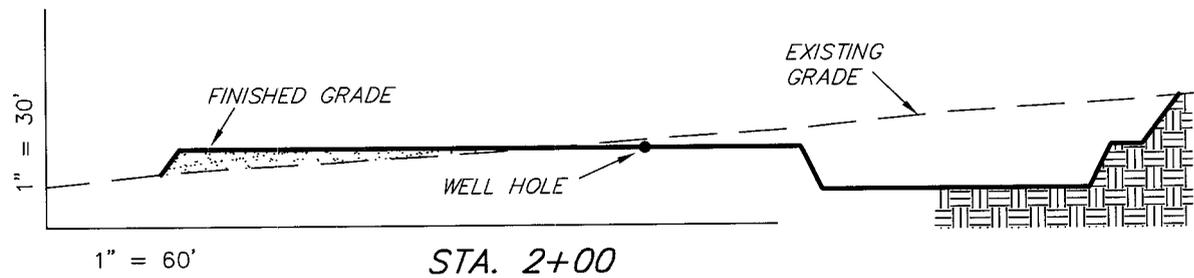
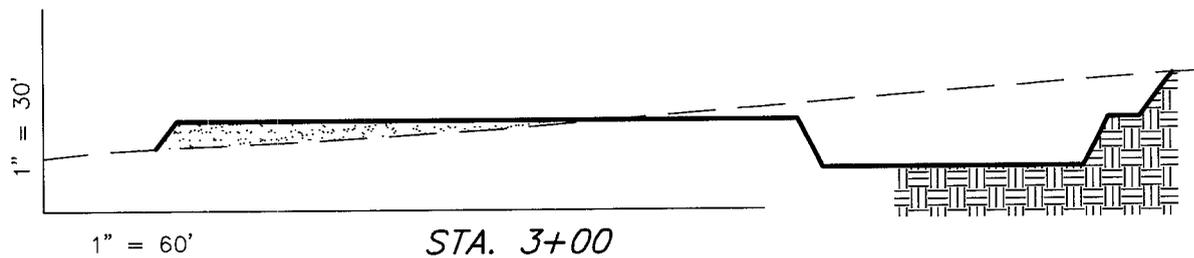
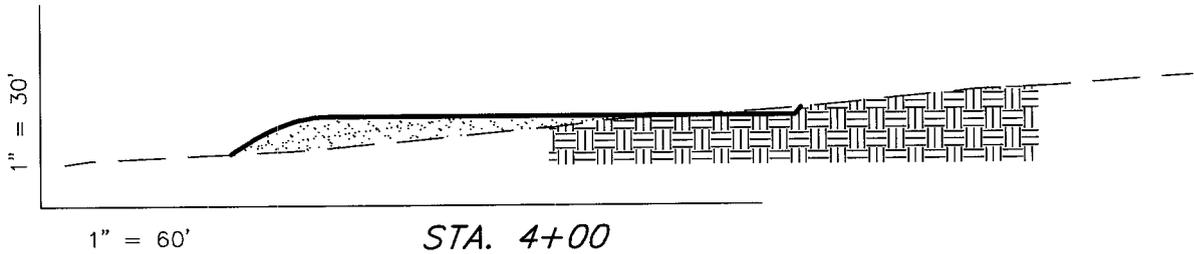
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250' WESTERLY	-	5336.7'
300' WESTERLY	-	5338.8'

SURVEYED BY: C.M.	DATE SURVEYED: 2-14-08
DRAWN BY: M.W.	DATE DRAWN: 2-15-08
SCALE: 1" = 60'	REVISED:

**Tri State**  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS STATE 14-16T-9-17



NOTE:  
UNLESS OTHERWISE NOTED  
CUT SLOPES ARE AT 1:1  
FILL SLOPES ARE AT 1.5:1

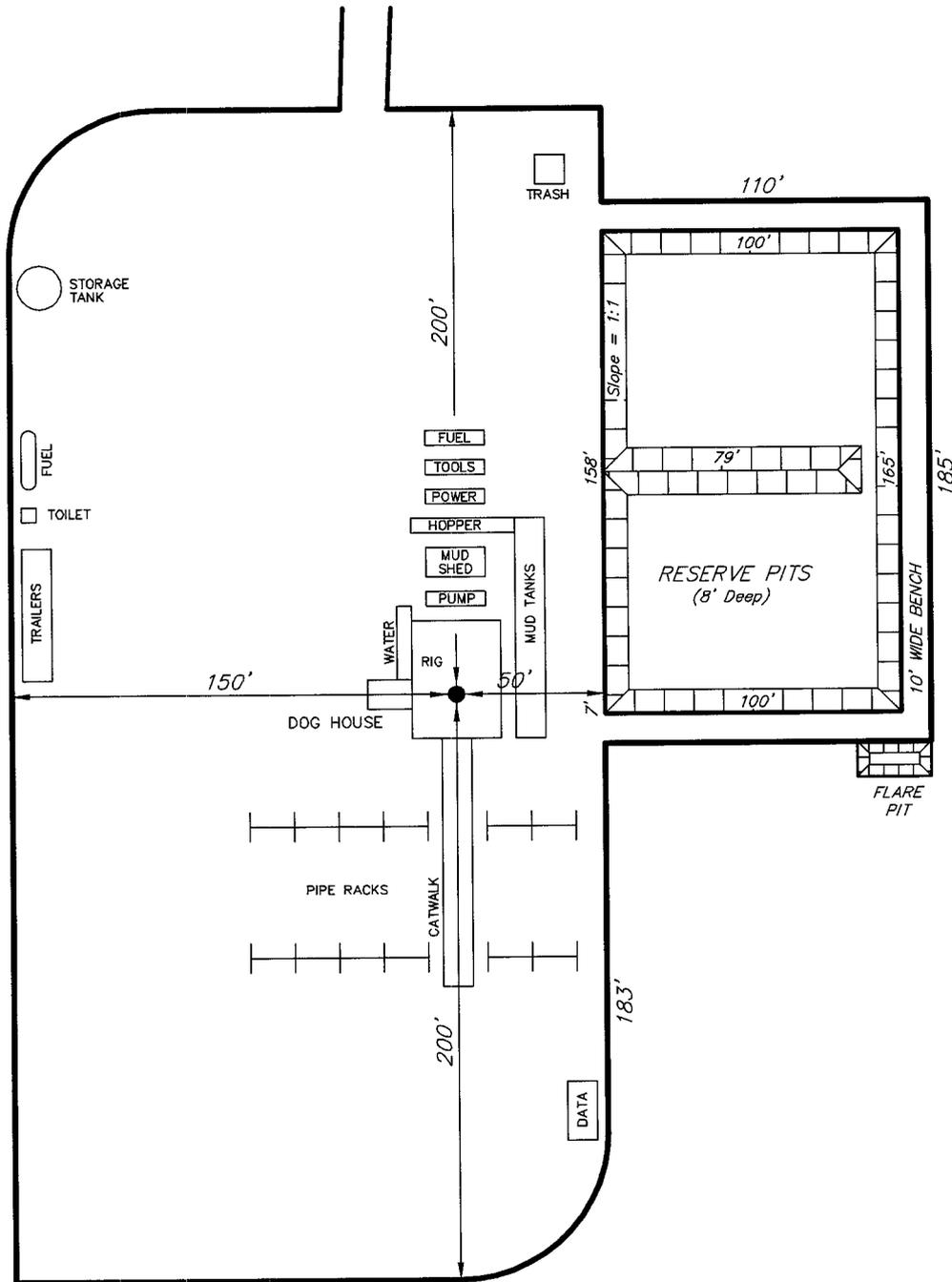
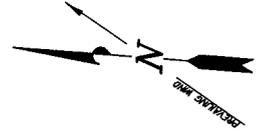
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PAD	5,020	5,020	Topsoil is not included in Pad Cut	0
PIT	4,100	0		4,100
TOTALS	9,120	5,020	2,010	4,100

SURVEYED BY: C.M.	DATE SURVEYED: 2-14-08
DRAWN BY: M.W.	DATE DRAWN: 2-15-08
SCALE: 1" = 60'	REVISED:

**Tri State**  
Land Surveying, Inc.  
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(435) 781-2501

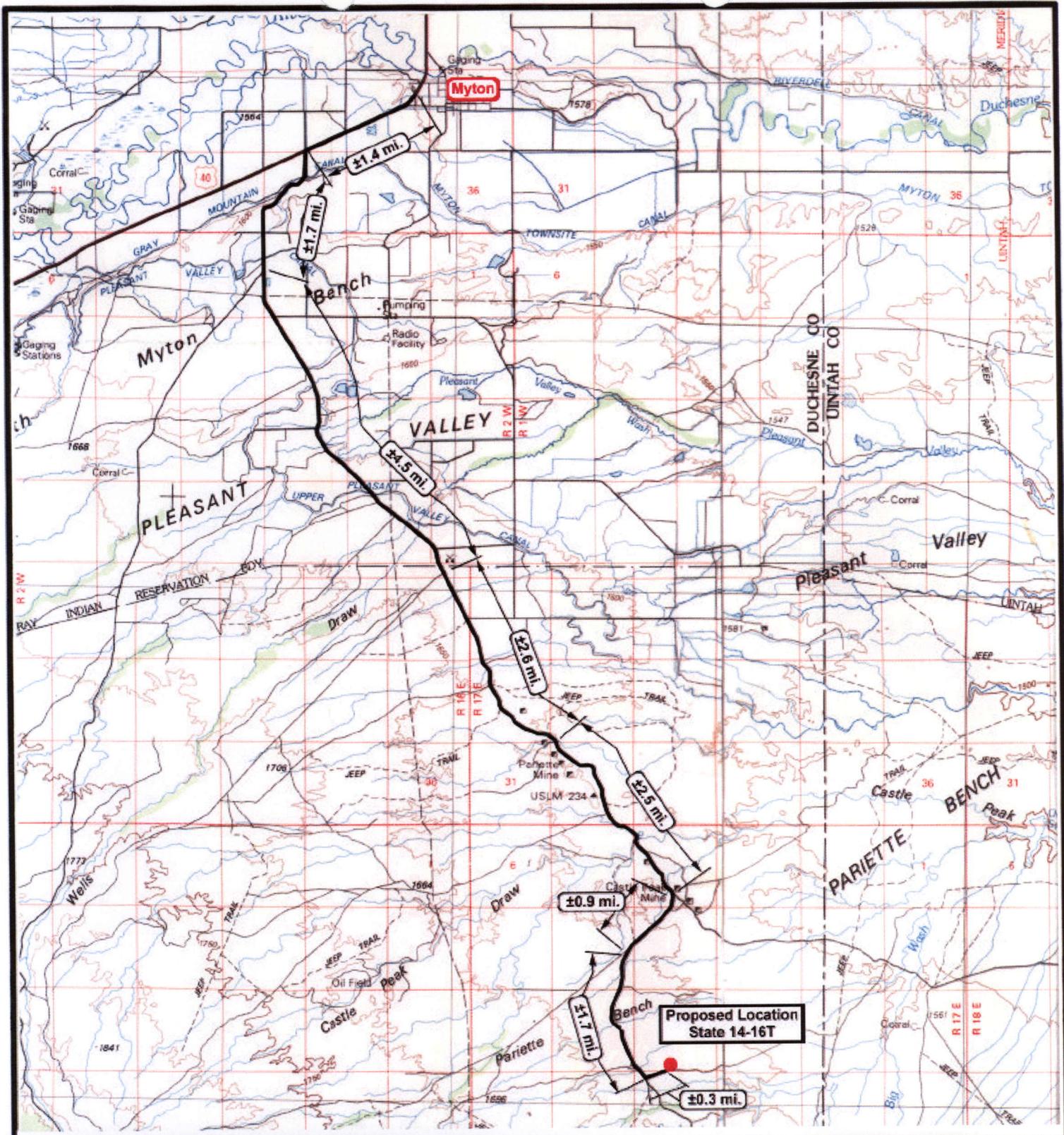
# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT STATE 14-16T-9-17



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DRAWN BY: M.W.	DATE DRAWN: 2-15-08
SCALE: 1" = 60'	REVISED:

**Tri State** (435) 781-2501  
*Land Surveying, Inc.*  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078



**NEWFIELD**  
Exploration Company

**State 14-16T-9-17**  
**SEC. 16, T9S, R17E, S.L.B.&M.**



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

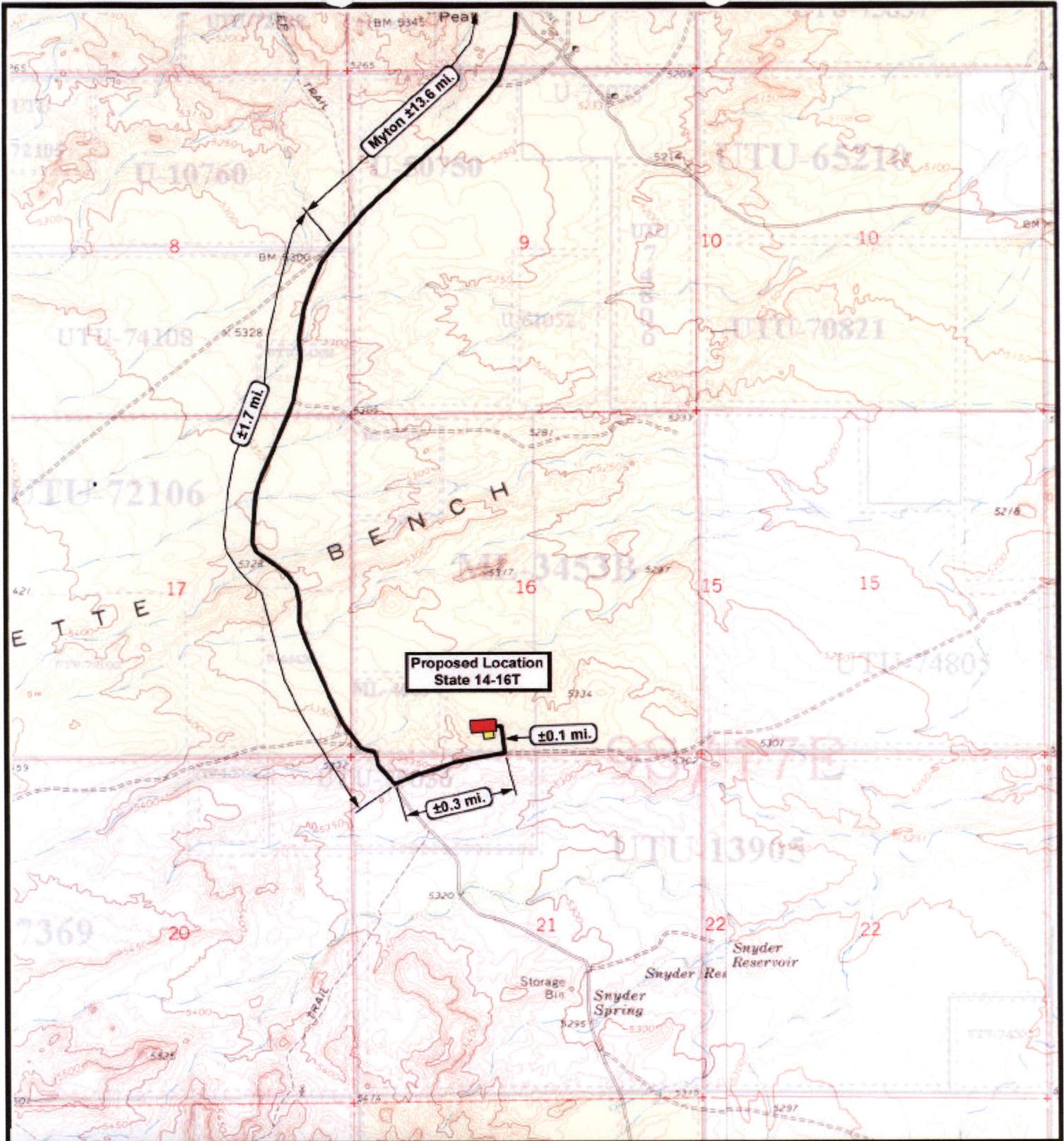
SCALE: 1:100,000  
DRAWN BY: mw/nc  
DATE: 04-08-2008

