

STATE OF UTAH  
 DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NO.

**ML-45555**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**APPLICATION FOR PERMIT TO DRILL, DEEPEN**

1a. TYPE OF WORK **DRILL**  **DEEPEN**

7. UNIT AGREEMENT NAME

1b. TYPE OF WELL

OIL  GAS  OTHER  SINGLE ZONE  MULTIPLE ZONE

8. FARM OR LEASE NAME  
**Castle Draw**

2. NAME OF OPERATOR

**Inland Production Company**

9. WELL NO.

**#16-2-9-17**

3. ADDRESS AND TELEPHONE NUMBER:

**P.O. Box 790233 Vernal, UT 84079**

**Phone: (435) 789-1866**

10. FIELD AND POOL OR WILDCAT

**Monument Butte**

4. LOCATION OF WELL (FOOTAGE)

At Surface **SE/SE**

At proposed Producing Zone

**660' FSL & 660' FEL**

*70' 70'*

*588186.29  
4434107.57*

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

**SE/SE**

**Sec. 2, T9S, R17E**

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

**14.9 Miles southeast of Myton, Utah**

12. County

**Uintah**

13. STATE

**UT**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest dtg. unit line, if any)

**660'**

16. NO. OF ACRES IN LEASE

**640.20**

17. NO. OF ACRES ASSIGNED TO THIS WELL

**40**

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

**6500'**

20. ROTARY OR CABLE TOOLS

**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

**5058.7' GR**

22. APPROX. DATE WORK WILL START\*

**4th Quarter 1998**

23. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24#	300'	120 sx
7 7/8	5 1/2	15.5#	TD	400 sx followed by 330 sx
				See Detail Below

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data 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.

**The actual cement volumes will be calculated off of the open hole logs, plus 15% excess:**

**SURFACE PIPE - Premium Plus Cement, w/ 2% Gel, 2% CaCl<sub>2</sub>, 1/4# Flocele/sk**

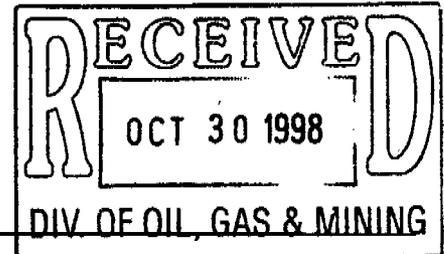
Weight: 14.8 PPG YIELD: 1.37 Cu Ft/sk H2O Req: 6.4 gal/sk

**LONG STRING - Lead: Hibond 65 Modified**

Weight: 11.0 PPG YIELD: 3.00 Cu Ft/sk H2O Req: 18.08 gal/sk

Tail: Premium Plus Thixotropic

Weight: 14.2 PPG YIELD: 1.59 Cu Ft/sk H2O Req: 7.88 gal/sk



24. Name & Signature *Cheryl Cameron* Title: **Regulatory Specialist**

Date: **10/27/98**

**Cheryl Cameron**

(This space for State use only)

API Number Assigned:

43-047-33240

APPROVAL: \_\_\_\_\_

Approved by the  
 Utah Division of  
 Oil, Gas and Mining

Date: 1-3-00

By: *[Signature]*

\*See Instructions On Reverse Side

**Operator:** Inland Production Company  
**Well Name & Number:** Castle Draw 16-2-9-17  
**API Number:** 43-047-33240  
**Lease:** State **Surface Owner:** State  
**Location:** SE SE **Sec.** 2 **T.** 9 S. **R.** 17 E.

### Conditions of Approval

#### 1. General

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

#### 2. Notification Requirements

Notify the Division of the following actions during drilling of this well:

- . 24 hours prior to cementing or testing casing
- . 24 hours prior to testing blowout prevention equipment
- . 24 hours prior to spudding the well
- . within 24 hours of any emergency changes made to the approved drilling program
- . prior to commencing operations to plug and abandon the well

Division contacts (please leave a voice mail message if person is not available to take the call):

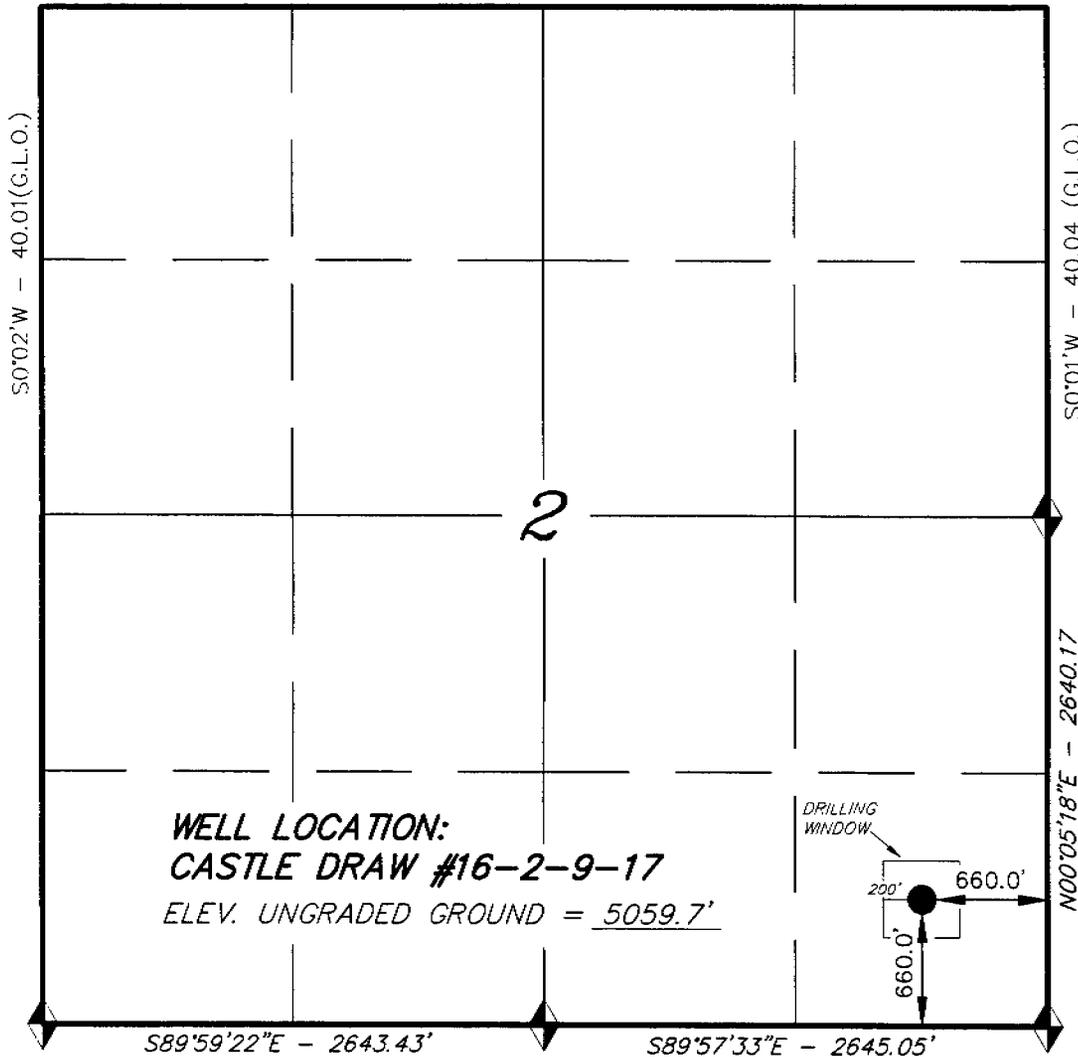
- . Dan Jarvis at (801) 538-5338
- . Robert Krueger at (801) 538-5274 (plugging)
- . Carol Daniels at (801) 538-5284 (spud)

#### 3. Reporting Requirements

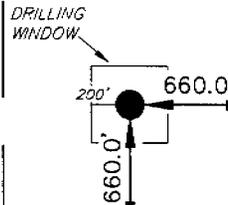
All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells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

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

N89°58'E (G.L.O.)



**WELL LOCATION:**  
**CASTLE DRAW #16-2-9-17**  
 ELEV. UNGRADED GROUND = 5059.7'

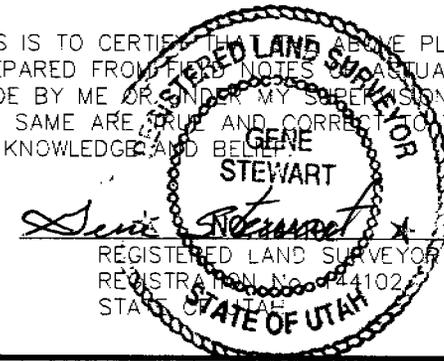


## INLAND PRODUCTION COMPANY

WELL LOCATION, CASTLE DRAW #16-2-9-17,  
 LOCATED AS SHOWN IN THE SE 1/4 SE 1/4  
 OF SECTION 2, T9S, R17E, S.L.B.&M.  
 UINTAH 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.



REGISTERED LAND SURVEYOR  
 REGISTRATION No. 44102  
 STATE OF UTAH

### TRI STATE LAND SURVEYING & CONSULTING

38 WEST 100 NORTH - VERNAL, UTAH 84078  
 (801) 781-2501

SCALE: 1" = 1000'

SURVEYED BY: D.S.

DATE: 10-4-98

WEATHER: WARM

REVISIONS: 10-12-98

FILE #

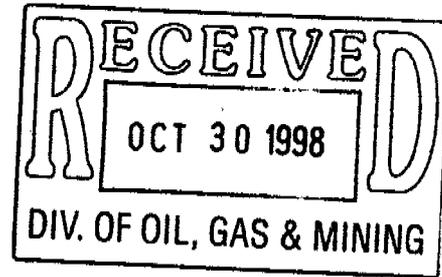
◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

BASIS OF BEARINGS IS A GLOBAL POSITIONING SATELITE OBSERVATION



October 29, 1998



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

**ATTENTION: Lisha Cordova**

**RE: Castle Draw #9-2-9-17  
NE/SE Sec. 2, T9S, R17E  
Uintah County, Utah**

**Castle Draw #15-2-9-17  
SW/SE Sec. 2, T9S, R17E  
Uintah County, Utah**

**Castle Draw #16-2-9-17  
SE/SE Sec. 2, T9S R17E  
Uintah County, Utah**

Dear Lisha,

Enclosed are the originals and two (2) copies each of the Application For Permit To Drill, for the above referenced locations. Included is a copy of the Cultural Resource Evaluation.

You may contact me at (435) 789-1866 in order to schedule an onsite date or Brad Mecham in the Pleasant Valley Field Office (435) 646-3721.

Please do not hesitate to call me if you have any questions, or need additional information.

Sincerely,

Cheryl Cameron  
Regulatory Specialist

cc: Bureau of Land Management  
Vernal District Office  
170 South 500 East  
Vernal, Utah 84078

**INLAND PRODUCTION COMPANY  
CASTLE DRAW #16-2-9-17  
SE/SE SECTION 2, T9S, R17E  
UINTAH COUNTY, UTAH**

**TEN POINT WELL PROGRAM**

**1. GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

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

Uinta	0' - 1450'
Green River	1450'
Wasatch	6500'

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

Green River Formation 1450' - 6500' - Oil

**4. PROPOSED CASING PROGRAM**

8 5/8", J-55, 24# w/ ST&C collars; set at 300' (New)  
5 1/2", J-55, 15.5# w/ LT&C collars; set at TD (New)

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

The operators minimum specifications for pressure control equipment are as follows:

A 8" Series 900 Annular Bag type BOP and a 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOPS's will be checked daily.

(See Exhibit F)

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

The well will be drilled with fresh water through the Uinta Formation. From the top of the Green River Formation @ 3050' ±, to TD, a fresh water/polymer system will be utilized. If necessary to control formation fluids, the system will be weighted with the addition of bentonite gel, and if conditions warrant, barite. Clay inhibition will be achieved with additions of 5 lb. - 8 lb. per barrel of DAP (Di-Ammonium Phosphate, commonly known as fertilizer). This fresh water system will contain Total Dissolved Solids (TDS) of less than 3000 PPM. Neither potassium chloride or chromate's will be utilized in the fluid system. The anticipated mud weight is 8.4 ppg and weighted as necessary for gas control.