**Legend**

Existing Road

TOPOGRAPHIC MAP

**"A"**



 **NEWFIELD**  
Exploration Company

---

**State 14-16T-9-17**  
**SEC. 16, T9S, R17E, S.L.B.&M.**



 **Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

---

SCALE: 1" = 2,000'  
DRAWN BY: mw/nc  
DATE: 04-08-2008

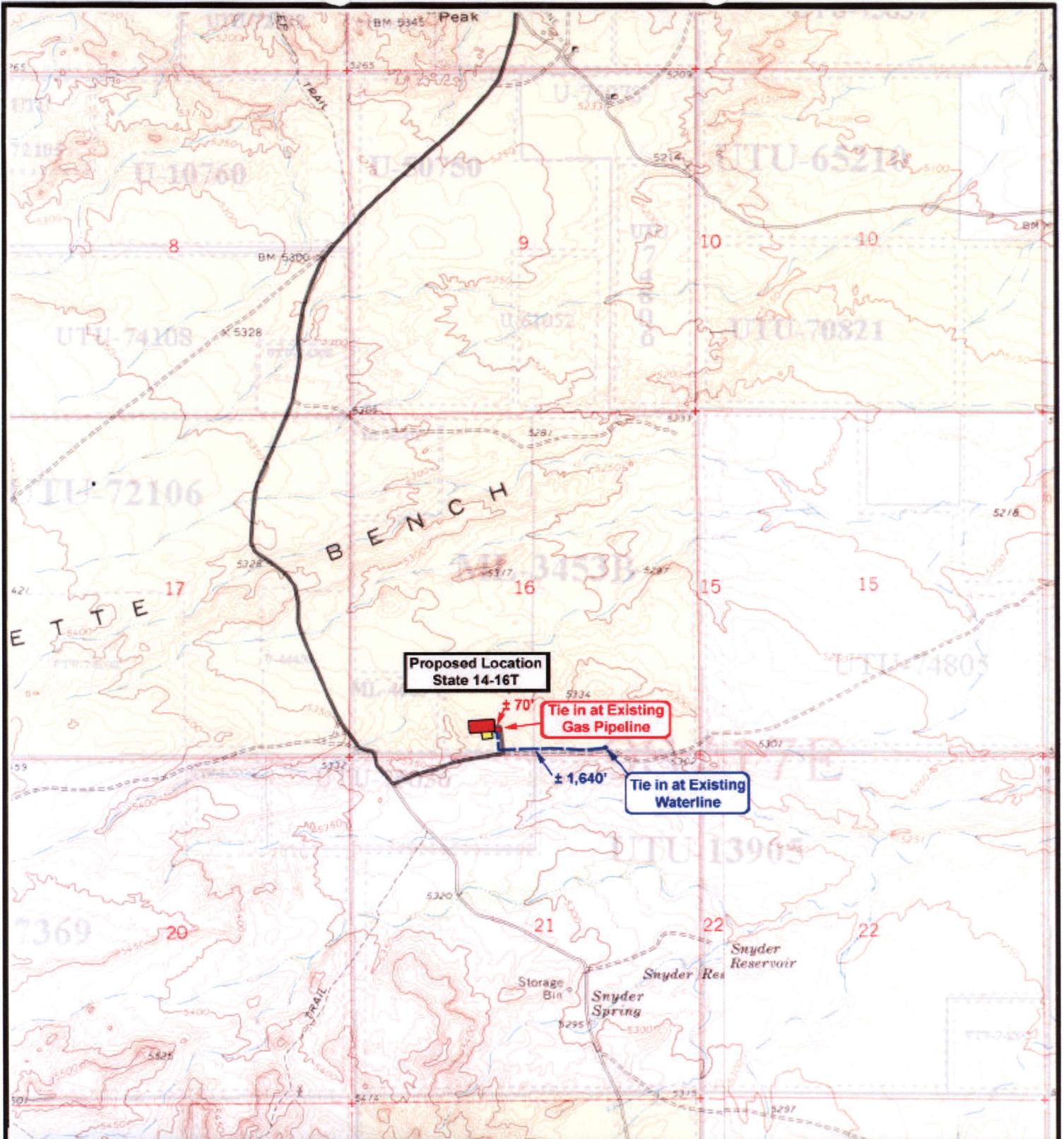
**Legend**

-  Existing Road
-  Proposed Access

---

TOPOGRAPHIC MAP

**"B"**



 **NEWFIELD**  
Exploration Company

**State 14-16T-9-17**  
**SEC. 16, T9S, R17E, S.L.B.&M.**



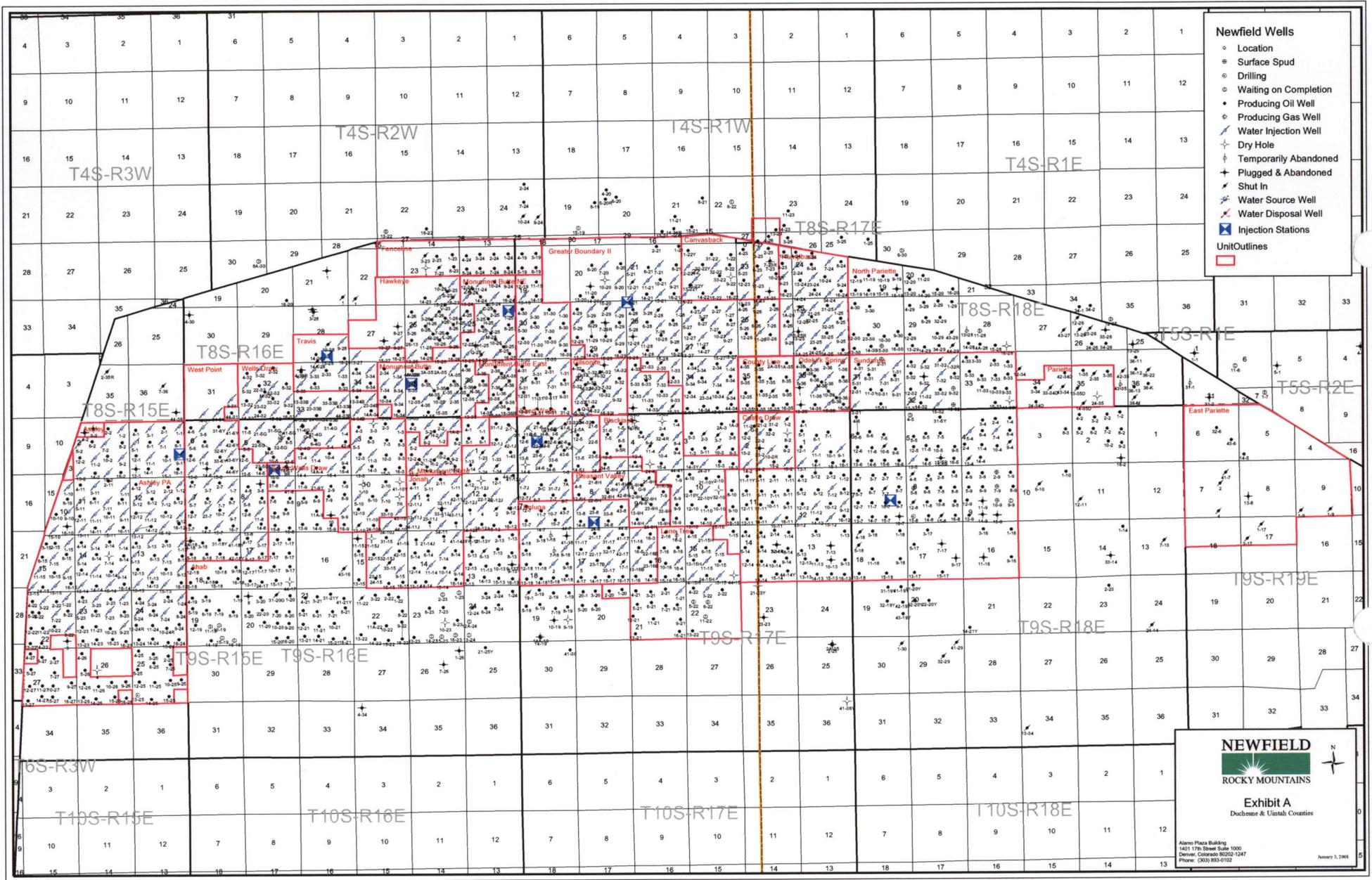
  
**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2,000'  
DRAWN BY: mw/nc  
DATE: 04-04-2008

**Legend**

-  Roads
-  Proposed Gas Line
-  Proposed Water Line

**TOPOGRAPHIC MAP**  
**"C"**



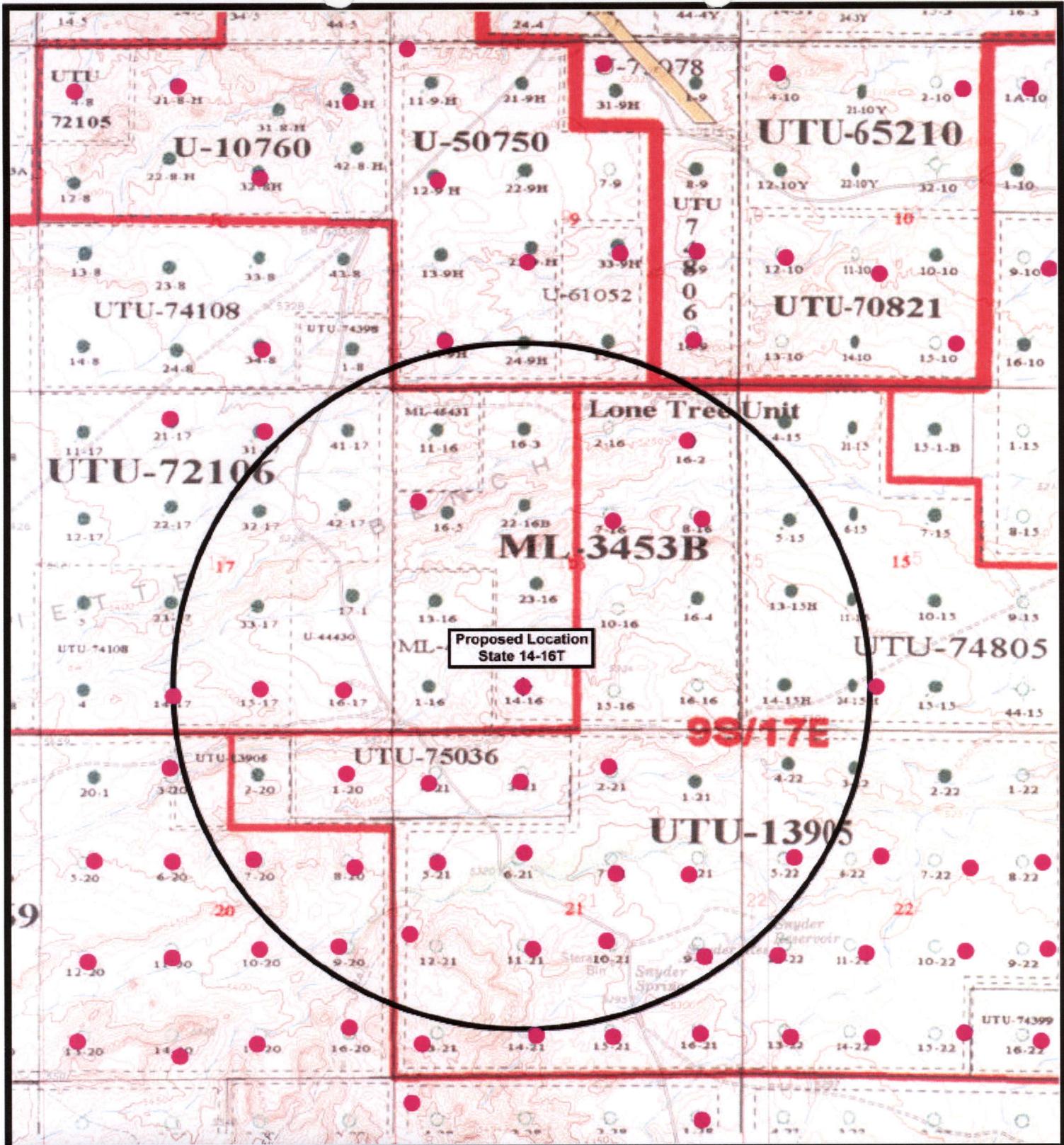
- Newfield Wells**
- Location
  - Surface Spud
  - Drilling
  - Waiting on Completion
  - Producing Oil Well
  - Producing Gas Well
  - Water Injection Well
  - Dry Hole
  - Temporarily Abandoned
  - Plugged & Abandoned
  - Shut In
  - Water Source Well
  - Water Disposal Well
  - Injection Stations
- Unit Outlines**
- 

**NEWFIELD**  
 ROCKY MOUNTAINS

Exhibit A  
 Duchesne & Uintah Counties

Alamo Plaza Building  
 1401 17th Street Suite 1000  
 Denver, Colorado 80202-1247  
 Phone: (303) 850-6102

January 7, 2008



Proposed Location  
State 14-16T

9S/17E



**NEWFIELD**  
Exploration Company

**State 14-16T-9-17**  
**SEC. 16, T9S, R17E, S.L.B.&M.**




**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

SCALE: 1" = 2000'  
DRAWN BY: mwnc  
DATE: 04-08-2008

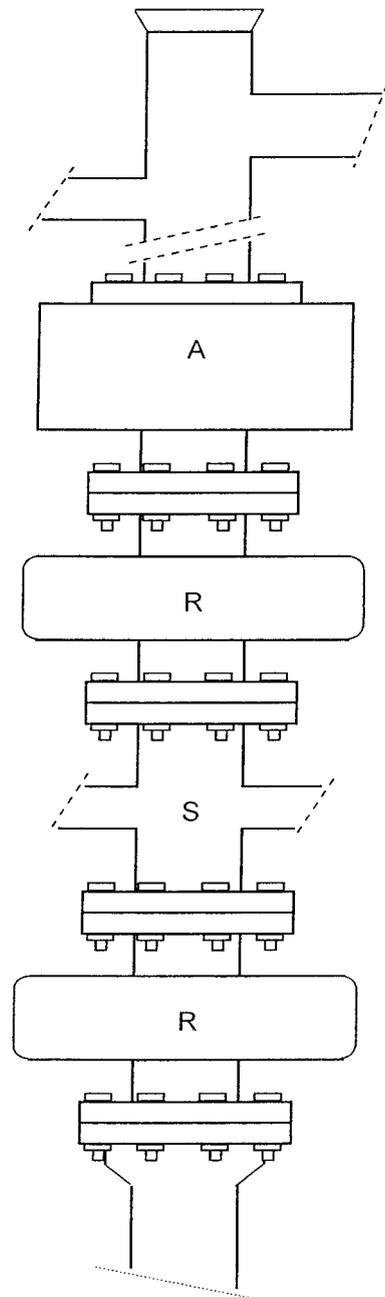
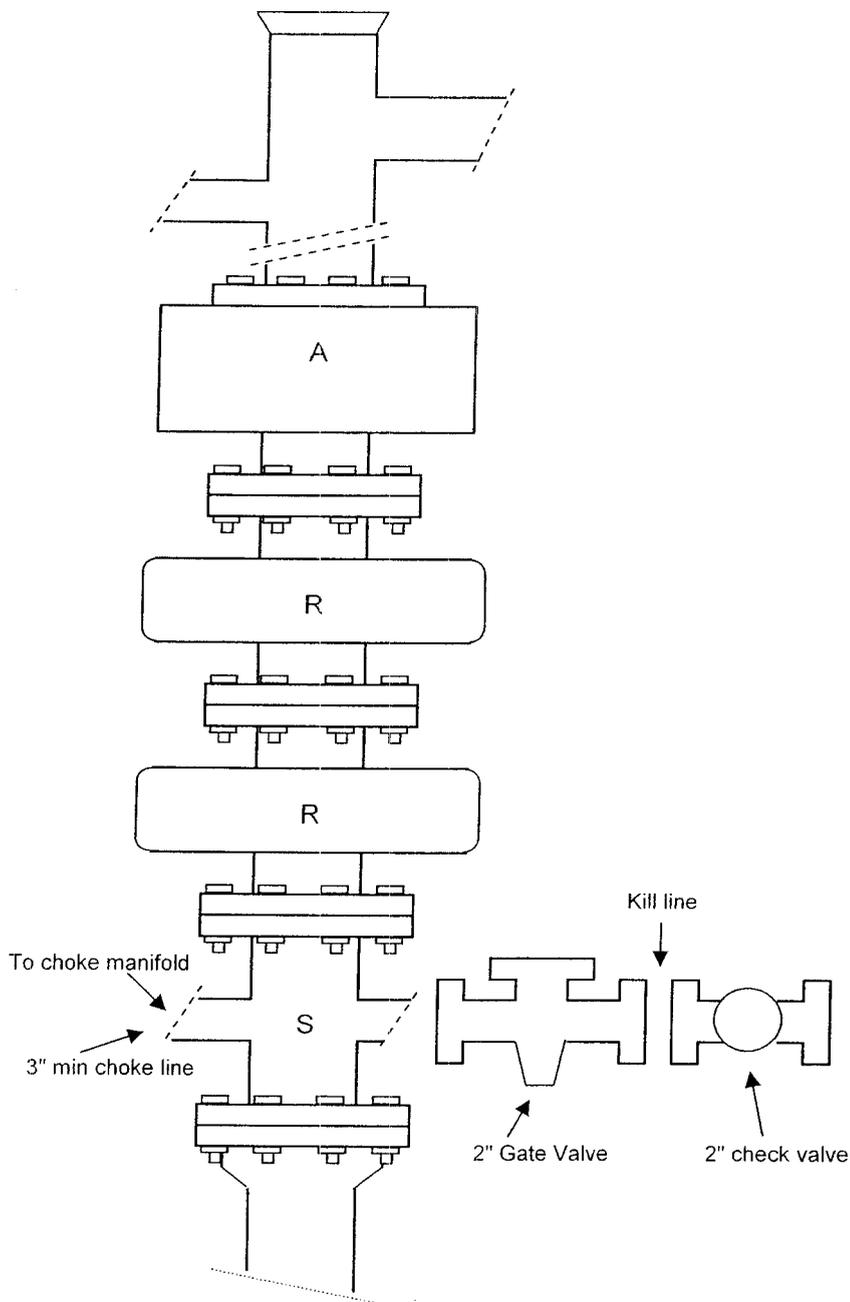
**Legend**

- Location
- One-Mile Radius

**Exhibit "B"**

# 11" 5 M stack

## Blowout Prevention Equipment Systems



### EXAMPLE BLOWOUT PREVENTER ARRANGEMENTS FOR 3M AND 5M RATED WORKING PRESSURE

\* Drilling spool and its location in the stack arrangement is optional- refer to Par 2 C 6

Exhibit "D"

1 of 3

CULTURAL RESOURCE INVENTORIES OF 400 ACRES  
IN THE WELLS DRAW AND PARIETTE BENCH  
LOCALITIES FOR INLAND PRODUCTION COMPANY  
DUCHESNE COUNTY, UTAH

---

by

Keith R. Montgomery

Prepared For:

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

Prepared Under Contract With:

Inland Production Company  
2507 Flintridge Place  
Fort Collins CO 80521

Prepared By:

Montgomery Archaeological Consultants  
P.O. Box 147  
Moab, Utah 84532

MOAC Report No. 01-03

January 17, 2001

United States Department of Interior (FLPMA)  
Permit No. 00-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-01-MQ-0010b,s

✓

**CULTURAL RESOURCE INVENTORY OF  
SIX WELL PAD LOCATIONS IN THE  
SOUTH WELLS DRAW AND  
LONE TREE UNITS  
DUCHESNE COUNTY, UTAH**

*JBR Cultural Resource Report 00-04*

*by  
Richard Crosland*

*Reviewed by Scott Billat  
Cultural Resource Director*

prepared for  
**Inland Resources Inc.**  
**Denver, Colorado**

*submitted by*

***JBR Environmental Consultants Inc.***  
***Springville, UT***

February 25, 2000

Federal BLM Permit No. 99UT55134  
Utah State Project Authorization No. U-99-JB-0725s

**Paleontological Assessment for  
Newfield Exploration Co. 40-Acre  
Parcel around Proposed Well Beluga  
14-16T-9-17 and Access Road in  
SWSE Quarter-Quarter**

**Myton SE Quadrangle  
Duchesne County, Utah**

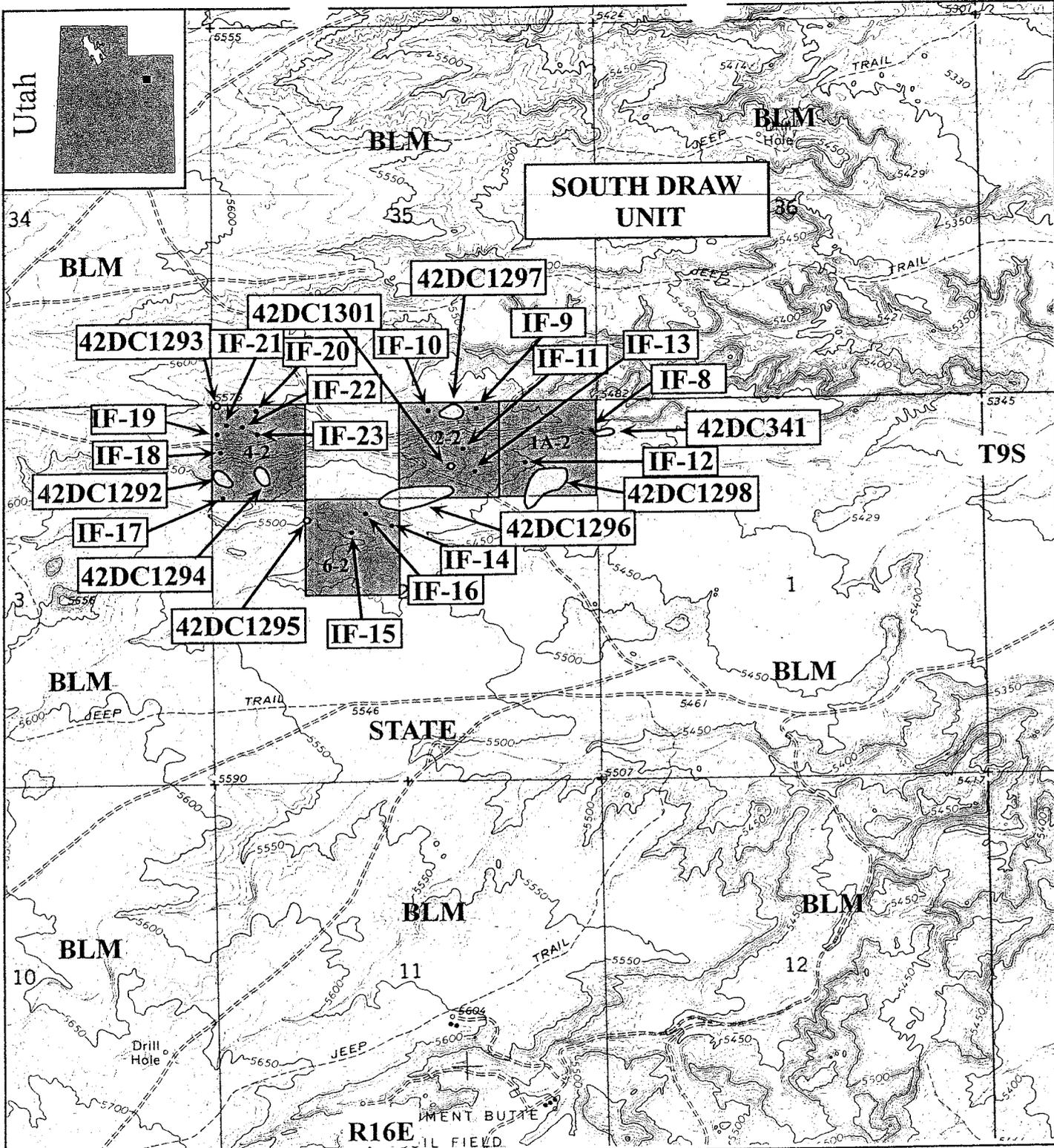
Prepared for

**Newfield Production Co.  
and  
School and Institutional Trust Land  
Administration**

Prepared by

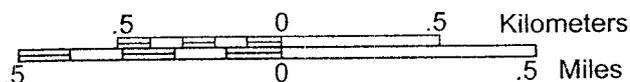
**SWCA Environmental Consultants**

June 18, 2008  
SWCA #UT08-14273-17



**KEY:** BASE FROM MYTON SE, UT - 7.5 MIN QUAD, 1964  
CONTOUR INTERVAL 10 FT

-  CLASS III INVENTORY
-  CULTURAL RESOURCE SITE
-  ISOLATED FIND

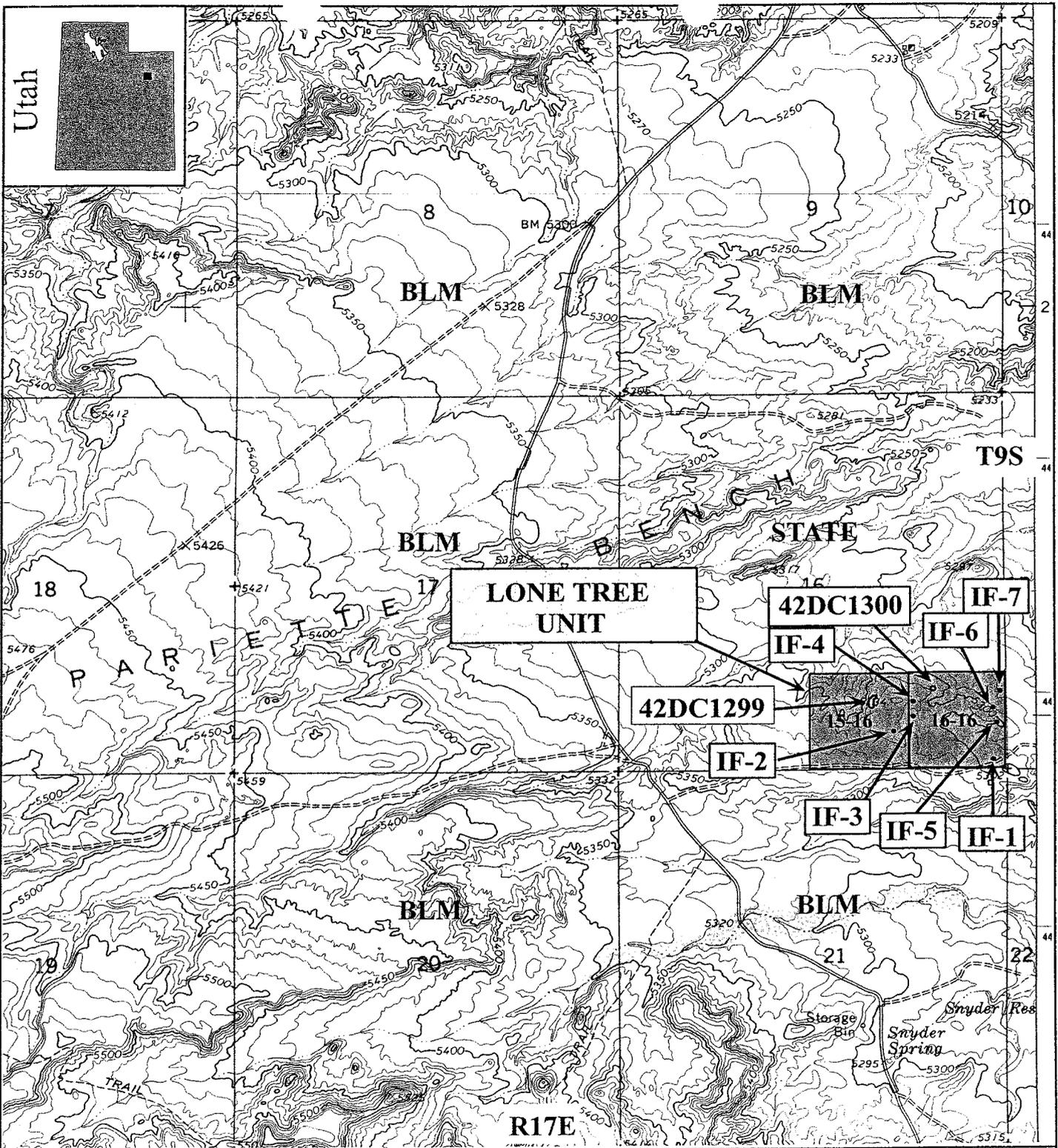


## INLAND RESOURCES SIX WELLS IN THE LONE TREE AND SOUTH WELLS DRAW UNITS

FIGURE 2  
PROJECT AREA  
AND CULTURAL RESOURCES

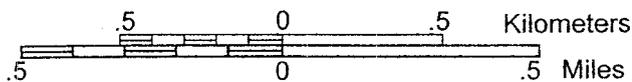


environmental consultants, inc.  
Salt Lake City, Utah • Springville, Utah • Reno, Nevada • Elko, Nevada