**AIR DRILLING**

In the event that the proposed location be "Air Drilled", Inland requests a variance to regulations requiring a straight run blooie line. Inland proposes that the flowline will contain two (2) 90 degree turns. Inland also requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line. Inland requests authorization to ignite as needed, and the flowline at 80'.

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

**MUD PROGRAM**

**MUD TYPE**

Surface - 320'	Air
320' - 4200'	Air/Mist & Foam
4200' - TD	The well will be drilled with fresh water through the Green River Formation @ 4200' ±, to TD, a fresh water/polymer system will be utilized. If necessary to control formation fluids, the system will be weighted with the addition of bentonite gel, and if conditions warrant, barite. Clay inhibition will be achieved with additions or by adding DAP (Di-Ammonium Phosphate, commonly known as fertilizer.) Typically, this fresh water/polymer system will contain Total Dissolved Solids (TDS) of less than 3000 PPM. Neither potassium chloride or chromates will be utilized in the fluid system. The anticipated mud weight is 8.4 ppg and weighted as necessary for gas control.

**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:**

No drill stem testing has been scheduled for this well. It is anticipated at this time that the logging will consist of a Dual Induction Laterolog, Gamma Ray/Caliber from TD to base of surface casing @ 300' ±, and a Compensated Neutron-Formation Density Log. Logs will run from TD to 3500' ±. The cement bond log will be run from PBTD to cement top. An automated mud logging system will be utilized while drilling to monitor and record penetration rate, and relative gas concentration, in the fluid system.

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

The anticipated maximum bottom hole pressure is 2000 psi. It is not anticipated that abnormal temperatures will be encountered; nor that any other abnormal hazards such as H2S will be encountered in this area.

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

It is anticipated that the drilling operations will commence the forth quarter of 1998, and take approximately six days to drill.

**INLAND PRODUCTION COMPANY  
CASTLE DRAW #16-2-9-17  
SE/SE SECTION 2, T9S, R17E  
UINTAH COUNTY, UTAH**

**THIRTEEN POINT WELL PROGRAM**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Inland Production Company well location site Castle Draw #16-2-9-17 located in the SE ¼ SE ¼ Section 2, T9S, R17E, S.L.B. & M. Uintah County, Utah:

Proceed westerly out of Myton, Utah along Highway 40 - 1.6 miles ± to the junction of this highway and Utah State Highway 53; proceed southerly along Utah State Highway 53 – 12.9 miles to its junction with an existing dirt road to the northeast; proceed northeasterly along this road – 1.4 miles to its junction with a dirt road to the southeast; proceed southeasterly 1.1 miles to the beginning of the proposed access road, to be discussed in Item #2.

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 required 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**

Approximately 0.2 miles of access road is proposed.  
See 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 determined 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**

See Exhibit "D".

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 the entire contents of the largest tank 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**

Inland Production Company has purchased a 3" water connection with Johnson Water District (a public water source) to supply the Monument Butte, Travis, and Gilsonite oil fields. Johnson Water District has given permission to Inland Production Company to use water from this system, for the purpose of drilling and completing the Castle Draw #16-2-9-17. A temporary line may be used for water transportation from our existing supply line, from Johnson Water District, or trucked from Inland Production Company's water supply line located at the Gilsonite State #7-32 (SW/NE Sec. 32, T8S, R17E), or the Monument Butte Federal #5-35 (SW/NW Sec. 35, T8S, R16E), or the Travis Federal #15-28 (SW/SE Sec. 28, T8S, R16E), or other taps which may be installed on Inland's water system in the future. The system being tapped will have prior approval by the AO. See Exhibit "C".

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

See Location Layout Sheet - Exhibit "E".

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**

See Location Layout Sheet - Exhibit "E".

A small reserve pit (90' X 40' X 8' deep, or less) will be constructed from native soil and clay materials. A water processing unit will be employed to continuously recycle the drilling fluid as it is used, returning the fluid component to the drilling rig's steel tanks. The reserve pit will primarily receive the processed drill cuttings (wet sand, shale & rock) removed from the well bore. 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 by the water recycling unit and then returned to the steel rig tanks. All drilling fluids will be fresh water based containing DAP (Di-Ammonium Phosphate, commonly known as fertilizer), typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride chromate's, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be utilized in the reserve pit.

All completion fluids, frac gels, etc., will be contained in steel tanks and hauled away to approved commercial disposal, as necessary.

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 in storage tanks. Inland requests temporary approval to transfer the produced water to Inland's nearby waterflood, for re-injection into the waterflood reservoirs via existing approved injection wells. Within 90 days of first production, a water analysis will be submitted to the Authorized Officer, along with an application for approval of this, as a permanent disposal method.

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 - Exhibit "E".

The reserve pit will be located on the north between stakes 4 & 5.

The stockpiled topsoil (first six (6) inches) will be stored on the south between stakes 2 & 8.

Access to the well pad will be from the west between stakes 2 & 3.

**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 cemented 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 re contoured to the approximated natural contours. 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.

When the drilling and completion phase ends, reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer. The seed mixture will be per State of Utah, and stated in the conditions of approval.

- 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) Inland 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, Inland is to immediately stop work that might further disturb such materials, and contact the Authorized Officer.
- b) Inland 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 Cultural Resource Survey Report is attached.

***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. Inland Production is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

***Hazardous Material Declaration***

Inland Production Company guarantees that during the drilling and completion of the Castle Draw #16-2-9-17, we 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. Inland also guarantees that during the drilling and completion of the Castle Draw #16-2-9-17 we 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.

Inland Production Company or a contractor employed by Inland 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 OPERATORS REPRESENTATIVE AND CERTIFICATION

Representative

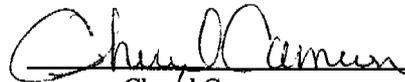
Name: Cheryl Cameron  
Address: P.O. Box 790233 Vernal, UT 84079  
Telephone: (435) 789-1866

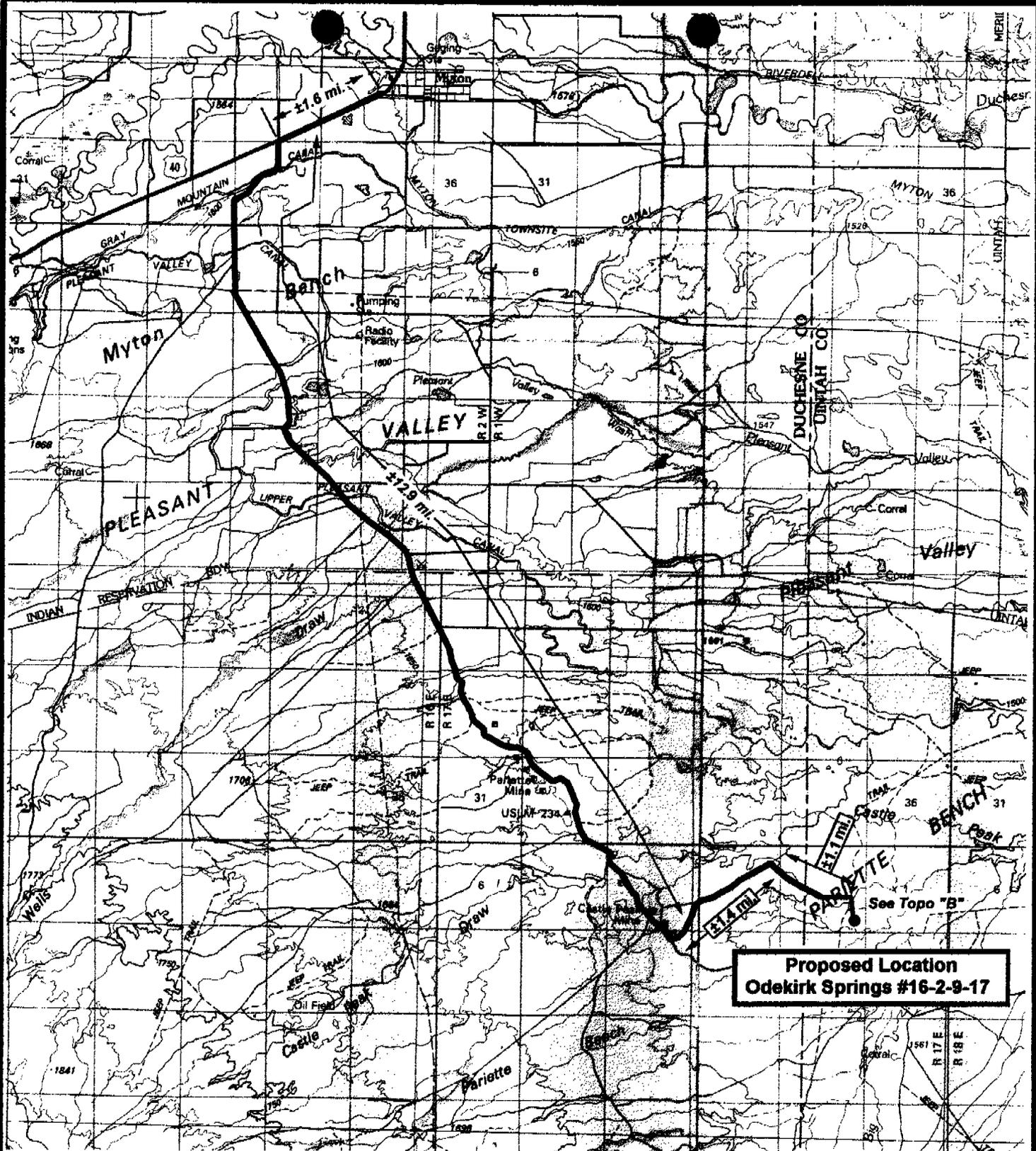
Certification

Please be advised that INLAND PRODUCTION COMPANY is considered to be the operator of Well #16-2-9-17 Section 2, Township 9S, Range 17E: Lease #ML-45555 Uintah 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 drillsite 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 Inland 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 18 U.S.C. 1001 for the filing of a false statement.