**KEY:** BASE FROM MYTON SE, UT - 7.5 MIN QUAD, 1964  
CONTOUR INTERVAL 10 FT

-  CLASS III INVENTORY
-  CULTURAL RESOURCE SITE
-  ISOLATED FIND



## INLAND RESOURCES SIX WELLS IN THE LONE TREE AND SOUTH WELLS DRAW UNITS

FIGURE 3  
PROJECT AREA  
AND CULTURAL RESOURCES

## 8.2 Site Summaries

**Site Number:** 42DC341

**Temp Number:** 341

**Figure Numbers:** 2 and 4

**Site Type:** Quarry

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located at the base of a ridge along two terraces.

**Description:** The site was described by Grand River Consultants in 1981 as a quarry site containing a single siltstone biface located at the base of the south facing talus of an east-west bench. A high number of non-artifactual spalls and chunks of siltstone materials made identification difficult but approximately 20 flakes were identified as cultural. Another 20 flakes were identified as possible cultural flakes. The current 2000 revisit of the site recorded an additional biface of siltstone and an uniface of siltstone. The site boundary was also extended another 40 meters to the north onto the next higher terrace as flakes were also noted in this area. The site is located on two terraces north of a large intermittent drainage system. No cultural material was located south of the improved dirt road running along the southern edge of the site. No features, concentrations, or FCR were found on the site. The site contains residual soils and exposed bedrock and outcrops with little depth potential.

**National Register Assessment:** The site contains a sparse scatter of lithic material that may have been culturally produced. One bifacial tool was located during the original recording of the site and two tools during the present project. No features, lithic concentrations, or FCR were noted and depth at the site is fairly nonexistent. The site was originally recommended as ineligible because of the lack of diagnostics and depth potential. An inspection of the road cut that now borders the south end of the site did not reveal any subsurface material. The site is recommended as **ineligible** for the NRHP.

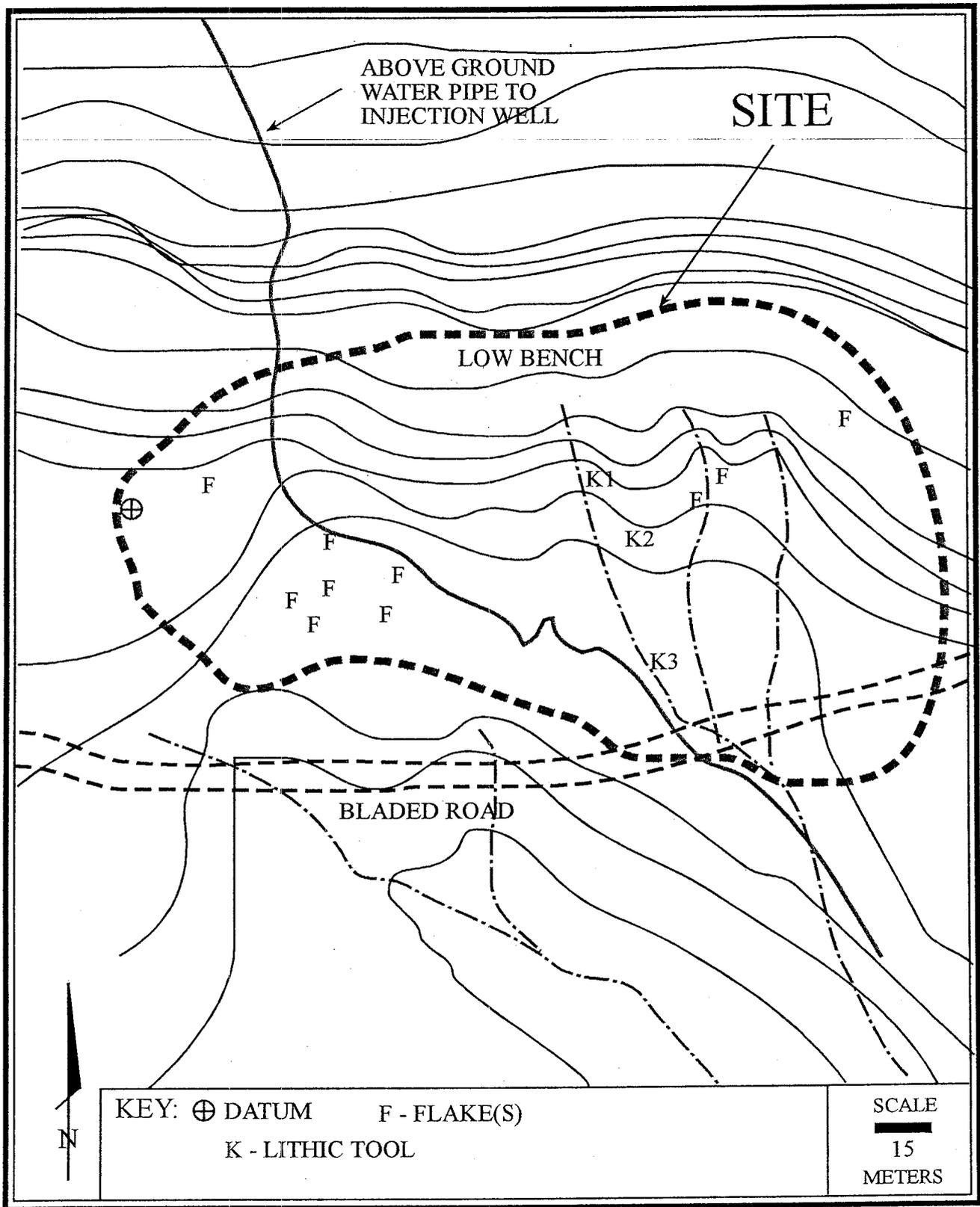


Figure 4. Plan map of site 42DC341.

**Site Number:** 42DC1292

**Temp Number:** 1-2-5

**Figure Numbers:** 2 and 5

---

**Site Type:** Lithic Scatter and Possible Historic Inscriptions

**Cultural Affiliation:** Unknown aboriginal and EuroAmerican

**Setting:** The site is located on a bench above an ephemeral drainage at the base of a ridge.

**Description:** The site is a small lithic scatter measuring 120 by 70 meters. It is located the base of a ridge, just below an exposed rock outcrop. The site consists of 20 flakes and tools including four bifaces, one knife, and a scraper. Flakes are mostly primary with secondary common. A single piece of shatter and two cores were noted as well. Lithic material includes cherts and siltstone. Maximum density of flakes is two per square meter. No prehistoric features or artifact concentrations were located. One possible historic inscription is located on a boulder within the site. The inscription reads "Floyd Johnstun", and "GC". A nearby boulder also has the slight carving of a face. Impacts to the site include erosion and grazing.

**National Register Assessment:** While the site did not contain artifact concentrations or features, portions of the site contain relatively deep deposits of alluvial and aeolian sediments that may obscure potentially intact features. Although no diagnostic tools or features are present on the surface, the presence of tools suggests that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. There is a potential for the site to yield substantive information regarding spatial patterning and lithic technology. The site is recommended as **eligible** for the NRHP under criterion D.

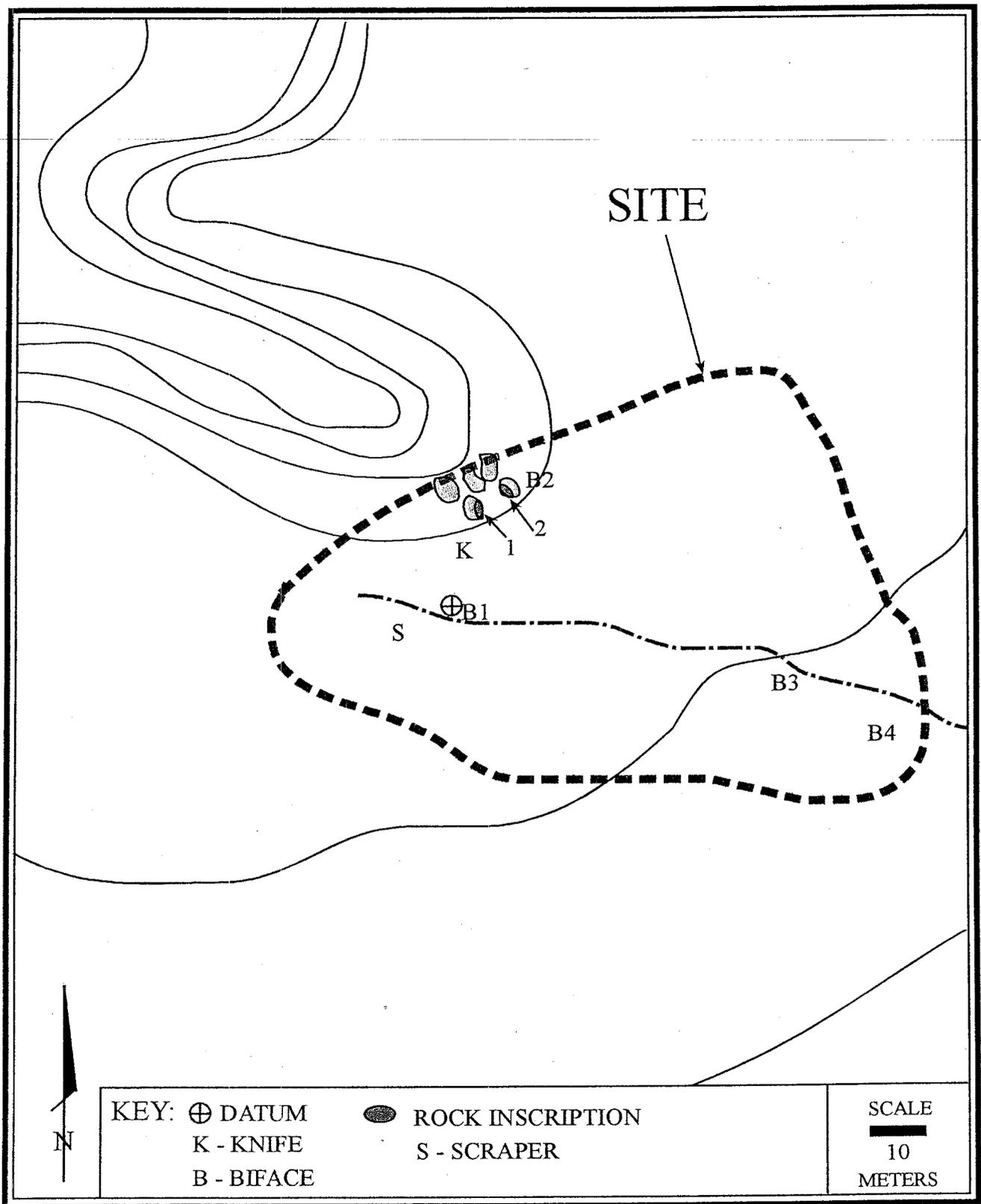


Figure 5. Plan map of site 42DC1292.

**Site Number:** 42DC1293

**Temp Number:** 1-2-6

**Figure Numbers:** 2 and 6

---

**Site Type:** Lithic scatter and historic debris scatter

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located at the base a low finger ridge.

**Description:** The site is a dual component site consisting of a lithic scatter and an historic debris scatter. The site extends over an 37 by 22 meter area. The prehistoric component consists of a crude scraper and approximately 20 pieces of lithic debitage. The flakes are mostly primary types with a few secondary flakes noted as well as a core. Lithic material includes chert and siltstone. The maximum density of flakes is two per square meter. No prehistoric features or concentrations were noted at the site. The historic component consists of one hole-in-cap can and post 1950's debris consisting of single serving cans, glass bottle and jar fragments, and Clorox bottle fragments.

**National Register Assessment:** The site is a sparse lithic scatter and historic/modern debris scatter located on thin layer of aeolian sands and blowout areas exposing desert pavement. Little potential exists for depth at the site, however, as the prehistoric materials were located in the blowout areas, the potential exists for additional buried material or intact features under the aeolian sediments. While no diagnostic tools or features are present on the surface, the presence of a tool suggests that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. There is a potential for the site to yield substantive information regarding spatial patterning and lithic technology. The prehistoric component of the site is recommended **eligible** for the NRHP under criterion D. The historic component of the site consists of only one hole-in-cap can. The remaining trash near the site dates to the post 1950s. The historic component is recommended as **ineligible**.

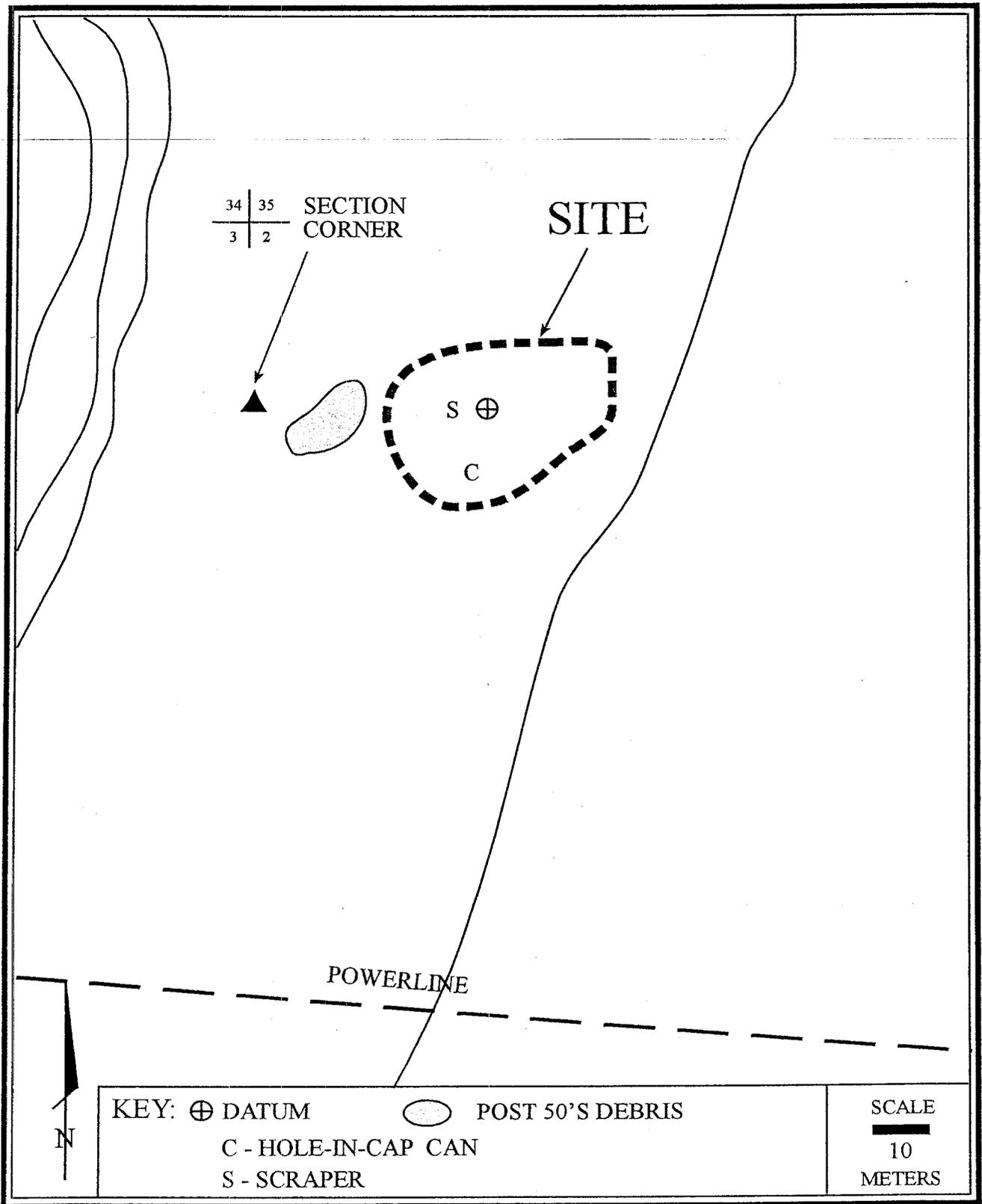


Figure 6. Plan map of site 42DC1293.

**Site Number:** 42DC1294

**Temp Number:** 1-2-7

**Figure Numbers:** 2 and 7

**Site Type:** Lithic scatter

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located on a bench above drainages to the south and a ridge to the north.

**Description:** The site is a sparse lithic scatter extending over a 90 by 50 meter area. The site contains approximately about 25 pieces of lithic debitage, a biface, a small knife, and three utilized flakes/scrapers. Lithic debitage consists of tan and grey cherts and tan siltstone. Lithic debitage is mostly secondary and primary flakes. Maximum density is three flakes per square meter. No diagnostic tools, features, or debitage concentrations were found. Soils on site vary and include sandy silts and gravels in desert pavement areas and aeolian sand deposits with sandstone outcrops to the north.

**National Register Assessment:** The site is a small lithic scatter containing some tools. While no diagnostic tools or features are present on the surface, the presence of tools suggests that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. The site lies partially in aeolian sediments that may obscure intact features or subsurface cultural material. There is a potential for the site to yield substantive information regarding spatial patterning and lithic technology, thus the site meets criterion D. It retains integrity aspects of location, association, feeling, materials, and setting. The site is recommended **eligible** under criterion D for the NRHP.

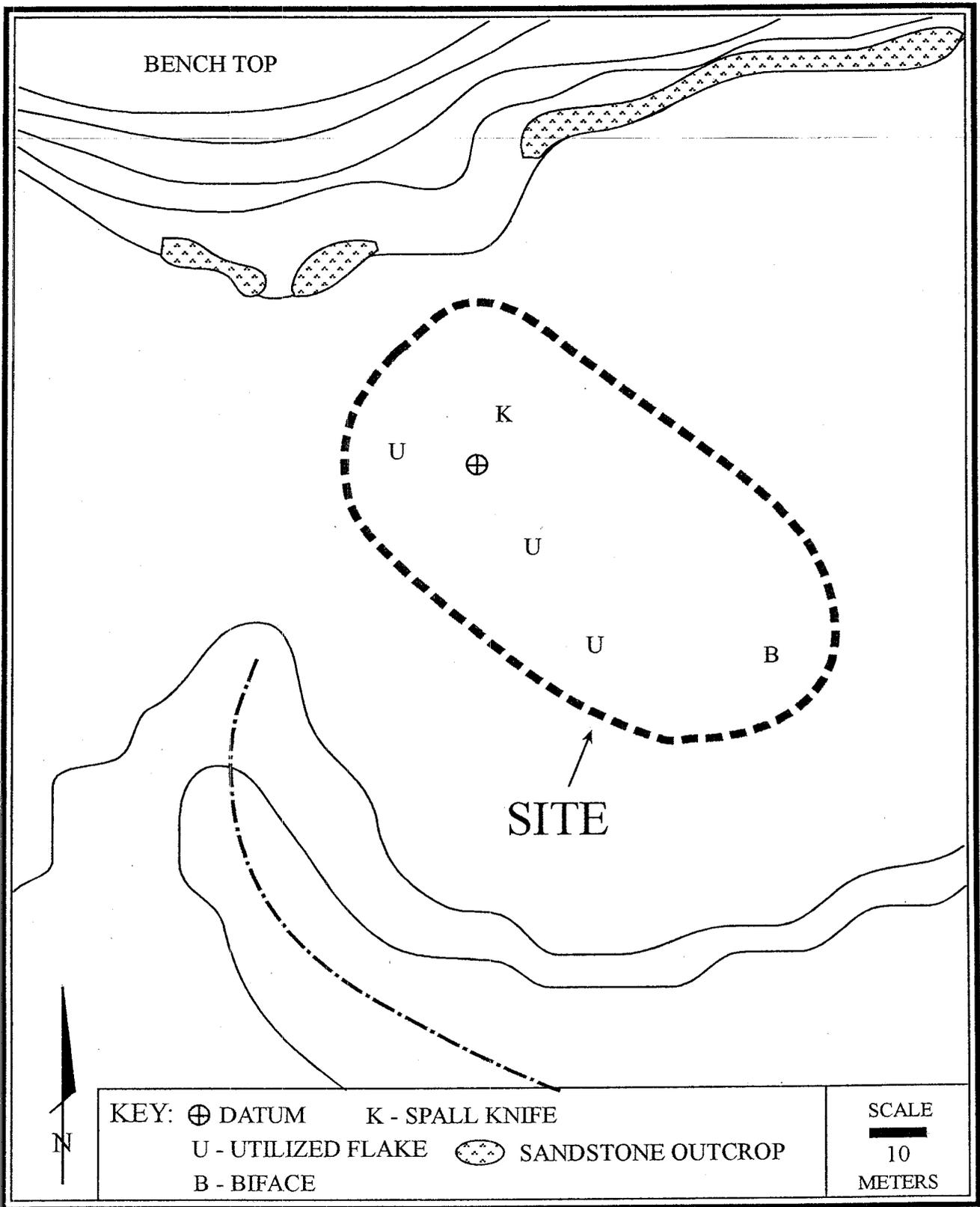


Figure 7. Plan map of site 42DC1294.

**Site Number:** 42DC1295

**Temp Number:** 1-2-4

**Figure Numbers:** 2 and 8

---

**Site Type:** Slab Lined Hearths

**Cultural Affiliation:** Unknown Aboriginal

**Setting:** The site is located on a slope of a ridge, just south of a large wash/drainage.

**Description:** The site consists of two slab lined hearths and a primary flake within a 15 by 20 meter area. Hearth 1 consists of 2-3 upright slabs at about a 90 degree angle from each other. One of the slabs may be broken. The feature measures 80 by 60 centimeters. Hearth 2 consists of 4-5 upright sandstone slabs, one of which is broken. The feature measures about 100 centimeters in diameter. The flake is a gray-tan mottled chert primary flake. It is located about four meters northeast of Hearth 2. No surface ash stains or fire-cracked rock were noted in or around the features. No other features, diagnostic artifacts, or debitage concentrations were located. Soils on site are aeolian sands with exposed bedrock also present.

**National Register Assessment:** The site appears to contain two semi-intact features and a flake. The site is located in aeolian sands that may obscure datable deposits or other intact features or diagnostic material. There is potential for the site to yield substantive data regarding spatial patterns, settlement patterns, subsistence, and possibly chronology. The site is recommended as **eligible** under criterion D for NRHP inclusion.

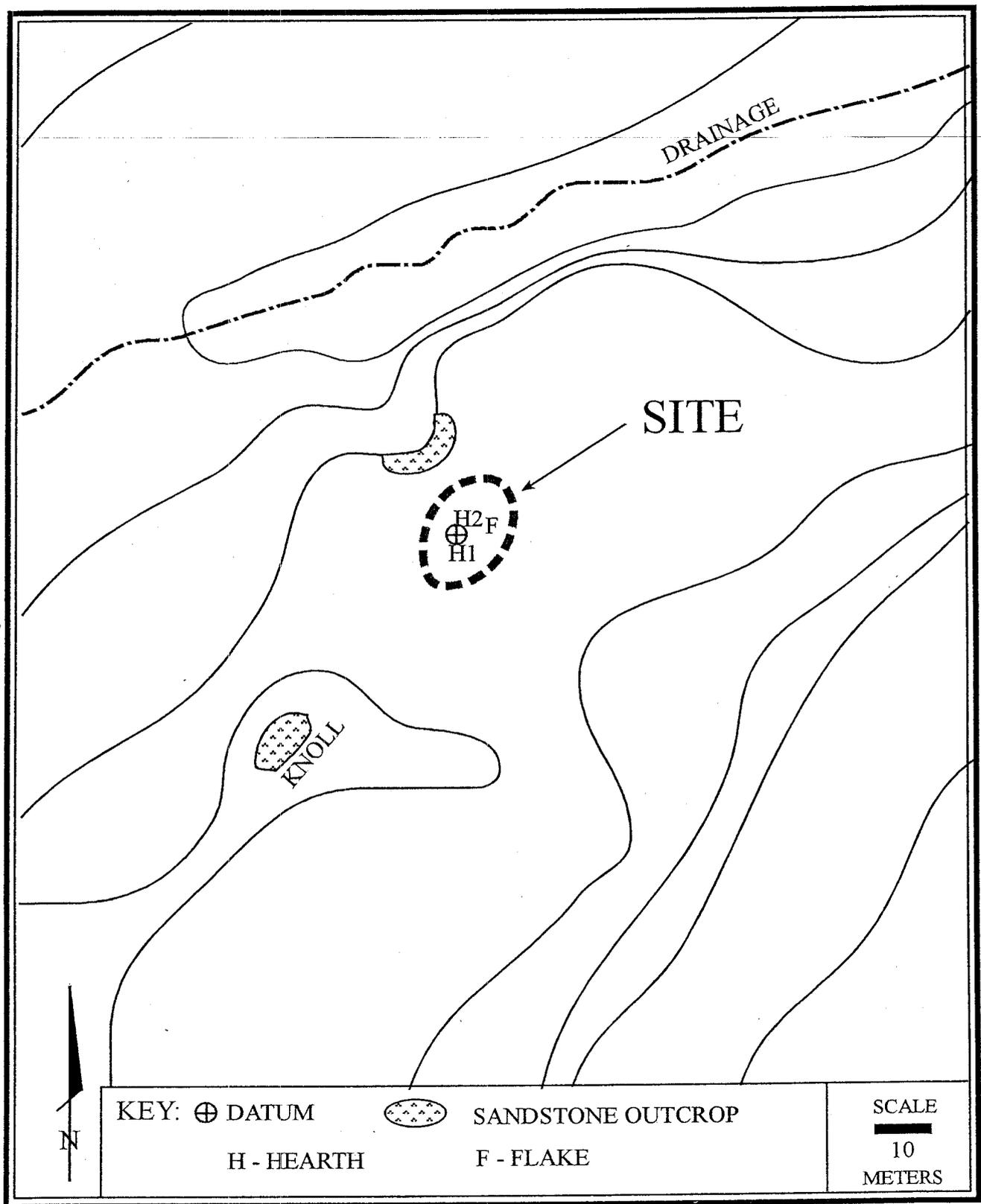


Figure 8. Plan map of site 42DC1295.

**Site Number:** 42DC1296

**Temp Number:** 1-2-3

**Figure Numbers:** 2 and 9

**Site Type:** Lithic scatter

**Cultural Affiliation:** Unknown aboriginal

**Setting:** The site is located on a ridge top overlooking a drainage/wash to the south.

**Description:** The site is a large, sparse lithic scatter extending over a 285 by 120 meter area and contains 50-75 artifacts. Lithic debitage consists of secondary and primary flakes of chert and siltstone. Maximum flake density is two per square meter with an average of one flake per 10 square meters. No debitage concentrations, tools, or features were found. Sediments are aeolian sands over bedrock and rock outcrops.

**National Register Assessment:** The site is a lithic scatter situated on fairly deep deposits of aeolian and alluvial deposits that may contain intact subsurface cultural material or features. While no tools or features are present on the surface, the presence of lithic debitage indicates that lithic reduction activities were occurring on site, and that evidence of spatial patterning can be discerned from the artifacts that are present. There is a potential for the site to yield substantive information regarding spatial patterning and lithic technology. The site is recommended as **eligible** under criterion D for inclusion on the NRHP.