10/28/98  
Date

  
Cheryl Cameron  
Regulatory Specialist

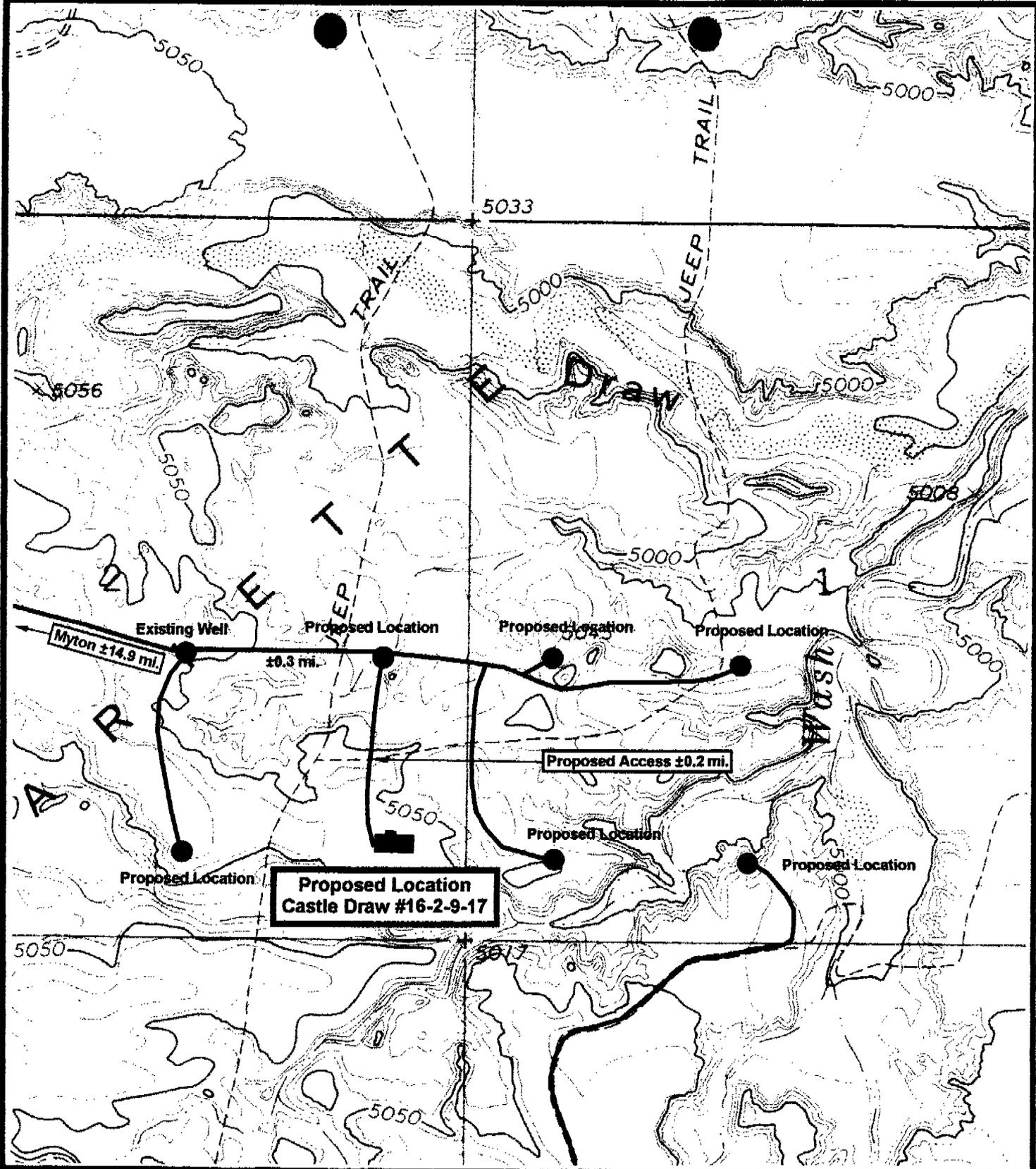


**ODEKIRK SPRINGS #16-2-9-17**  
**SEC. 2, T9S, R17E, S.L.B.&M.**  
**TOPOGRAPHIC MAP "A"**



Drawn By: SS	Revision:
Scale: 1 : 100,000	File:
Date: 9/28/98	

**Tri-State Land Surveying Inc.**  
**P.O. Box 533, Vernal, UT 84078**  
**435-781-2501 Fax 434-781-2518**

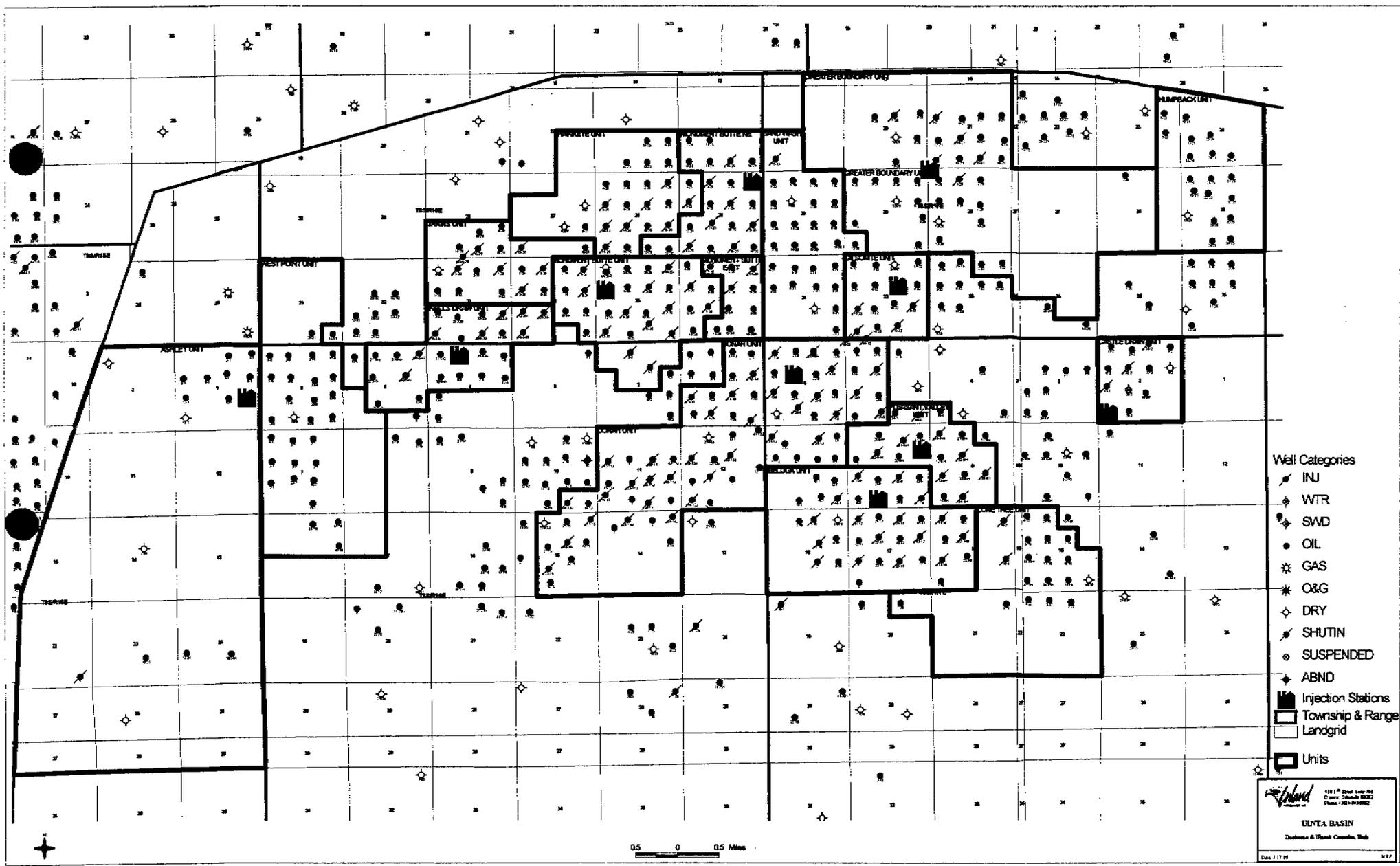


**CASTLE DRAW #16-2-9-17**  
**SEC. 2, T9S, R17E, S.L.B.&M.**  
**TOPOGRAPHIC MAP "B"**



Drawn By: SS	Revision:
Scale: 1" = 1000'	File:
Date: 9/24/98	
<b>Tri-State Land Surveying Inc.</b> <b>P.O. Box 533, Vernal, UT 84078</b> <b>435-781-2501 Fax 434-781-2518</b>	

# EXHIBIT "C"



- Well Categories**
- INJ
  - WTR
  - SWD
  - OIL
  - GAS
  - O&G
  - DRY
  - SHUTIN
  - SUSPENDED
  - ABND
  - Injection Stations
  - Township & Range
  - Landgrid
  - Units

*Inland*  
 410 17<sup>th</sup> Street, Suite 202  
 Denver, Colorado 80202  
 Phone: 303.733.8222

**UINTA BASIN**  
 Duchesne & Park Counties, Utah

Date: 1/17/01

8S/17E

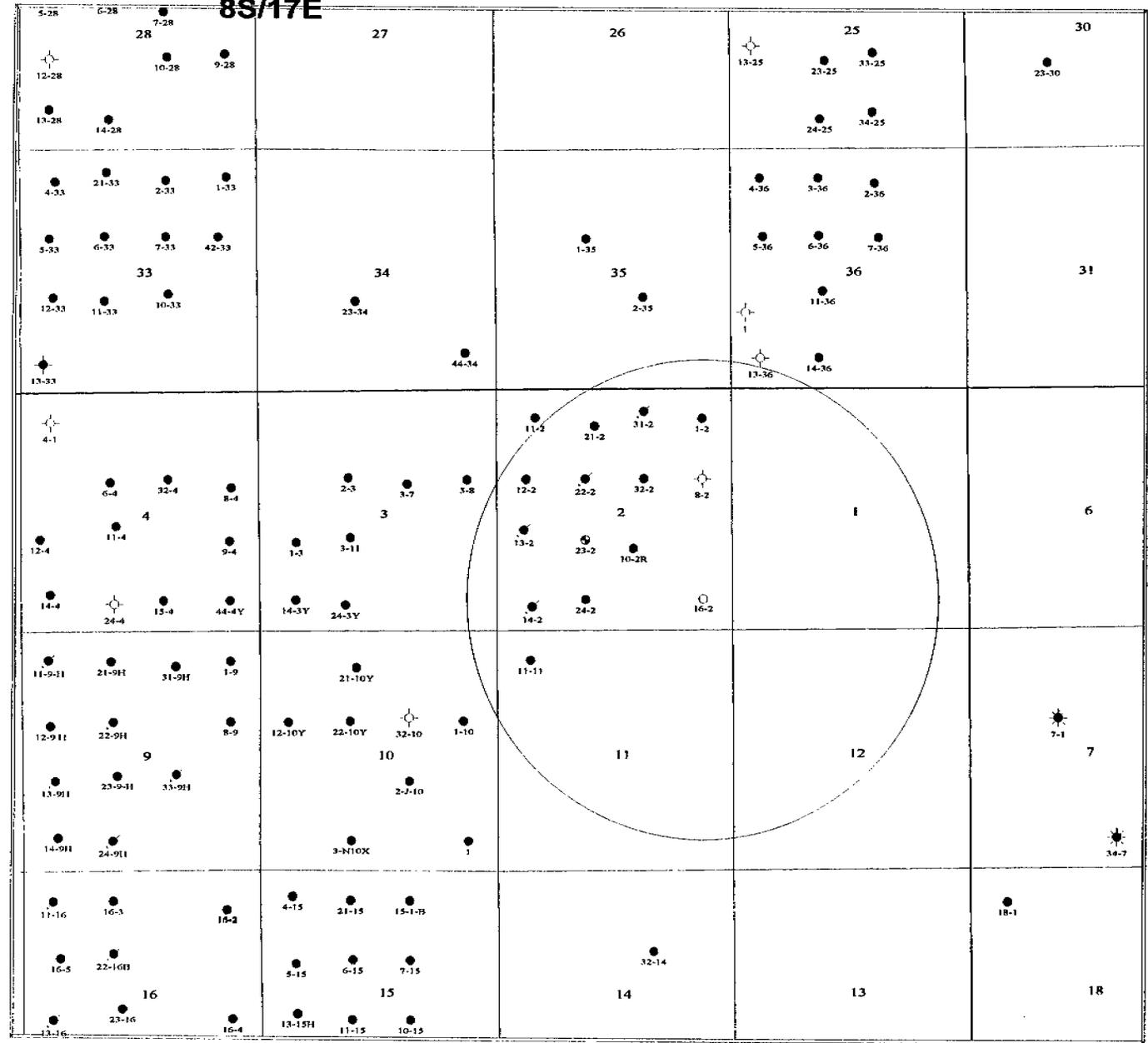
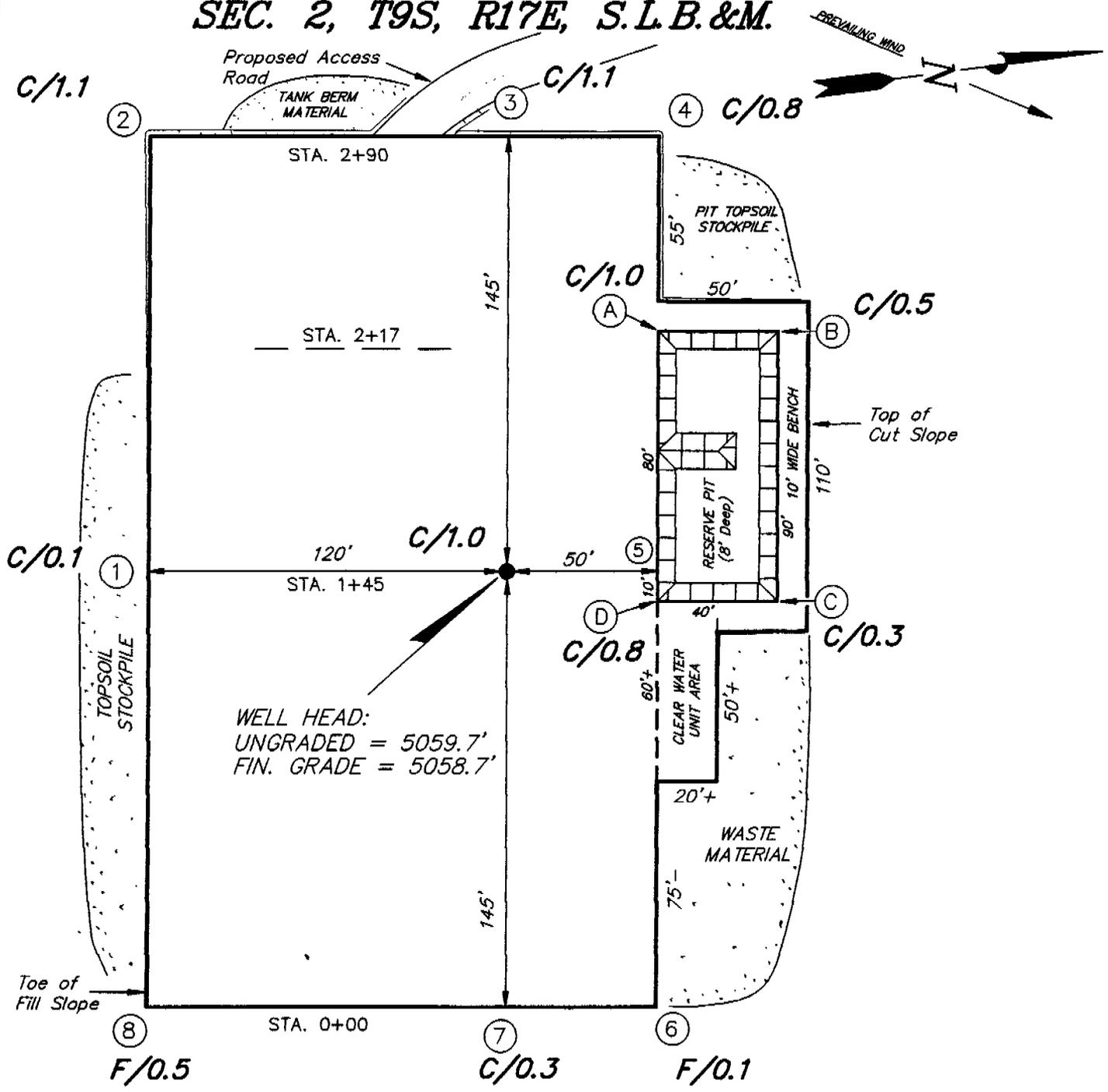