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 06/23/2008

API NO. ASSIGNED: 43-013-34008

WELL NAME: STATE 14-16T-9-17

OPERATOR: NEWFIELD PRODUCTION ( N2695 )

PHONE NUMBER: 435-646-3721

CONTACT: MANDIE CROZIER

PROPOSED LOCATION:

SESW 16 090S 170E  
 SURFACE: 0411 FSL 2021 FWL  
 BOTTOM: 0411 FSL 2021 FWL  
 COUNTY: DUCHESNE  
 LATITUDE: 40.02494 LONGITUDE: -110.0131  
 UTM SURF EASTINGS: 584216 NORTHINGS: 4430782  
 FIELD NAME: MONUMENT BUTTE ( 105 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DIED	8/28/08
Geology		
Surface		

LEASE TYPE: 3 - State  
 LEASE NUMBER: ML-3453B  
 SURFACE OWNER: 3 - State

PROPOSED FORMATION: MNCS  
 COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]  
(No. B001834 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. MUNICIPAL )
- RDCC Review (Y/N)  
(Date: )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

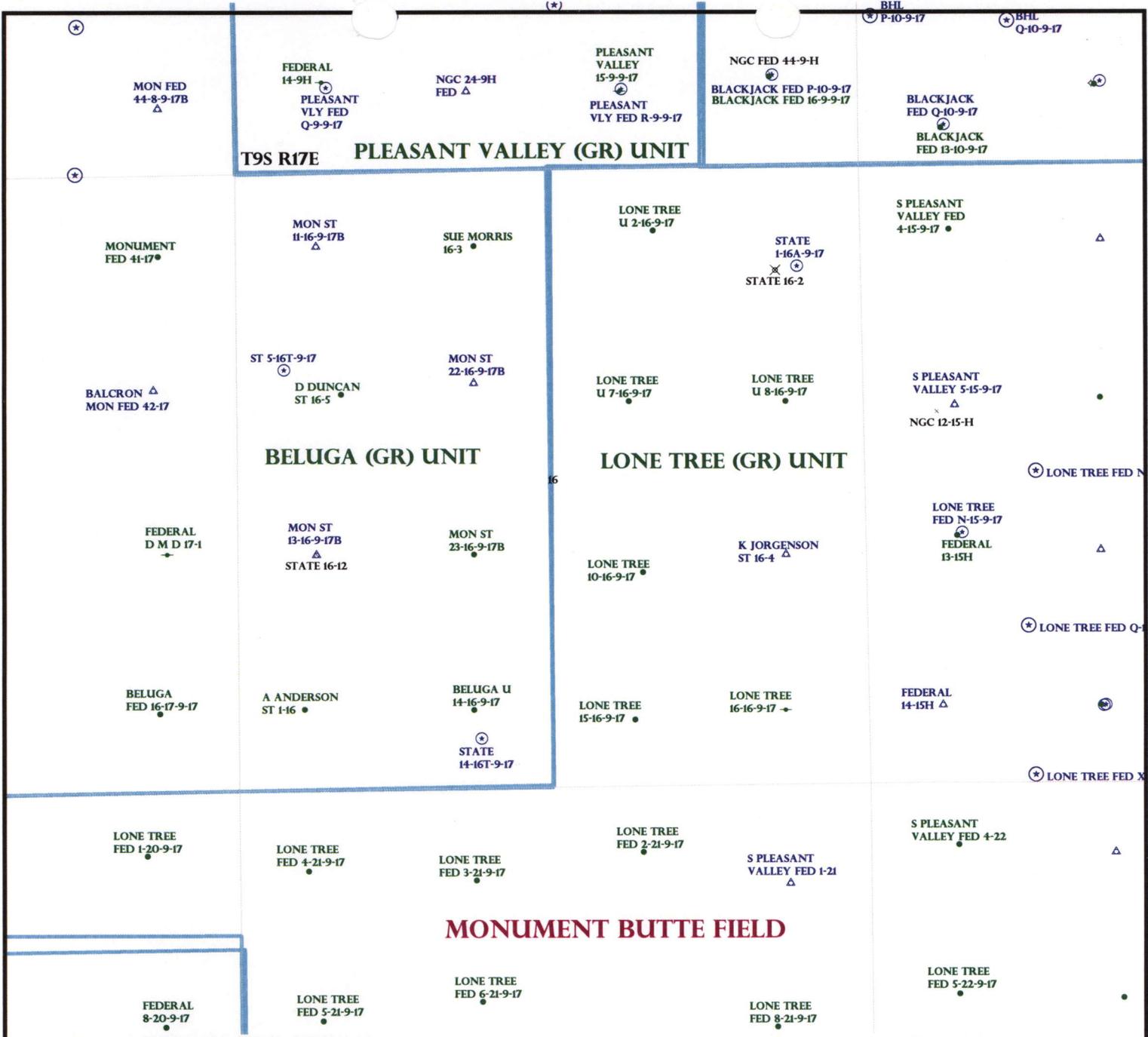
- \_\_\_ R649-2-3.
- Unit: BELUGA (GRRV) \* Non PA
- \_\_\_ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- \_\_\_ Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_
- \_\_\_ R649-3-11. Directional Drill

COMMENTS:

*Needs Prest (07-03-08)*

STIPULATIONS:

- 1- Spacing Strip
- 2- STATEMENT OF BASIS
- 3- Surface Cg Cmt Strip
- 4- Cmt Strip # 3A (7 5/8" Intermediate, 3000' MD minimum, Green River Fm)



OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 2 T.9S R.17E

FIELD: MONUMENT BUTTE (105)

COUNTY: DUCHESNE

SPACING: R649-3-3 / EXCEPTION LOCATION

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

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

- Wells Status**
- GAS INJECTION
  - GAS STORAGE
  - LOCATION ABANDONED
  - NEW LOCATION
  - PLUGGED & ABANDONED
  - PRODUCING GAS
  - PRODUCING OIL
  - SHUT-IN GAS
  - SHUT-IN OIL
  - TEMP. ABANDONED
  - TEST WELL
  - WATER INJECTION
  - WATER SUPPLY
  - WATER DISPOSAL
  - DRILLING



PREPARED BY: DIANA MASON  
DATE: 24-JUNE-2008

# Application for Permit to Drill

## Statement of Basis

8/7/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
833	43-013-34008-00-00		GW	S	No
<b>Operator</b>	NEWFIELD PRODUCTION COMPANY	<b>Surface Owner-APD</b>			
<b>Well Name</b>	STATE 14-16T-9-17	<b>Unit</b>	BELUGA (GRRV)		
<b>Field</b>	MONUMENT BUTTE	<b>Type of Work</b>			
<b>Location</b>	SESW 16 9S 17E S 411 FSL 2021 FWL	GPS Coord (UTM)	584216E 4430782N		

### Geologic Statement of Basis

Newfield proposes to set 1,000' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 200'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 16. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect useable sources of underground water.

Brad Hill  
APD Evaluator

8/7/2008  
Date / Time

### Surface Statement of Basis

The general area is approximately 16 miles southwest of Myton, Utah in the Monument Butte field of Pariette Bench. Castle Peak Draw is the main drainage in the area. It runs in a northeasterly direction about 7 miles and joins Pariette Draw. Pariette Draw continues in a southeasterly direction about 6 miles and joins the Green River about 6 miles below Ouray Utah. Pariette Draw contains a perennial stream somewhat consisting of irrigation runoff and seepage. No streams springs or seeps occur in the immediate area. An occasional pond constructed to store runoff for livestock or wildlife exists. Drainages are ephemeral only flowing during spring snowmelt or following intense summer rainstorms. Broad flats or rolling topography intersected by drainages with gentle to moderate side-slopes characterize the area. Access to the area from Myton, Utah is following State of Utah Hwy. 40 and Duchesne County and oilfield development roads a distance of 15.6 miles. A new road approximately 0.1 mile in length will be constructed to the site.

The State 14-16T-9-17 is proposed as a deep gas well with the pad to be constructed on a flat with a slight slope to the north. The pad will lie longitudinally along the slope oriented in a east to west direction. A rocky outcrop lies to the west that shows slight surface runoff. The reserve pit spoils will intercept any runoff and the location will be bermed when the pit is closed and put into production. No diversions are needed. The new pad will but against an existing producing oil well. The selected site appears to be a suitable location for drilling and operating a well and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA. Ed Bonner represented SITLA at the site visit. He had no concerns regarding the proposal. SITLA is to be contacted for reseeding and reclamation standards for reclaiming the site. Ben Williams of the Utah Division of Wildlife Resources was invited to the evaluation. He did not attend.

Floyd Bartlett  
Onsite Evaluator

7/3/2008  
Date / Time

---

# Application for Permit to Drill

## Statement of Basis

8/7/2008

Utah Division of Oil, Gas and Mining

Page 2

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### Conditions of Approval / Application for Permit to Drill

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** NEWFIELD PRODUCTION COMPANY  
**Well Name** STATE 14-16T-9-17  
**API Number** 43-013-34008-0      **APD No** 833      **Field/Unit** MONUMENT BUTTE  
**Location:** 1/4,1/4 SESW      **Sec** 16   **Tw** 9S   **Rng** 17E   411 FSL 2021 FWL  
**GPS Coord (UTM)** 584217      4430776      **Surface Owner**

### Participants

Floyd Bartlett (DOGM), David Allred (Newfield Production Company), Cory Miller (Tri-State Land Surveying) and Ed Bonner (SITLA).

### Regional/Local Setting & Topography

The general area is approximately 16 miles southwest of Myton, Utah in the Monument Butte field of Pariette Bench. Castle Peak Draw is the main drainage in the area. It runs in a northeasterly direction about 7 miles and joins Pariette Draw. Pariette Draw continues in a southeasterly direction about 6 miles and joins the Green River about 6 miles below Ouray Utah. Pariette Draw contains a perennial stream somewhat consisting of irrigation runoff and seepage. No streams springs or seeps occur in the immediate area. An occasional pond constructed to store runoff for livestock or wildlife exists. Drainages are ephemeral only flowing during spring snowmelt or following intense summer rainstorms. Broad flats or rolling topography intersected by drainages with gentle to moderate side-slopes characterize the area. Access to the area from Myton, Utah is following State of Utah Hwy. 40 and Duchesne County and oilfield development roads a distance of 15.6 miles. A new road approximately 0.1mile in length will be constructed to the site.

The State 14-16T-9-17 is proposed as a deep gas well with the pad to be constructed on a flat with a slight slope to the north. The pad will lie longitudinally along the slope oriented in a east to west direction. A rocky outcrop lies to the west that shows slight surface runoff. The reserve pit spoils will intercept any runoff and the location will be bermed when the pit is closed and put into production. No diversions are needed. The new pad will but against an existing producing oil well. The selected site appears to be a suitable location for drilling and operating a well and is the best site in the immediate area.

Both the surface and minerals are owned by SITLA.

### Surface Use Plan

#### **Current Surface Use**

Grazing  
Recreational  
Wildlfe Habitat

#### **New Road**

<b>Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.1	<b>Width</b> 310 <b>Length</b> 400	Onsite	UNTA

**Ancillary Facilities** N

### Waste Management Plan Adequate?

### Environmental Parameters

**Affected Floodplains and/or Wetland** N

#### **Flora / Fauna**

Vegetation is a good Desert shrub type. Identified vegetation consisted of shadscale, greasewood, mustard weed,

rabbit brush, Gardner saltbrush, horsebrush, halogeton, prickly pear, sitation hystrix, curly mesquite, broom snakeweed, and spring annuals.

Cattle, prairie dogs, antelope, small mammals and birds.

**Soil Type and Characteristics**

Deep gravely sandy loam.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diverson Required** N

**Berm Required?** Y

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?**            **Paleo Potential Observed?**            **Cultural Survey Run?**            **Cultural Resources?**

**Reserve Pit**

<b>Site-Specific Factors</b>		<b>Site Ranking</b>
<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	<300	20
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>	<10	0
<b>Affected Populations</b>	<10	0
<b>Presence Nearby Utility Conduits</b>	Not Present	0
	<b>Final Score</b>	35
		1 <b>Sensitivity Level</b>

**Characteristics / Requirements**

A 100' x 165' x 8' deep reserve pit is planned in an area of cut on the southeast side of the location. A pit liner is required. Newfield commonly uses a 16-mil liner.