EXHIBIT "D"

INLAND PRODUCTION COMPANY		
ONE MILE RADIUS Castle Draw #16-2-9-17		
Josh Anderson		10/2008
	Scale 1:42547.14	

# INLAND PRODUCTION COMPANY

**CASTLE DRAW #16-2-9-17  
SEC. 2, T9S, R17E, S.L.B.&M.**



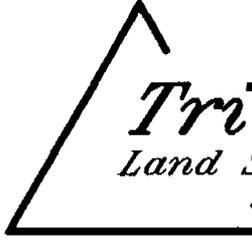
WELL HEAD:  
UNGRADED = 5059.7'  
FIN. GRADE = 5058.7'

EXHIBIT "E"

**REFERENCE POINTS**

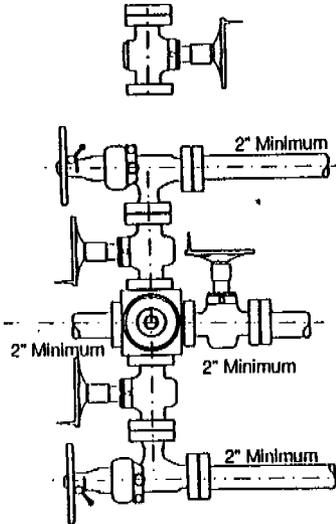
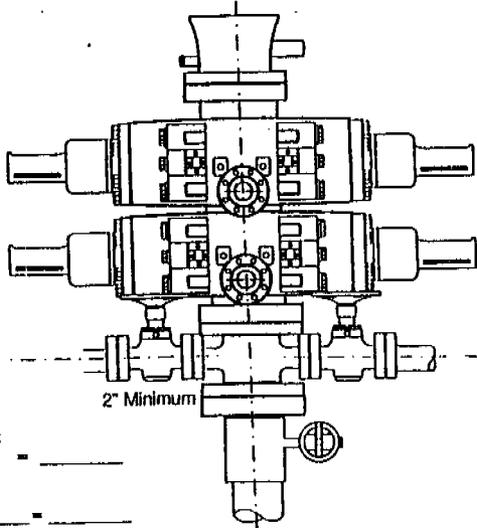
- 172' SOUTH = 5058.5'
- 225' SOUTH = 5058.3'
- 200' EAST = 5057.6'
- 250' EAST = 5056.7'

SURVEYED BY:	G.S.
DRAWN BY:	J.R.S.
DATE:	10-4-98
SCALE:	1" = 50'
REVISIONS:	


  
**Tri State**  
*Land Surveying, Inc.*  
 (801) 781-2501  
 38 WEST 100 NORTH VERNAL, UTAH 84078

RAM TYPE B.O.P.  
 Make:  
 Size:  
 Model:

2-M SYSTEM



GAL TO CLOSE  
 Annular BOP = \_\_\_\_\_  
 Ramtype BOP  
 \_\_\_\_\_ Rams x \_\_\_\_\_ = \_\_\_\_\_ Gal.  
 \_\_\_\_\_ x 2 = \_\_\_\_\_ Total Gal.

Rounding off to the next higher  
 increment of 10 gal. would require  
 \_\_\_\_\_ Gal. (total fluid & nitro volume)

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/30/98

API NO. ASSIGNED: 43-047-33240

WELL NAME: CASTLE DRAW 16-2-9-17  
 OPERATOR: INLAND PRODUCTION COMPANY (N5160)  
 CONTACT: ~~Cheryl Cameron~~ (435) 789-1866

PROPOSED LOCATION:  
 SESE 02 - T09S - R17E  
 SURFACE: 0660-FSL-0660-FEL  
 BOTTOM: 0660-FSL-0660-FEL  
 UINTAH COUNTY  
 EIGHT MILE FLAT NORTH FIELD (590)

INSPECT LOCATION BY: 11/15/98		
TECH REVIEW	Initials	Date
Engineering	<i>PTC</i>	1-3-00
Geology		
Surface		

LEASE TYPE: STA  
 LEASE NUMBER: ML-45555  
 SURFACE OWNER: State

PROPOSED FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

Plat  
 Bond: Federal  State  Fee   
 (No. #4471291)  
 Potash (Y/N)  
 Oil Shale (Y/N) \*190-5(B)  
 Water Permit  
 (No. Johnson Water District)  
 RDCC Review (Y/N)  
 (Date: \_\_\_\_\_)  
 Fee Surf Agreement (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3. Unit Castle Draw Sec. Rec.  
 R649-3-2. General  
 \_\_\_ R649-3-3. Exception  
 \_\_\_ Drilling Unit  
 Board Cause No: \_\_\_\_\_  
 Date: \_\_\_\_\_

COMMENTS: \* Castle Draw Secondary Recovery Unit  
\* Need Presite. (Conducted 12-2-99)

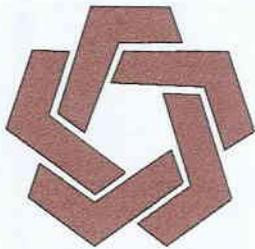
STIPULATIONS: On Statement of MBasis

\_\_\_\_\_

\_\_\_\_\_

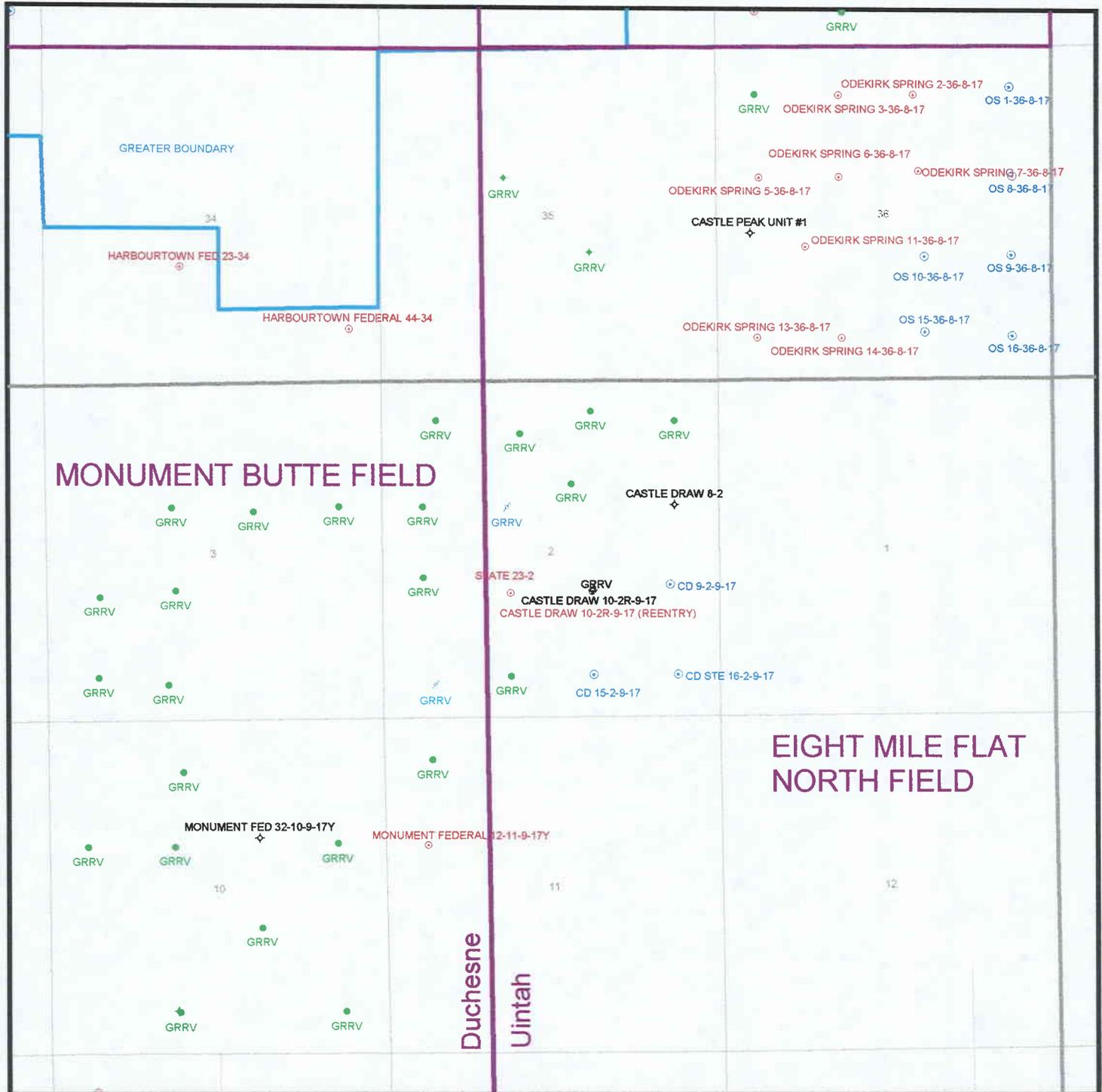
\_\_\_\_\_

\_\_\_\_\_



DIVISION OF OIL, GAS & MINING

OPERATOR: INLAND PRODUCTION COMPANY (N5160)  
FIELD: EIGHT MILE FLAT NORTH (590)  
SEC. 2, TWP 9S, RNG 17E  
COUNTY: UINTAH UNIT: NONE



DATE PREPARED:  
2-NOV-1998

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

**Operator Name:** INLAND PRODUCTION CO.

**Name & Number:** CASTLE DRAW 16-2-9-17

**API Number:** 43-047-33240

**Location:** 1/4, 1/4 SE/SE Sec. 2 T. 9S R. 17E

**Geology/Ground Water:**

The Division of Water Rights has no records of any water wells within 10000 feet of the proposed location. There are 12 surface points of diversion in the searched area. The depth of the moderately saline ground water is at approximately 500'. The Uinta Formation is found at the surface and in the near surface at this location. The Uinta Fm. Is made up of discontinuous sandstones interbedded with shales. The Uinta is not expected to be a significant aquifer in this area. The proposed surface casing program should adequately protect any potential aquifers.

**Reviewer:** Brad Hill

**Date:** 12/21/99

**Surface:**

The pre-site investigation of the surface was performed by field personnel on 12/2/99. SITLA and DWR were notified of this investigation on 11/30/99. Neither agency chose to attend. Access to this site will come from the Castle Draw 15-2-9-17, (0.2 miles to the east) not from the proposed location 0.2 miles to the north as topographic map "B" shows. This site is a legal location per general state siting rule. A revised plat "B" will be submitted by Inland.

**Reviewer:** DAVID W. HACKFORD

**Date:** 12/16/99

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

None

ON-SITE PREDRILL EVALUATION

Division of Oil, Gas and Mining

OPERATOR: INLAND PRODUCTION CO.  
WELL NAME & NUMBER: CASTLE DRAW 16-2-9-17  
API NUMBER: 43-047-33240  
LEASE: ML 45555 FIELD/UNIT: MONUMENT BUTTE  
LOCATION: 1/4, 1/4 SE/SE Sec: 2 TWP: 9S RNG: 17E 660' FSL 660' FEL  
LEGAL WELL SITING: 660' F SEC. LINE; 660' F 1/4, 1/4 LINE; \_\_\_\_\_ F ANOTHER WELL.  
GPS COORD (UTM) 12588123E 4434315N  
SURFACE OWNER: STATE TRUST LANDS

PARTICIPANTS

BRAD MECHAM, JOHN HOLST, (INLAND); DAVID W. HACKFORD, DENNIS INGRAM,  
(D.O.G.M.)

REGIONAL/LOCAL SETTING & TOPOGRAPHY

SITE IS LOCATED ON THE POINT OF A FLAT TOPPED RIDGE RUNNING WEST TO  
EAST. DRAINAGE IS TO THE NORTH, SOUTH AND EAST.

SURFACE USE PLAN

CURRENT SURFACE USE: LIVESTOCK AND WILDLIFE GRAZING.

PROPOSED SURFACE DISTURBANCE: LOCATION WILL BE 290' X 210'.  
ACCESS ROAD WILL BE 0.2 MILES.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: SEE ATTACHED MAP  
FROM GIS DATABASE.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: \_\_\_\_\_  
ALL PRODUCTION FACILITIES WILL BE ON LOCATION AND ADDED AFTER  
DRILLING WELL.

SOURCE OF CONSTRUCTION MATERIAL: ALL CONSTRUCTION MATERIAL WILL BE  
BORROWED FROM THIS SITE DURING CONSTRUCTION AND IS NATIVE.

ANCILLARY FACILITIES: NONE WILL BE REQUIRED.

WASTE MANAGEMENT PLAN:

DRILLED CUTTINGS WILL BE SETTLED INTO RESERVE PIT. LIQUIDS FROM PIT  
WILL BE ALLOWED TO EVAPORATE. FORMATION WATER WILL BE CONFINED TO  
STORAGE TANKS. SEWAGE FACILITIES, STORAGE AND DISPOSAL WILL BE  
HANDLED BY COMMERCIAL CONTRACTOR. TRASH WILL BE CONTAINED IN TRASH  
BASKETS AND HAULED TO AN APPROVED LAND FILL.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: NONE

FLORA/FAUNA: NATIVE GRASSES, SHADSCALE, SAGE, SALTBRUSH, GREASEWOOD,  
PRICKLY PEAR; PRONGHORN, RODENTS, COYOTES, SONGBIRDS, RAPTORS.

SOIL TYPE AND CHARACTERISTICS: LIGHT BROWN SANDY CLAY WITH PEA SIZE  
MULTI-COLORED GRAVEL.

SURFACE FORMATION & CHARACTERISTICS: UINTAH FORMATION, SOUTH FLANK OF THE UINTAH MOUNTAINS.

EROSION/SEDIMENTATION/STABILITY: MINOR EROSION, MINOR SEDIMENTATION, NO STABILITY PROBLEMS ANTICIPATED.

PALEONTOLOGICAL POTENTIAL: NONE OBSERVED.

RESERVE PIT

CHARACTERISTICS: 110' BY 40' AND 8' DEEP.

LINER REQUIREMENTS (Site Ranking Form attached): A LINER WILL NOT BE REQUIRED.

SURFACE RESTORATION/RECLAMATION PLAN

AS PER STATE LANDS.

SURFACE AGREEMENT: STATE TRUST LANDS.

CULTURAL RESOURCES/ARCHAEOLOGY: A REPORT OF THE ARCHAEOLOGY INVESTIGATION PERFORMED BY A.E.R.C. OF BOUNTIFUL, UTAH WILL BE SUBMITTED.

OTHER OBSERVATIONS/COMMENTS

INVESTIGATION WAS DONE ON A COLD DAY WITH NO SNOW COVER.

ATTACHMENTS:

PHOTOS OF PROPOSED SITE WILL BE PLACED ON FILE.

DAVID W. HACKFORD  
DOGM REPRESENTATIVE

12/2/99 11:55 AM  
DATE/TIME

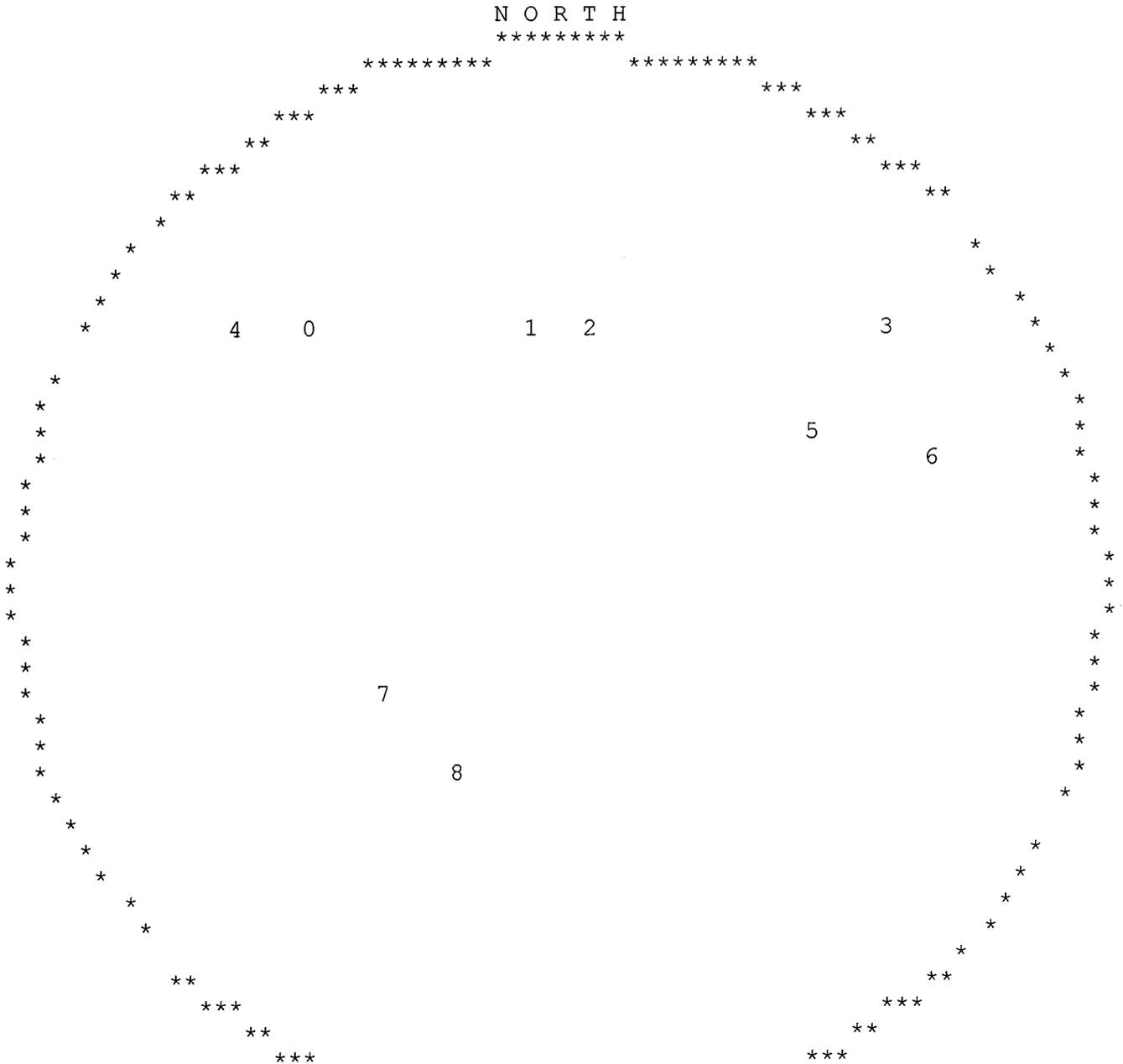
**Evaluation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

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

UTAH DIVISION OF WATER RI  
WATER RIGHT POINT OF DIVERSION PLOT CREATED TU  
PLOT SHOWS LOCATION OF 12 POINT

PLOT OF AN AREA WITH A RADIUS OF 10000  
FEET, FEET OF THE SE CORN  
SECTION 2 TOWNSHIP 9S RANGE 17E

PLOT SCALE IS APPROXIMATELY 1 INCH =



\*\*\* 9 \*\*\*  
 \*\*\*A\*\*\*\*\*  
 \*\*\*\*\*

UTAH DIVISION OF WATER RI  
 NWPLAT POINT OF DIVERSION LOCA

MAP CHAR	WATER RIGHT	CFS	QUANTITY AND/OR	AC-FT	SOURCE DESCRIPTION or WELL INFO	DIAMETER	DEPTH	YEAR LOG	N
0	<u>47 1180</u>	.0000		.00	North Branch Castle Peak Draw				
			WATER USE(S): STOCKWATERING		State of Utah School & Institutional Tru 675 East 500 South, 5t				
1	<u>47 1180</u>	.0000		.00	North Branch Castle Peak Draw				
			WATER USE(S): STOCKWATERING		State of Utah School & Institutional Tru 675 East 500 South, 5t				
2	<u>47 1300</u>	.0000		.00	North Branch Castle Peak Draw				
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management		2370 South 2300 West		
3	<u>47 1300</u>	.0000		.00	North Branch Castle Peak Draw				
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management		2370 South 2300 West		
4	<u>47 1301</u>	.0000		.00	North Branch Castle Peak Draw				
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management		2370 South 2300 West		
5	<u>47 1680</u>	.0000		.12	Unnamed tributary				S
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management (Vernal Di 170 South 500 East				
6	<u>47 1681</u>	.0000		.12	Unnamed tributary				S
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management (Vernal Di 170 South 500 East				
7	<u>47 1578</u>	.0000		.00	unnamed stream				
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management		170 South 500 East		
8	<u>47 1580</u>	.0000		.00	unnamed stream				
			WATER USE(S): STOCKWATERING		USA Bureau of Land Management		170 South 500 East		
8	<u>47 1577</u>	.0000		.00	unnamed stream				

WATER USE(S) : STOCKWATERING  
USA Bureau of Land Management 170 South 500 East

9 47 1677 .0000 .18 Unnamed tributary N

WATER USE(S) : STOCKWATERING  
USA Bureau of Land Management (Vernal Di 170 South 500 East

A 47 1685 .0000 .12 Unnamed tributary N

WATER USE(S) : STOCKWATERING  
USA Bureau of Land Management (Vernal Di 170 South 500 East

---













RECEIVED

DEC 20 1999

DIVISION OF OIL, GAS & MINING

December 16, 1999

Ms. Lisha Cordova  
Utah Division of Oil Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

43-04733240

**RE: Archeological Reports for Inland Resources Proposed Well Locations: South Wells Draw 11-2-9-16, South Wells Draw 12-2-9-16, South Wells Draw 13-2-9-16, South Wells Draw 14-2-9-16, Castle Draw 9-2-2-17, Castle Draw 15-2-9-17, Castle Draw 16-2-9-17.**

Dear Lisha:

Please find enclosed the Archeological Reports for the above-referenced proposed well locations. Feel free to give me a call if you have any questions or need additional information.

Respectfully,

  
Jon D. Holst  
Counsel

Enc.

# CULTURAL RESOURCE EVALUATION OF 16 PROPOSED INLAND UNITS IN THE SOUTH WELLS DRAW -- CASTLE PEAK DRAW -- PARIETTE BENCH LOCALITIES OF UINTAH & DUCHESNE COUNTIES, UTAH

Report Prepared for Inland Resources, Inc.