**Closed Loop Mud Required?** N    **Liner Required?**    **Liner Thickness** 16    **Pit Underlayment Required?** Y

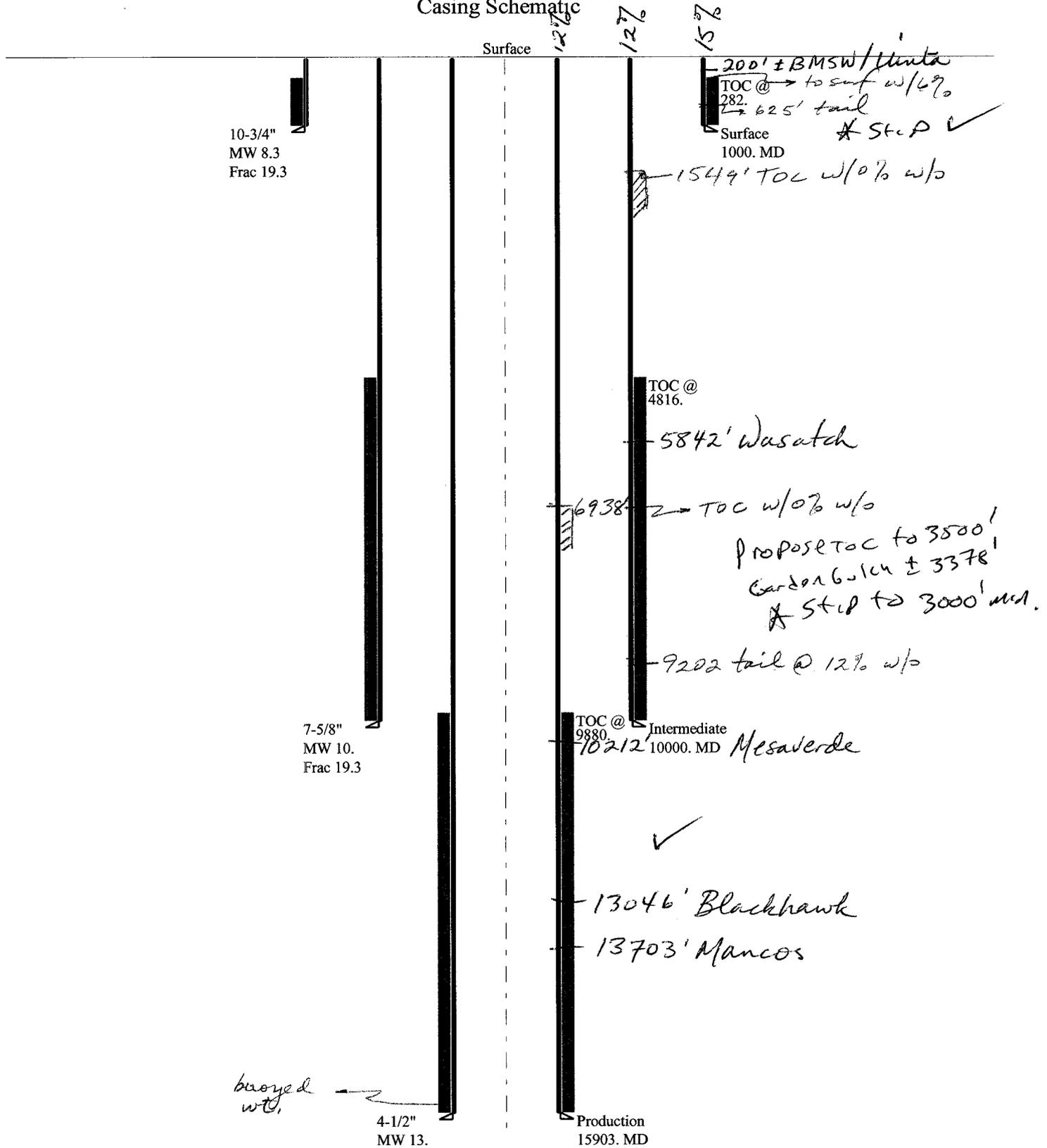
**Other Observations / Comments**

Floyd Bartlett  
**Evaluator**

7/3/2008  
**Date / Time**

43013340080000 State 14-16T-9-17

Casing Schematic



Well name:	<b>4301334008000 State 14-16T-9-17</b>	
Operator:	<b>Newfiled Production Company</b>	Project ID:
String type:	Surface	43-013-34008-0000
Location:	Duchesne County	

**Design parameters:**

**Collapse**  
Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**  
Design factor 1.125

**Burst:**  
Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 79 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 185 ft  
Cement top: 282 ft

**Burst**

Max anticipated surface pressure: 780 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 1,000 psi

No backup mud specified.

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

Tension is based on air weight.  
Neutral point: 878 ft

**Non-directional string.**

**Re subsequent strings:**  
Next setting depth: 9,500 ft  
Next mud weight: 10.000 ppg  
Next setting BHP: 4,935 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 1,000 ft  
Injection pressure: 1,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1000	10.75	40.50	J-55	ST&C	1000	1000	9.925	550.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	433	1580	3.652	1000	3130	3.13	40	420	10.37 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Minerals

Phone: 810-538-5357

Date: August 14, 2008  
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
Collapse is based on a vertical depth of 1000 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes.  
Burst strength is not adjusted for tension.

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

Well name:	<b>4301334008000 State 14-16T-9-17</b>	
Operator:	<b>Newfiled Production Company</b>	
String type:	Intermediate	Project ID: 43-013-34008-0000
Location:	Duchesne County	

**Design parameters:**

**Collapse**

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

**Burst**

Max anticipated surface pressure: 7,241 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 9,441 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Tension:**

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

Tension is based on air weight.  
Neutral point: 8,509 ft

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 205 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top: 4,816 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 15,903 ft  
Next mud weight: 13.000 ppg  
Next setting BHP: 10,740 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 10,000 ft  
Injection pressure: 10,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft <sup>3</sup> )
1	10000	7.625	39.00	N-80	LT&C	10000	10000	6.5	2393.9

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	5195	8820	1.698	9441	9180	0.97	390	798	2.05 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Minerals

Phone: 810-538-5357

Date: August 13, 2008  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
Collapse is based on a vertical depth of 10000 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes.  
Burst strength is not adjusted for tension.

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

Well name:	<b>43013340080000 State 14-16T-9-17</b>		
Operator:	<b>Newfiled Production Company</b>		
String type:	Production	Project ID:	43-013-34008-0000
Location:	Duchesne County		

**Design parameters:**

**Collapse**

Mud weight: 13.000 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 7,241 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 10,740 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

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

Tension is based on buoyed weight.  
 Neutral point: 12,768 ft

**Environment:**

H2S considered? No  
 Surface temperature: 65 °F  
 Bottom hole temperature: 288 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 368 ft

Cement top: 9,880 ft

**Non-directional string.**

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	15903	4.5	15.10	P-110	LT&C	15903	15903	3.701	1269.7
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	10740	14350	1.336	10740	14420	1.34	193	406	2.11 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Minerals

Phone: 810-538-5357

Date: August 14, 2008  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 15903 ft, a mud weight of 13 ppg. The casing is considered to be evacuated for collapse purposes.  
 Burst strength is not adjusted for tension.

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

**BOPE REVIEW**

**Newfield State14-16T-9-17**

**API 43-013-34008-0000**

Well Name	Newfield State14-16T-9-17 API 43-013-34008-0000		
	String 1	String 2	String 3
Casing Size (")	10 3/4	7 5/8	4 1/2
Setting Depth (TVD)	1000	10000	15903
Previous Shoe Setting Depth (TVD)	40	1000	10000
Max Mud Weight (ppg)	8.33	10	13 ✓
BOPE Proposed (psi)	500	5000	10000
Casing Internal Yield (psi)	3130	9180	14420
Operators Max Anticipated Pressure (psi)	10337		12.5 ppg ✓

Calculations	String 1	10 3/4 "	
Max BHP [psi]	.052*Setting Depth*MW =		433
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =		313 YES ✓ Diverter head
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =		213 YES
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =		222 ← NO <i>g/v</i>
Required Casing/BOPE Test Pressure			1000 psi
*Max Pressure Allowed @ Previous Casing Shoe =			40 psi *Assumes 1psi/ft frac gradient

Calculations	String 2	7 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =		5200
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =		4000 YES ✓ 5M double ram, 5M annular rotating head.
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =		3000 YES
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =		3220 ← NO
Required Casing/BOPE Test Pressure			6426 psi
*Max Pressure Allowed @ Previous Casing Shoe =			1000 psi *Assumes 1psi/ft frac gradient

Calculations	String 3	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =		10750
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =		8842 YES ✓ 10M double ram, 5M annular rotating head.
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =		7252 YES
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =		9452 YES ✓
Required Casing/BOPE Test Pressure			10000 psi
*Max Pressure Allowed @ Previous Casing Shoe =			9180 psi *Assumes 1psi/ft frac gradient

**From:** Jim Davis  
**To:** Bonner, Ed  
**Date:** 7/17/2008 8:43 AM  
**Subject:** Another Newfield well cleared.

**CC:** Mason, Diana  
Ed, Diana,

The following well has been granted paleontological and archaeological clearance from SITLA.  
State 14-16T-9-17      API 4301334008      9S 17E sec 16

-Jim



July 21, 2008

State of Utah, Division of Oil, Gas & Mining  
ATTN: Diana Mason  
PO Box 145801  
Salt Lake City, UT 84114-5801

RE: Exception Location  
**State 14-16T-9-17**  
ML-3453B  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

Dear Ms. Mason;

Pursuant to Rule 649-3-3 of the Oil & Gas Rules and Regulations of the State of Utah, Newfield Production Company ("NPC") hereby requests an exception location for the drilling of the captioned well. The proposed drillsite for this well is located 50' south of the drilling window required by Rule R649-3-2, which requires a well to be located in the center of a forty (40) acre quarter-quarter section, or a substantially equivalent lot or tract, with a tolerance of two hundred (200) feet in any direction from the center.

The attached plat depicts the proposed location and illustrates the deviation from the drilling window. This location has been chosen so it will not interfere with the wellbore of the Beluga 14-16-9-17, an oil well producing from the Green River formation. The State 14-16T-9-17 is being permitted as a deep gas well.

The State 14-16T-9-17 will be drilled on ML-3453B, which is owned by Newfield 50%, Yates Petroleum Corporation 20%, Myco Industries Inc. 10%, Abo Petroleum Corporation 10% and Yates Drilling Company 10%, as to deep rights. However, please note the location of this well is 411' from U-75036, which is owned by Newfield 77.5%, Yates Petroleum Corporation 9%, Myco Industries Inc. 4.5%, Abo Petroleum Corporation 4.5%, and Yates Drilling Company 4.5%, as to the deep rights. Enclosed are letters from the above referenced parties signifying their consent to the location of the State 14-16T-9-17.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at [reveland@newfield.com](mailto:reveland@newfield.com). Your consideration of this matter is greatly appreciated.

Sincerely,  
NEWFIELD PRODUCTION COMPANY

A handwritten signature in cursive script that reads "Roxann Eveland".

Roxann Eveland  
Land Associate

Attachment

RECEIVED

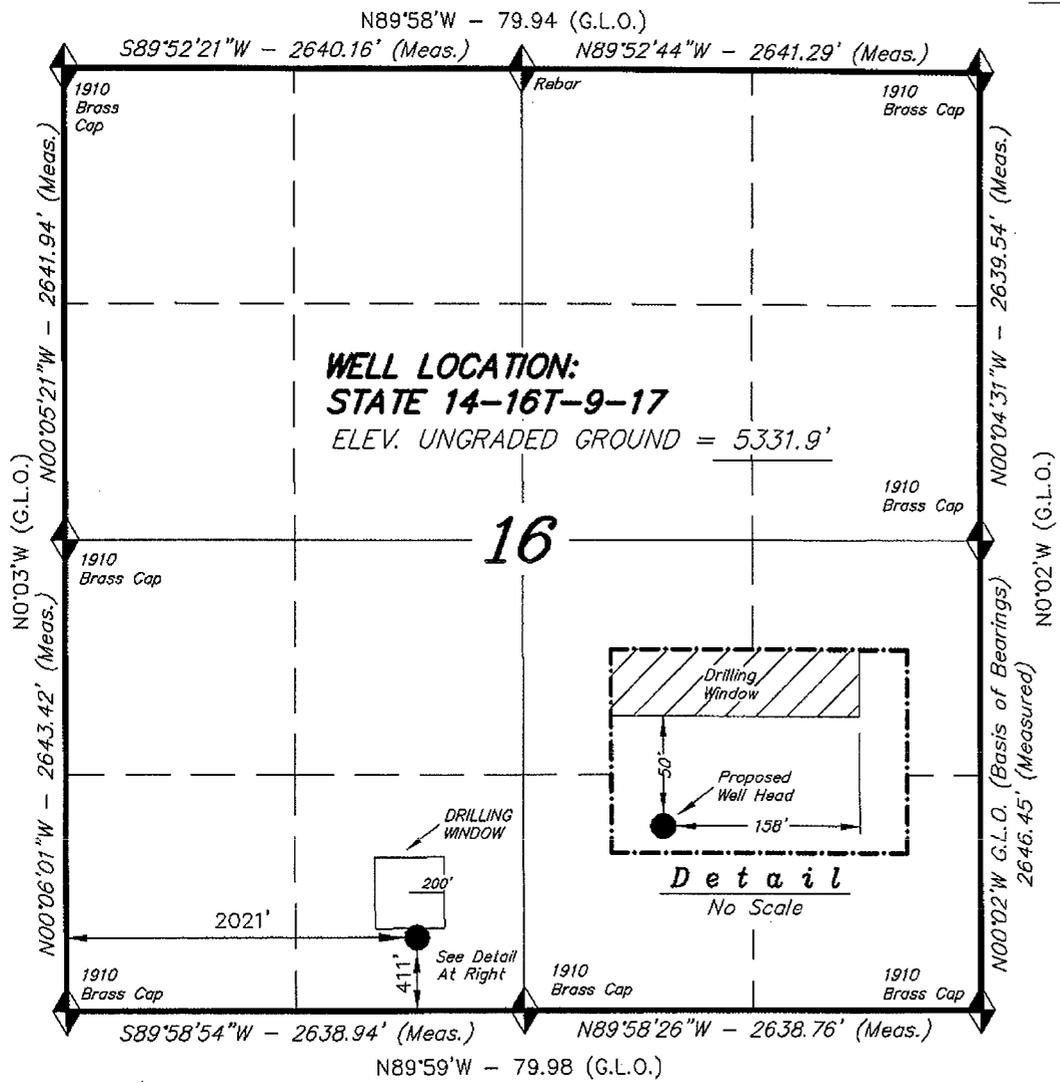
JUL 25 2008

DIV. OF OIL, GAS & MINING

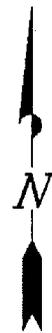


# T9S, R17E, S.L.B.&M.

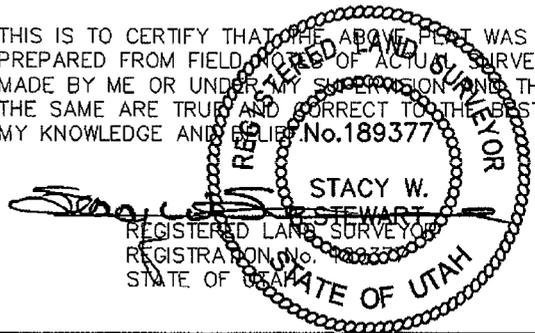
## NEWFIELD PRODUCTION COMPANY



WELL LOCATION, STATE 14-16T-9-17,  
 LOCATED AS SHOWN IN THE SE 1/4 SW  
 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M.  
 DUCHESNE COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE ABOVE PLAN 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. No. 189377



◆ = SECTION CORNERS LOCATED  
 BASIS OF ELEV;  
 U.S.G.S. 7-1/2 min QUAD (MYTON SE)

**STATE 14-16T-9-17**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 01' 29.40"  
 LONGITUDE = 110° 00' 49.68"

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>	
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501	
DATE SURVEYED: 2-14-08	SURVEYED BY: C.M.
DATE DRAWN: 02-15-08	DRAWN BY: M.W.
REVISED:	SCALE: 1" = 1000'



June 19, 2008

Yates Petroleum Corporation  
ATTN: Cody Moore  
105 S. 4<sup>th</sup> St.  
Artesia, NM 88210

RE: Exception Location  
State 14-16T-9-17  
Duchesne County, Utah

Dear Mr. Moore;

Please be advised Newfield Production Company has submitted an application for permit to drill for the following well:

**State 14-16T-9-17**  
ML-3453B  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

This well is located outside of the drilling window as required by State of Utah R649-3-2. This location has been chosen so it will not interfere with the wellbore of the Beluga 14-16-9-17, which is an oil well producing from the Green River formation. The State 14-16T-9-17 is proposed as a deep gas well. It is necessary to obtain your written concurrence with this exception location as a 9% working interest owner of UTU-75036, the lease this well location is encroaching upon.