Units 6-10(9-16), 13-10(9-16), 7-36(8-17), 11-36(8-17), 1-35(8-17), 7-35(8-17), 9-35(8-17)  
9-2(9-17), 15-2(9-17), 16-2(9-17), 1-11(9-17), 2-11(9-17), 3-11(9-17), 6-11(9-17), 7-11(9-17),  
& 8-11(9-17)

Department of Interior Permit No.: UT-98-54937

Utah State Project No.: UT-98-AF-0166bs

AERC Project 1597 (CNG98-3B)

Author of the Report:

F. Richard Hauck



## ARCHEOLOGICAL-ENVIRONMENTAL RESEARCH CORPORATION

181 North 200 West, Suite 5 -- Bountiful, Utah 84010

P.O. Box 853, Bountiful, Utah 84011

Phone: (801) 292-7061, 292-9668

FAX: (801) 292-0614

E-mail: [ari@xmission.com](mailto:ari@xmission.com) Web page: [www.ari-aerc.org](http://www.ari-aerc.org)

April 20, 1998

## Abstract

An intensive cultural resource examination has been conducted for Inland Resources, Inc. of 16 potential well pad locations (6-10, 13-10, 7-36, 11-36, 1-35, 7-35, 9-35, 9-2, 15-2, 16-2, 1-11, 2-11, 3-11, 6-11, 7-11, 8-11), additional bulk acreage in Sections 2 & 11 (Township 9 South, Range 17 East), and associated access routes all situated in the South Wells Draw Unit and Pariette Bench -- Castle Peak Draw localities of Duchesne and Uintah Counties, Utah (see Maps 1 through 5). The purpose of this report is to detail the result of these evaluations, portions of which were conducted at earlier dates. A total of 873.33 acres was examined for cultural resource presence. This acreage includes 855 acres of parcel and bulk area survey and 18.33 acres of 100 foot-wide access route corridors. Eleven of the proposed development areas associated with these well locations are situated on federal lands (756.4 acres) administered by the Vernal District of the Bureau of Land Management, Diamond Mountain Resource Area, Vernal, Utah. The remaining five locations (116.93 acres) are situated on Utah State lands.

Field examinations were conducted between March 17 and April 9, 1998. AERC archaeologists Brian Mueller, Marcel Corbeil, Kris Kunkel, Alan Hutchinson, Stance Hurst, Richard Francisco, Tammy Gibson, and Christy Gobber conducted the field survey program under the direction of Glade Hadden, and/or F.R. Hauck.

Sites 42DC 1146 and 42DC 1148 are situated in the proximity of Units 6-10 and 13-10 in Section 10 of Township 9 South, Range 16 East. Sites 42Un 1330, 42UN 2528, 42UN 2529, and 42Un 2530 are situated in the proximity of Units 16-2 and 1-11 in Sections 2 and 11 of Township 9 South, Range 17 East; these six cultural resources will not be endangered by the development of these well locations, however, the access route into Unit 1-11 will need to be carefully designed to avoid nearby cultural resource sites 42UN 2528, 42UN 2529, and 42UN 1330.

In addition, construction on Unit 1-11 should be restricted to the south side of the drainage that forms the southern and eastern periphery of Site 42UN 1330 in order to facilitate the preservation of that resource situated on the northeastern periphery of Section 11, Township 9 South, Range 17 East.

Sites 42UN 2526 and 42UN 2527 are respectively adjacent to Units 11-36 and 7-36 in Section 36, Township 8 South, Range 17 East. Site 42UN 2526 is a significant, open occupation and avoidance by moving the pad's staked location 100 feet to the southwest is recommended to ensure site preservation. AERC also recommends that the northern and eastern peripheries of the relocated well pad be fenced to facilitate the continued preservation of the site from random vehicle traffic originating on the well pad location. Site 42UN 2527 is not considered to be a significant resource; it has neither depth potential nor contextual integrity, and thus lacks potential for inclusion on the National Register of Historic Places. AERC does not recommend avoidance of this cultural locus.

No previously recorded significant or National Register eligible cultural resources will be adversely affected by well location development and access/pipeline route corridor development within the acreage cleared and reported within this document with adherence to these recommendations.

AERC recommends project clearance based on adherence to the stipulations noted above and repeated in the final section of this report.

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## GENERAL INFORMATION

From March 17 through April 9, 1998, AERC archaeologists Brian Mueller, Marcel Corbeil, Kris Kunkel, Alan Hutchinson, Stance Hurst, Richard Francisco, Tammy Gibson, and Christy Gobber under the direction of Glade Hadden and/or F.R. Hauck, conducted intensive cultural resource evaluations of 16 proposed well locations (6-10, 13-10, 7-36, 11-36, 1-35, 7-35, 9-35, 9-2, 15-2, 16-2, 1-11, 2-11, 3-11, 6-11, 7-11, 8-11), additional bulk acreage in Sections 2 & 11 (Township 9 South, Range 17 East), and associated access routes all situated in the South Wells Draw Unit and Pariette Bench -- Castle Peak Draw localities of Duchesne and Uintah Counties, Utah (see Maps 1 through 5). A total of 873.33 acres was examined for cultural resource presence.

Eleven of the proposed development areas ( 756.4 acres) associated with these survey locations are situated on federal lands administered by the Vernal District of the Bureau of Land Management, Diamond Mountain Resource Area, Vernal, Utah. The remaining five locations (7-36, 11-36, 9-2, 15-2, and 16-2 are situated on Utah State land (116.93 acres).

The purpose of this field study and this report is to identify and document cultural site presence and assess National Register potential significance relative to established criteria (cf. Title 36 CFR 60.6). The future development of these proposed well locations and associated access routes requires an archaeological evaluation in compliance with U.C.A. 9-8-404, the Federal Antiquities Act of 1906, the Reservoir Salvage Act of 1960-as amended, the National Environmental Policy Act of 1969, the Federal Land Policy and Management Act of 1979, the Archaeological Resources Protection Act of 1979, the Native American Religious Freedom Act of 1978, the Historic Preservation Act of 1980, and Executive Order 11593.

In addition to documenting cultural identity and significance, mitigation recommendations relative to the preservation of cultural data and materials can be directed to the Vernal District Office of the Bureau of Land Management, and to the Utah State Antiquities Section, Division of State History.

### Project Location

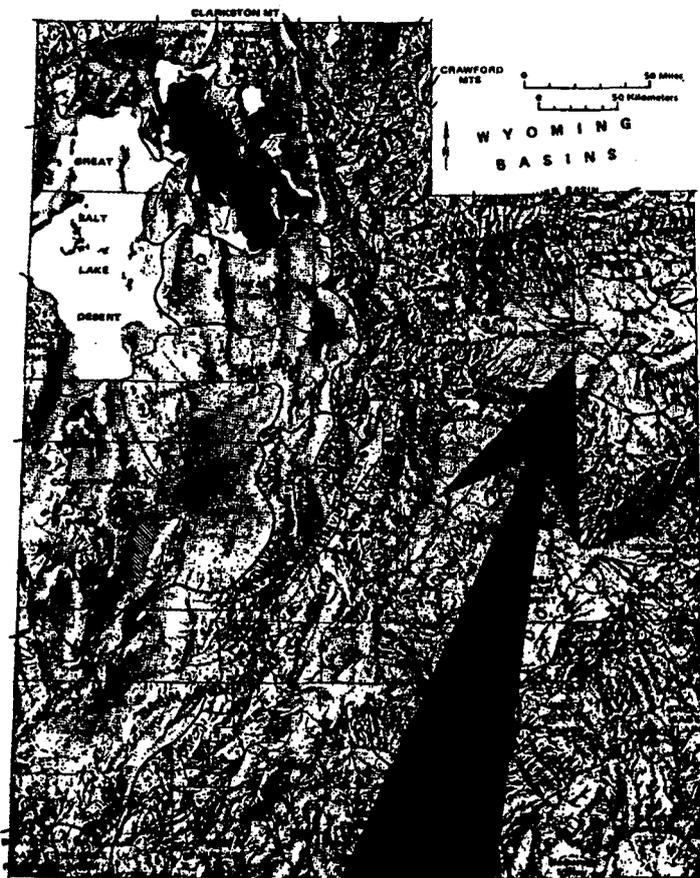
The project area is located in the South Wells Draw Unit, Pariette Bench and Castle Peak Draw localities of Duchesne and Uintah Counties, Utah. The various project areas are situated on the Myton SE and Pariette Draw SW 7.5 minute quads as shown on Maps 2 through 5. The inventoried areas and surveyed well locations and acreages are located as follows:

**South Wells Draw Unit (see Maps 2 and 3)** Two well locations were examined during bulk area inventories conducted during the winter of 1997-98. Map 3 shows the perimeters of those bulk surveys. Winter conditions precluded the recording of the associated cultural resources (42DC 1146 and 42DC 1148) in that report (c.f., Hauck and Hadden 1997). This present report completes the documentation of these 40 acre survey parcels with the reporting of cultural sites discovered in those parcels prior to the recent staking of these two well locations.

**MAP 1  
PROJECT AREA FOR THE INLAND  
1998 DEVELOPMENT  
PROGRAM**



**PROJECT: IPC98-3B  
SCALE: 1: 200,650  
DATE: 4/ 15/ 98**



UTAH GEOLOGICAL  
MAP  
PHYSIOGRAPHIC

# PROJECT AREA

**TOWNSHIP: multiple  
RANGE: multiple  
MERIDIAN: multiple**

Utah Geological and Mineral Survey  
Map 43 1977

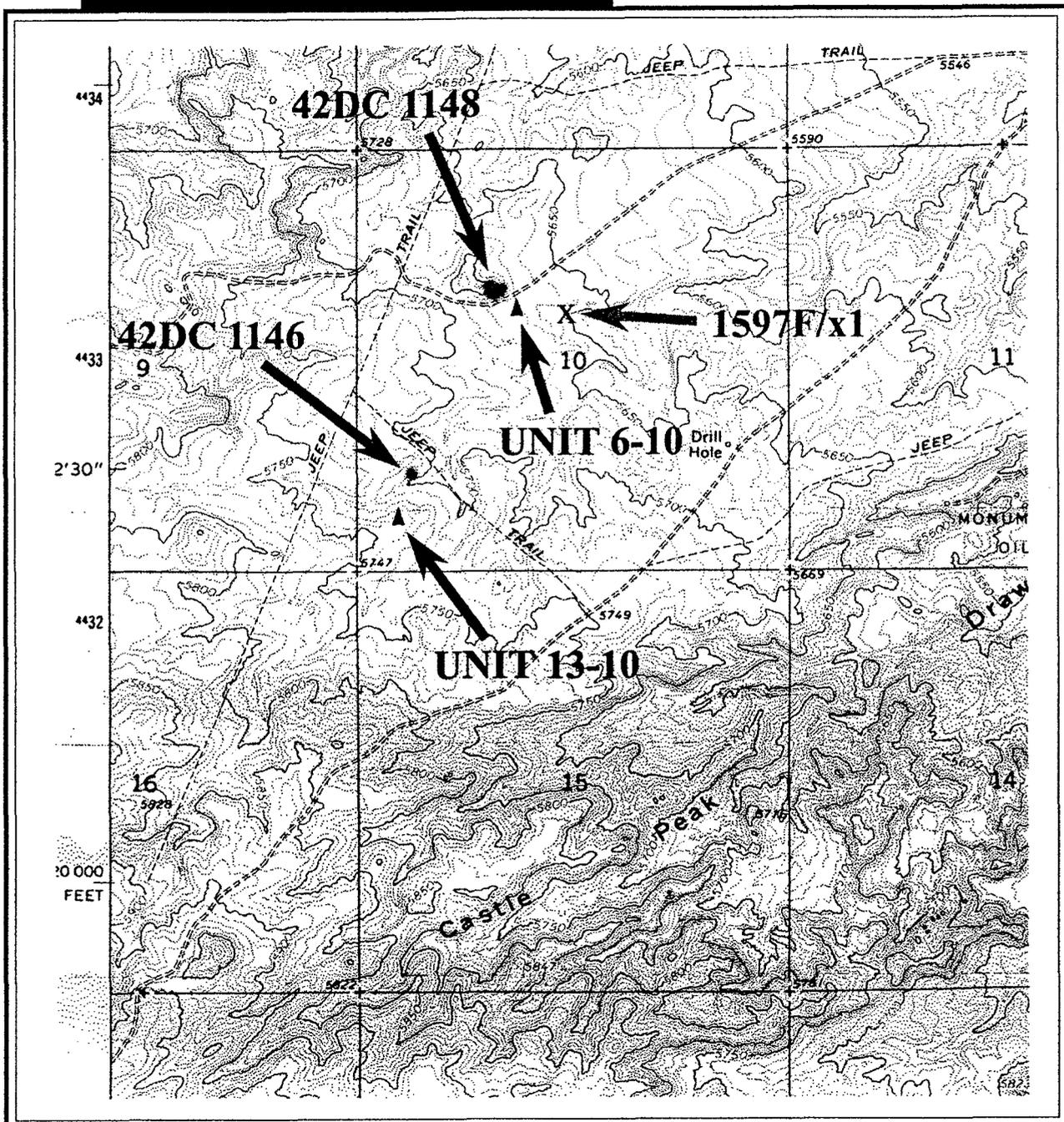
Physiographic Subdivisions of Utah  
by W.L. Stokes