Enclosed you will find a plat showing the location of the above referenced well. If you are in agreement to this location, please verify your consent by signing and dating where indicated on page 2 of this letter and returning to my attention **as soon as possible** by email at [reveland@newfield.com](mailto:reveland@newfield.com) or by fax to 303-893-0103.

If you have any questions or need further information, please do not hesitate to contact me at 303-382-4444 or by email. I appreciate your prompt attention to this matter.

Sincerely,

A handwritten signature in cursive script that reads "Roxann Eveland".

Roxann Eveland  
Land Associate

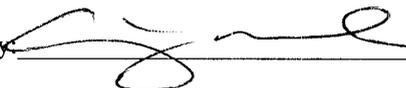
Enclosure

TO: Newfield Production Company  
ATTN: Roxann Eveland  
EMAIL: [reveland@newfield.com](mailto:reveland@newfield.com)  
FAX: 303-893-0103

RE: Exception Location  
**State 14-16T-9-17**  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

Please be advised Yates Petroleum Corporation does not have an objection to the proposed location of the  
aforementioned well.

**YATES PETROLEUM CORPORATION**

By:  Date: July 7, 2008

Cody J. Moore- Associate Landman  
Print Name and Title



June 19, 2008

Yates Drilling Company  
Attn: Cody Moore  
105 S. 4<sup>th</sup> St.  
Artesia, NM 88210

RE: Exception Location  
State 14-16T-9-17  
Duchesne County, Utah

Dear Mr. Moore;

Please be advised Newfield Production Company has submitted an application for permit to drill for the following well:

**State 14-16T-9-17**  
ML-3453B  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

This well is located outside of the drilling window as required by State of Utah R649-3-2. This location has been chosen so it will not interfere with the wellbore of the Beluga 14-16-9-17, which is an oil well producing from the Green River formation. The State 14-16T-9-17 is proposed as a deep gas well. It is necessary to obtain your written concurrence with this exception location as a 4.5% working interest owner of UTU-75036, the lease this well location is encroaching upon.

Enclosed you will find a plat showing the location of the above referenced well. If you are in agreement to this location, please verify your consent by signing and dating where indicated on page 2 of this letter and returning to my attention **as soon as possible** by email at [reveland@newfield.com](mailto:reveland@newfield.com) or by fax to 303-893-0103.

If you have any questions or need further information, please do not hesitate to contact me at 303-382-4444 or by email. I appreciate your prompt attention to this matter.

Sincerely,

A handwritten signature in cursive script that reads "Roxann Eveland".

Roxann Eveland  
Land Associate

Enclosure

TO: Newfield Production Company  
ATTN: Roxann Eveland  
EMAIL: [reveland@newfield.com](mailto:reveland@newfield.com)  
FAX: 303-893-0103

RE: Exception Location  
**State 14-16T-9-17**  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

Please be advised Yates Drilling Company does not have an objection to the proposed location of the  
aforementioned well.

**YATES DRILLING COMPANY**

By:  Date: July 7, 2008  
Cody J. Moore - Associate Landman  
Print Name and Title



June 19, 2008

Myco Industries Inc.  
PO Box 840  
Artesia, NM 88211

RE: Exception Location  
State 14-16T-9-17  
Duchesne County, Utah

Ladies and/or Gentlemen;

Please be advised Newfield Production Company has submitted an application for permit to drill for the following well:

**State 14-16T-9-17**  
ML-3453B  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

This well is located outside of the drilling window as required by State of Utah R649-3-2. This location has been chosen so it will not interfere with the wellbore of the Beluga 14-16-9-17, which is an oil well producing from the Green River formation. The State 14-16T-9-17 is proposed as a deep gas well. It is necessary to obtain your written concurrence with this exception location as a 4.5% working interest owner of UTU-75036, the lease this well location is encroaching upon.

Enclosed you will find a plat showing the location of the above referenced well. If you are in agreement to this location, please verify your consent by signing and dating where indicated on page 2 of this letter and returning to my attention **as soon as possible** by email at [reveland@newfield.com](mailto:reveland@newfield.com) or by fax to 303-893-0103.

If you have any questions or need further information, please do not hesitate to contact me at 303-382-4444 or by email. I appreciate your prompt attention to this matter.

Sincerely,

A handwritten signature in cursive script that reads "Roxann Eveland".

Roxann Eveland  
Land Associate

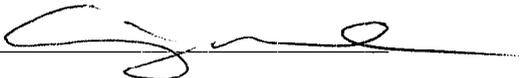
Enclosure

TO: Newfield Production Company  
ATTN: Roxann Eveland  
EMAIL: [reveland@newfield.com](mailto:reveland@newfield.com)  
FAX: 303-893-0103

RE: Exception Location  
**State 14-16T-9-17**  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

Please be advised Myco Industries Inc. does not have an objection to the proposed location of the  
aforementioned well.

**MYCO INDUSTRIES INC.**

By:  Date: July 7, 2008  
Cody J. Moore, Associate Landman  
Print Name and Title

NEWFIELD



June 19, 2008

Abo Petroleum Corporation  
PO Box 900  
Artesia, NM 88211

RE: Exception Location  
State 14-16T-9-17  
Duchesne County, Utah

Ladies and/or Gentlemen;

Please be advised Newfield Production Company has submitted an application for permit to drill for the following well:

**State 14-16T-9-17**  
ML-3453B  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

This well is located outside of the drilling window as required by State of Utah R649-3-2. This location has been chosen so it will not interfere with the wellbore of the Beluga 14-16-9-17, which is an oil well producing from the Green River formation. The State 14-16T-9-17 is proposed as a deep gas well. It is necessary to obtain your written concurrence with this exception location as a 4.5% working interest owner of UTU-75036, the lease this well location is encroaching upon.

Enclosed you will find a plat showing the location of the above referenced well. If you are in agreement to this location, please verify your consent by signing and dating where indicated on page 2 of this letter and returning to my attention **as soon as possible** by email at [reveland@newfield.com](mailto:reveland@newfield.com) or by fax to 303-893-0103.

If you have any questions or need further information, please do not hesitate to contact me at 303-382-4444 or by email. I appreciate your prompt attention to this matter.

Sincerely,

Roxann Eveland  
Land Associate

Enclosure

TO: Newfield Production Company  
ATTN: Roxann Eveland  
EMAIL: [reveland@newfield.com](mailto:reveland@newfield.com)  
FAX: 303-893-0103

RE: Exception Location  
**State 14-16T-9-17**  
T9S R17E, Section 16: SESW  
411' FSL 2021' FWL  
Duchesne County, Utah

Please be advised Abo Petroleum Corporation does not have an objection to the proposed location of the  
aforementioned well.

**ABO PETROLEUM CORPORATION**

By:  Date: July 7, 2008  
Cody J. Moore Associate Landman  
Print Name and Title



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

**Division of Oil, Gas and Mining**

JOHN R. BAZA  
*Division Director*

September 2, 2008

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: State 14-16T-9-17 Well, 411' FSL, 2021' FWL, SE SW, Sec. 16, T. 9 South, R. 17 East, Duchesne County, Utah

Gentlemen:

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

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-34008.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

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

**Operator:** Newfield Production Company

**Well Name & Number** State 14-16T-9-17

**API Number:** 43-013-34008

**Lease:** ML-3453B

**Location:** SE SW                      **Sec.** 16                      **T.** 9 South                      **R.** 17 East

### **Conditions of Approval**

#### **1. General**

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

#### **2. Notification Requirements**

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

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

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

- Dan Jarvis at:                      (801) 538-5338 office                      (801) 942-0871 home
- Carol Daniels at:                      (801) 538-5284 office
- Dustin Doucet at:                      (801) 538-5281 office                      (801) 733-0983 home

#### **3. Reporting Requirements**

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

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Cement volume for the 7 5/8" intermediate production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 3000' MD minimum in order to adequately isolate the Green River formation.
6. 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.
7. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
8. Surface casing shall be cemented to the surface.

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

1. <b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use "APPLICATION FOR PERMIT TO DRILL OR DEEPEN" form for such proposals.		5. LEASE DESIGNATION AND SERIAL NO. <b>ML-3453B</b>
2. NAME OF OPERATOR <b>NEWFIELD PRODUCTION COMPANY</b>		6. IF INDIAN, ALLOTTEE OR TRIBAL NAME <b>N/A</b>
3. ADDRESS AND TELEPHONE NUMBER <b>Rt. 3 Box 3630, Myton Utah 84052 435-646-3721</b>		7. UNIT AGREEMENT NAME <b>NA</b>
4. LOCATION OF WELL  Footages <b>411 FSL 2021 FWL</b>  QQ, SEC, T, R, M: <b>SE/SW Section 16, T9S R17E</b>		8. WELL NAME and NUMBER <b>STATE 14-16T-9-17</b>
		9. API NUMBER <b>43-013-34008</b>
		10. FIELD AND POOL, OR WILDCAT <b>MONUMENT BUTTE</b>
		COUNTY <b>DUCHESNE</b> STATE <b>UTAH</b>

11. <b>CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA</b>	
<p><b>NOTICE OF INTENT:</b> (Submit in Duplicate)</p> <p><input type="checkbox"/> ABANDON                      <input type="checkbox"/> NEW CONSTRUCTION</p> <p><input type="checkbox"/> REPAIR CASING                <input type="checkbox"/> PULL OR ALTER CASING</p> <p><input type="checkbox"/> CHANGE OF PLANS              <input type="checkbox"/> RECOMPLETE</p> <p><input type="checkbox"/> CONVERT TO INJECTION        <input type="checkbox"/> REPERFORATE</p> <p><input type="checkbox"/> FRACTURE TREAT OR ACIDIZE   <input type="checkbox"/> VENT OR FLARE</p> <p><input type="checkbox"/> MULTIPLE COMPLETION        <input type="checkbox"/> WATER SHUT OFF</p> <p><input checked="" type="checkbox"/> OTHER <u>Tight Hole Status</u></p>	<p><b>SUBSEQUENT REPORT OF:</b> (Submit Original Form Only)</p> <p><input type="checkbox"/> ABANDON*                      <input type="checkbox"/> NEW CONSTRUCTION</p> <p><input type="checkbox"/> REPAIR CASING                <input type="checkbox"/> PULL OR ALTER CASING</p> <p><input type="checkbox"/> CHANGE OF PLANS              <input type="checkbox"/> RECOMPLETE</p> <p><input type="checkbox"/> CONVERT TO INJECTION        <input type="checkbox"/> REPERFORATE</p> <p><input type="checkbox"/> FRACTURE TREAT OR ACIDIZE   <input type="checkbox"/> VENT OR FLARE</p> <p><input type="checkbox"/> OTHER _____</p> <p>DATE WORK COMPLETED _____</p> <p>Report results of Multiple Completion and Re Completions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.</p> <p>*Must be accompanied by a cement verification report.</p>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depth for all markers and zones pertinent to this work.)

Newfield Production is requesting "Tight Hole" Status on the above mentioned well.

13. NAME & SIGNATURE: Mandie Crozier TITLE Regulatory Specialist DATE 11/24/2008

(This space for State use only)

RECEIVED  
NOV 26 2008  
DIV. OF OIL, GAS & MINING

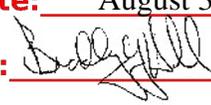
<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-3453B
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> BELUGA (GRRV)
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> STATE 14-16T-9-17
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43013340080000
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052	<b>PHONE NUMBER:</b> 435 646-4825 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0411 FSL 2021 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESW Section: 16 Township: 09.0S Range: 17.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 8/31/2009	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

**12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.**  
 Newfield Production Company requests to extend the Permit to Drill this well for one year.

Approved by the  
 Utah Division of  
 Oil, Gas and Mining

Date: August 31, 2009  
 By: 

<b>NAME (PLEASE PRINT)</b> Mandie Crozier	<b>PHONE NUMBER</b> 435 646-4825	<b>TITLE</b> Regulatory Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/31/2009	



**The Utah Division of Oil, Gas, and Mining**

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43013340080000**

**API:** 43013340080000

**Well Name:** STATE 14-16T-9-17

**Location:** 0411 FSL 2021 FWL QTR SESW SEC 16 TWNP 090S RNG 170E MER S

**Company Permit Issued to:** NEWFIELD PRODUCTION COMPANY

**Date Original Permit Issued:** 9/2/2008

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 rightof- 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

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

**Signature:** Mandie Crozier

**Date:** 8/31/2009

**Title:** Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY

**Date:** August 31, 2009

**By:**

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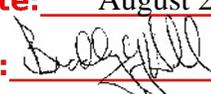
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/2/2010	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
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	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

Newfield requests to extend the permit to drill this well for one year.

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

Date: August 23, 2010  
 By: 

<b>NAME (PLEASE PRINT)</b> Mandie Crozier	<b>PHONE NUMBER</b> 435 646-4825	<b>TITLE</b> Regulatory Tech
<b>SIGNATURE</b> N/A		<b>DATE</b> 8/13/2010



**The Utah Division of Oil, Gas, and Mining**

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43013340080000**

**API:** 43013340080000

**Well Name:** STATE 14-16T-9-17

**Location:** 0411 FSL 2021 FWL QTR SESW SEC 16 TWNP 090S RNG 170E MER S

**Company Permit Issued to:** NEWFIELD PRODUCTION COMPANY

**Date Original Permit Issued:** 9/2/2008

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

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

**Signature:** Mandie Crozier

**Date:** 8/13/2010

**Title:** Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY

**Date:** August 23, 2010

**By:**



GARY R. HERBERT  
Governor

GREG BELL  
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

September 23, 2011

Mandie Crozier  
Newfield Production Co  
Route 3 Box 3630  
Myton, UT 84052

Re: APD Rescinded – State 14-16T-9-17, Sec. 16, T.9S, R.17E,  
Duchesne County, Utah API No. 43-013-34008

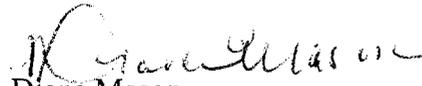
Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on September 2, 2008. On August 31, 2009 and August 23, 2010 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 September 23, 2011;

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  
SITLA, Ed Bonner