**MAP 2**  
**CULTURAL RESOURCE SURVEY**  
**OF INLAND UNITS 6-10 & 13-10**  
**IN THE SOUTH WELLS DRAW UNIT**  
**OF DUCHESNE CO., UTAH**



**PROJECT:** IPC98-3B  
**SCALE:** 1:24,000  
**QUAD:** Myton SW  
**DATE:** April 15, 1998



**TOWNSHIP:** 9 South  
**RANGE:** 16 East  
**MERIDIAN:** SL B. & M.

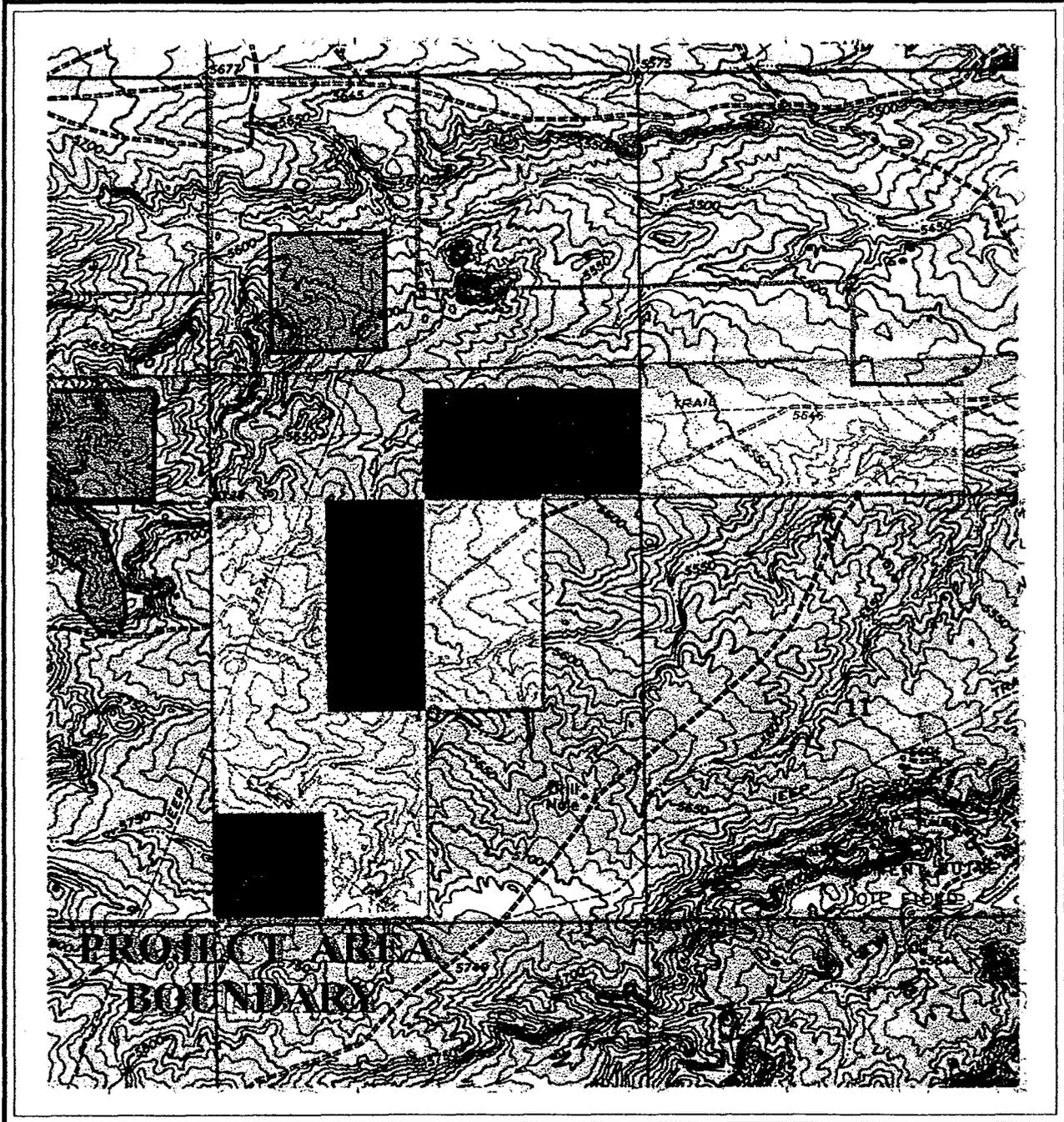
**LEGEND**

- WELL LOCATION
- CULTURAL SITE
- ISOLATED ARTIFACT

MAP 3  
**CULTURAL RESOURCE SURVEY  
 OF INLAND UNITS 6-10 & 13-10  
 IN THE SOUTHWELL'S DRAW UNIT  
 OF DUCHESNE CO., UTAH**



**PROJECT:** IPC98-3B  
**SCALE:** 1:24,000  
**QUAD:** Myton SW  
**DATE:** April 15, 1998



**TOWNSHIP:** 9 South  
**RANGE:** 16 East  
**MERIDIAN:** SL B. & M.

**LEGEND**



WELL  
 LOCATION



CULTURAL  
 SITE



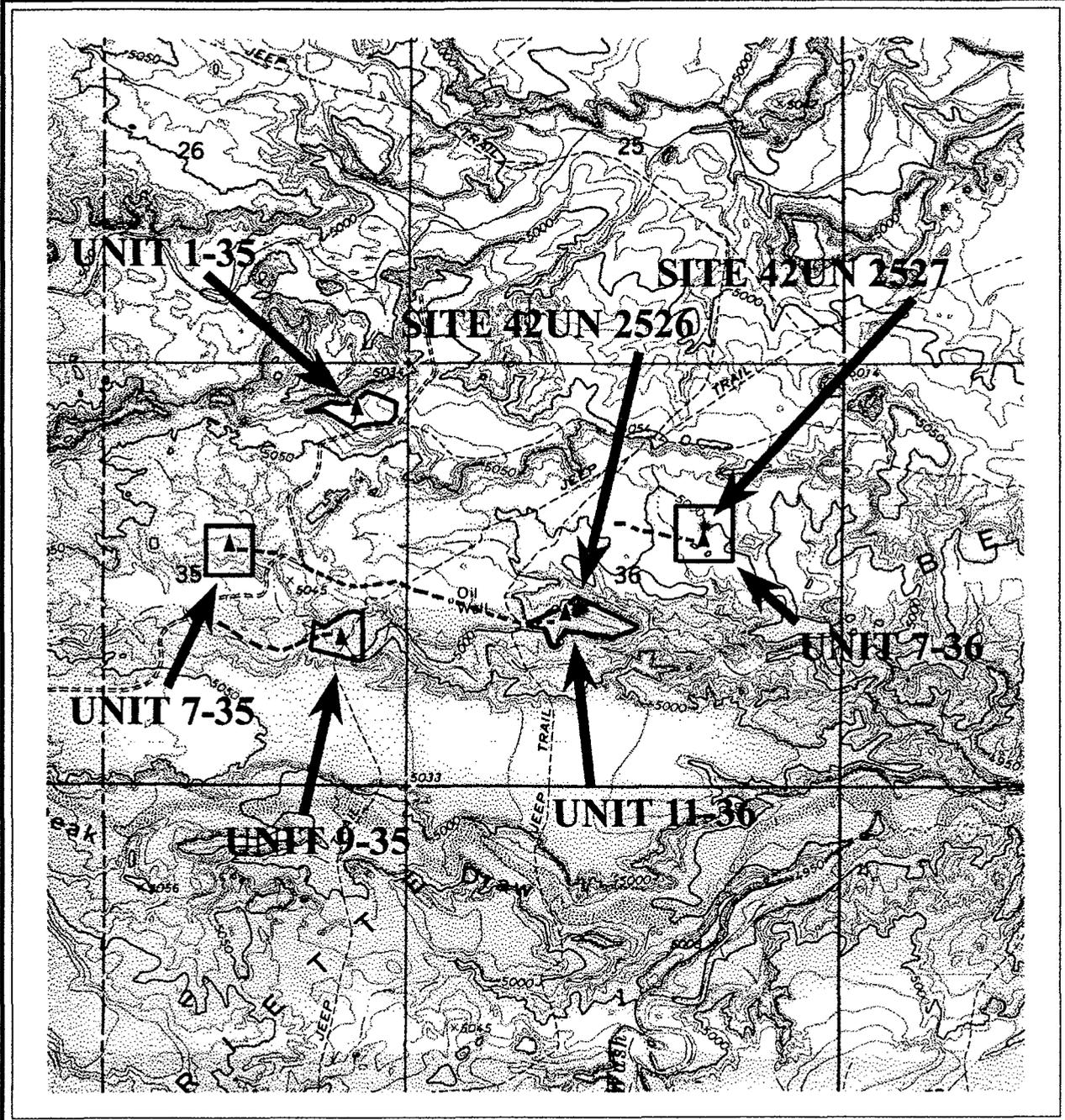
ISOLATED  
 ARTIFACT



**MAP 1**  
**CULTURAL RESOURCE SURVEY**  
**OF INLAND UNITS 7-36, 11-36, 1-35,**  
**7-35, & 9-35 IN THE PARIETTE BENCH**  
**LOCALITY OF UINTAR COUNTY, UTAH**



**PROJECT:** IPC98-3B  
**SCALE:** 1:24,000  
**QUAD:** Pariette Draw SW  
**DATE:** April 15, 1998



**LEGEND**



**TOWNSHIP:** 8 South  
**RANGE:** 17 East  
**MERIDIAN:** SL B. & M.

△ WELL LOCATION  
 □ 10 ACRE SURVEY AREA

--- ACCESS ROUTE

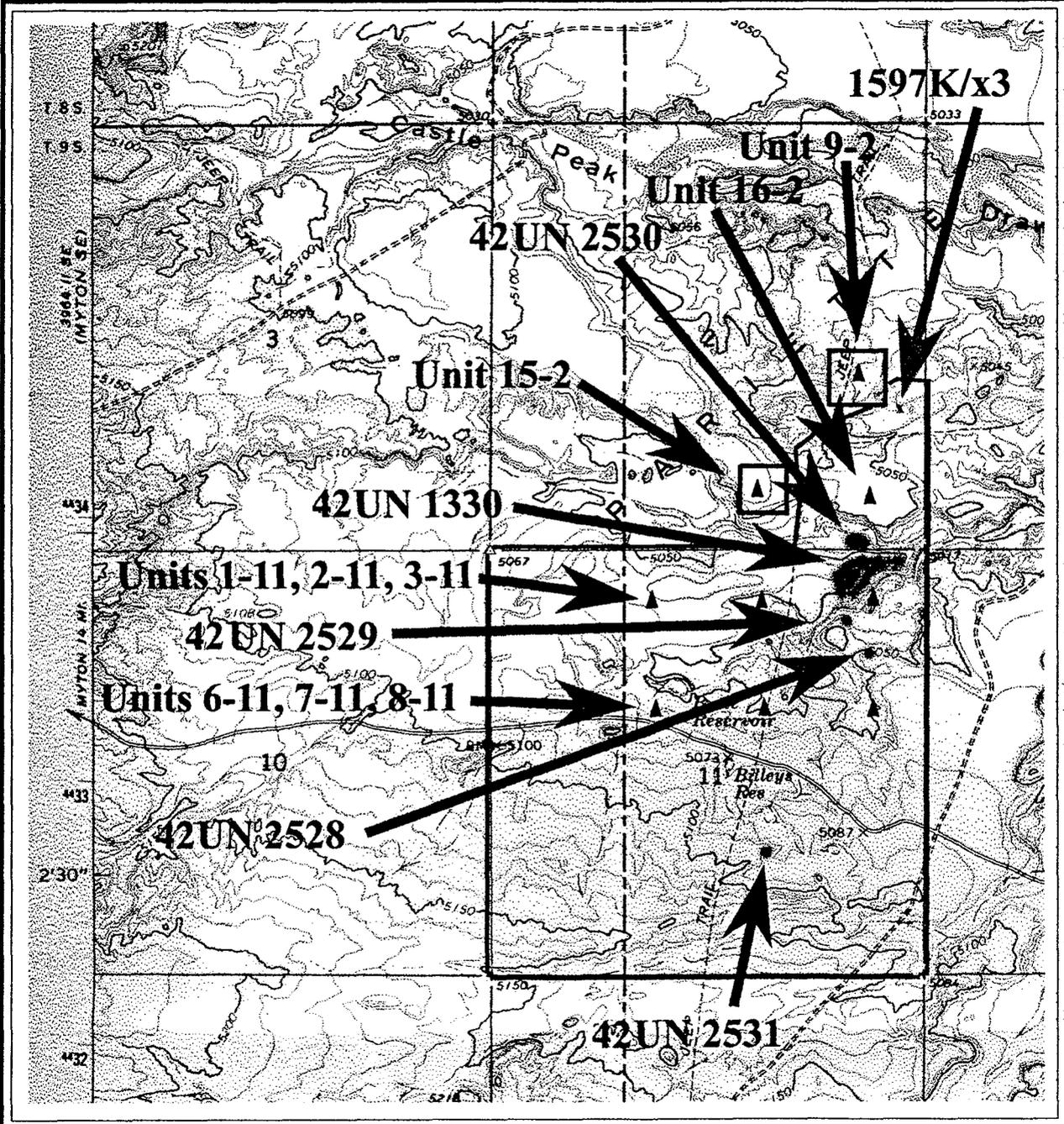
• CULTURAL SITE  
 X ISOLATED ARTIFACT



**MAP 5**  
**CULTURAL RESOURCE SURVEY**  
**OF INLAND UNITS 9-2, 15-2, 16-2, 1-11,**  
**2-11, 3-11, 6-11, 7-11 & 8-11**  
**IN THE CASTLE PEAK DRAW**  
**LOCALITY OF UTAH COUNTY, UTAH**



**PROJECT:** IPC98-3B  
**SCALE:** 1:24,000  
**QUAD:** Pariette Draw SW  
**DATE:** April 15, 1998



**LEGEND**



**TOWNSHIP:** 9 South  
**RANGE:** 17 East  
**MERIDIAN:** SL B. & M.



10 ACRE SURVEY AREA



WELL LOCATION



BULK SURVEY AREA



CULTURAL SITE



ISOLATED ARTIFACT

**Unit 6-10** — A 40 acre area was evaluated in association with the SE 1/4 of the NW 1/4 of Section 10, Township 9 South, Range 16 East (see Map 3) as reported in Hauck and Hadden 1997.

**Unit 13-10** — A 40 acre area was evaluated in association with the SW 1/4 of the SW 1/4 of Section 10, Township 9 South, Range 16 East (see Map 3) as reported in Hauck and Hadden 1997.

**Pariette Bench Locations (see Map 4)** The inventory in this locality included ten acre surveys at five separate well sites including four access route corridor evaluations. Units 7-36 and 11-36, which are situated on Utah State land, were initially reported in January of this year (c.f., Hauck 1998a); the recording of the sites associated with these two well pads was postponed until March due to weather conditions.

**Unit 1-35** — AERC archaeologists evaluated a 10 acre area adjacent to this present center stake upon the top of the mesa where this location is staked. Unit 1-35 is situated adjacent to an existing roadway in the NE 1/4 of the NE 1/4 of Section 35, Township 8 South, Range 17 East.

**Unit 7-35** — A 10 acre area was examined adjacent to this present center stake within a basin where this location is staked. Unit 7-35 is situated in the SW 1/4 of the NE 1/4 of Section 35, Township 8 South, Range 17 East. A .15 mile-long access corridor ( 1.8 acres) was also examined in association with this location.

**Unit 9-35** — A 10 acre area was examined adjacent to this present center stake within the arroyo bottom where this location is staked. Unit 9-35 is situated in the NE 1/4 of the SE 1/4 of Section 35, Township 8 South, Range 17 East. A .38 mile-long access corridor ( 4.6 acres) was also examined in association with this location.

**Unit 7-36** — A 10 acre area was evaluated adjacent to this present center stake by AERC archaeologists as noted above. Unit 7-36 is situated in the SW 1/4 of the NE 1/4 of Section 36, Township 8 South, Range 17 East. A .23 mile-long access corridor ( 2.75 acres) was also examined in association with this location.

**Unit 11-36** — AERC archaeologists evaluated a 10 acre area adjacent to this present center stake upon the top of the isolated mesa where this location is staked as noted above. Unit 11-36 is situated in the NE 1/4 of the SW 1/4 of Section 36, Township 8 South, Range 17 East. A .76 mile-long access corridor ( 9.18 acres) was also examined in association with this location.

**Castle Peak Draw Locations (see Map 5)** The inventory included the nine following well locations that are situated in Castle Peak Draw -- Pariette Bench locality. This inventory specifically involves two 10 acre parcel examinations associated with Units 9-2 and 15-2, a 65 acre bulk parcel associated with Unit 16-2, and a 640 acre bulk area (Section 11) evaluated in conjunction with Units 1-11, 2-11, 3-11, 6-11, 7-11, 8-11 and any other Inland well locations planned for that section. Units 9-2, 15-2 and 16-2 are all situated on Utah State land.

**Unit 9-2** — AERC archaeologists evaluated a 10 acre area adjacent to this present center stake. This unit is situated in the NE 1/4 of the SE 1/4 of Section 2, Township 9 South, Range 17 East. Since no access route has been staked into this location, future investigations will include the access and pipeline corridors probably during a bulk acreage survey in Section 2.

**Unit 15-2** — A 10 acre area was examined adjacent to this present center stake on the ridge where this location is staked. Unit 15-2 is situated in the SW 1/4 of the SE 1/4 of Section 2, Township 9 South, Range 17 East. Since no access route has been staked into this location, future investigations in Section 2 will include the access and pipeline corridors probably during an extension of the bulk acreage survey .

**Unit 16-2** — A 65 acre parcel was evaluated in the SE 1/4 of the SE 1/4 of Section 2, Township 9 South, Range 17 East.

**Units 1-11, 2-11, 3-11, 6-11, 7-11, 8-11** — As is demonstrated on Map 5, a 640 acre parcel was evaluated by AERC personnel involving Section 11, Township 9 South, Range 17 East. This bulk acreage provides Inland the flexibility to expand its drilling program to the south of the six presently staked well pads without the need for additional inventories of future proposed well locations, access routes, or pipeline corridors.

## **Environmental Description**

The various project areas associated with this report are within the 5000 to 5700 foot elevation zone above sea level. Open rangeland terrain and eroded Eocene lakebed surfaces are affiliated with the entire project area.

The vegetation in the project area includes rabbit brush (*Chrysothamnus spp.*), sagebrush (*Artemisia spp.*), Winterfat (*Ceratoides lanata*) greasewood (*Sarcobatus spp.*), Sulphurflower Buckwheat (*Eriogonum umbellatum*) Mormon tea (*Ephedra viridis*), Halogeton, Mountain Mahogany (*Cercocarpus spp.*), saltbush (*Atriplex canescens*), and a variety of grasses.

The geological associations within the project area consist of fluvial lake deposits which correlate with the Uintah Formation of Tertiary age.

## **PREVIOUS RESEARCH IN THE LOCALITY**

### **File Search**

A records search of the site files and maps at the Antiquities Section of the State Historic Preservation Office in Salt Lake City was conducted on November 6, 1997 in association with the primary project as requested by Inland Resources, Inc. A similar search was conducted in the Vernal

District Office of the BLM on November 10, 1997 and March 18, 1998. The National Register of Historic Places was consulted and no registered historic or prehistoric properties will be affected by the proposed developments.

A variety of known cultural sites are situated in the general locality. Many of these prehistoric resources were identified and recorded by AERC and other archaeologists and consultants during oil and gas exploration inventories (cf. Fike and Phillips 1984, Hauck and Weder 1989, Hauck and Hadden 1993, 1994, 1995, 1996, 1997).

## **Prehistory of the Cultural Region**

Currently available information indicates that the Northern Colorado Plateau Cultural Region has been occupied by a variety of cultures beginning perhaps as early as 10,000 B.C. These cultures, as identified by their material remains, demonstrate a cultural developmental process that begins with the earliest identified Paleoindian peoples (10,000 - 7,000 B.C.) and extends through the Archaic (ca. 7,000 B.C. - 300 A.D.), and Formative (ca. A.D. 400 - 1100) stages, and the Late Prehistoric-Protohistoric periods (ca. A.D. 1200 - 1850) to conclude in the Historic-Modern Period which was initiated with the incursion of the Euro-American trappers, explorers and settlers. Basically, each cultural stage -- with the possible exception of the Late Prehistoric hunting and gathering Shoshonean bands -- features a more complex life-way and social order than occurred during the earlier stage of development (Hauck 1991:53). For a more comprehensive treatment of the prehistory and history of this region see *Archaeological Evaluations in the Northern Colorado Plateau Cultural Area* (Hauck 1991).

## **Site Potential in the Project Development Zone**

Previous archaeological evaluations in the general project area have resulted in the identification and recording of a variety of cultural resource sites having eligibility for potential nomination to the National Register of Historic Places. The majority of these sites are lithic scatters containing cobble reduction materials. Many of these quarry sites are of the "tap and test" variety, and extend for tens of hundreds of meters. Open occupations are also frequently being identified in this locality. Sites associated with the open rangeland generally appear to have been occupied during the Middle Plains Archaic Stage with occasional indications of Paleoindian activity based on the recovery of isolated Plano style projectile points. The north-south drainage canyons appear to contain the majority of Late Prehistoric (Numic) sites probably because those canyon floors were transportation corridors and convenient pastures for the Ute horse herds. Evidence of Formative Stage occupation, i.e. Fremont, is rarely observed in the rangeland environment but is common within the Green River and White River canyons and their primary tributary canyons.

Site density in certain portions of the region appears to range from one to four sites per section. These densities increase in the canyon bottoms due to Ute rock art loci. Recent evaluations indicate

that the site densities may reach 8 to 12 sites per section in certain localities on the upper benches which were apparently favored for hunting, lithic resource procurement, and camping. Prehistoric sites on the rangeland benches appear to be associated with water courses and aeolian deposits. In the Wells Draw and Castle Peak Draw localities, site density appears to be very high, especially in areas near water courses and seep sources.

## **FIELD EVALUATIONS**

### **Methodology**

Intensive evaluations consisted of the archaeologists walking a series of 15 to 20 meter-wide transects within the various parcels associated with the surveyed well locations and along the 100 foot-wide access routes. Thus, 873.33 acres associated with these 16 proposed well locations were inventoried relative to this present project and previously reported projects as noted above.

Observation of cultural materials results in intensive examinations to determine the nature of the resource (isolate or activity locus). The analysis of each specific site results in its subsequently being sketched, photographed, and appropriately recorded on standard IMACS forms. Due to the on-set of winter conditions, the recording of archaeological sites 42DC 1146, 42DC 1148, 42Un 2526, and 42UN 2527, which were identified during the 1997-98 winter evaluations were postponed until March and April 1998. Additional reports for various Inland projects, also to be released in the spring of 1998, will continue to document those resources that were initially identified and noted in Hauck and Hadden 1997.

In certain instances, the cultural sites are evaluated for depth potential utilizing AERC's portable Ground Penetrating Radar (GPR) computerized system (SIR-2 manufactured by Geophysical Survey Systems, Inc. of North Salem, New Hampshire). GPR was not used during this project but may be employed to facilitate the significance assessments of certain cultural sites.

Following these field analyses, cultural sites are then evaluated for significance utilizing the standards described below and mitigation recommendations are developed by the principal investigator in consultation with both the client and relevant governmental agencies as a means of preserving significant resources which may be situated within the development zone.

### **Site Significance Criteria**

Prehistoric and historic cultural sites which can be considered as eligible for nomination to the National Register of Historic Places have been outlined as follows in the National Register's Criteria for Evaluation as established in Title 36 CFR 60.6:

*The quality of significance in American . . . archaeology . . . and culture is present in . . . sites . . . that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:*

- a. That are associated with events that have made a significant contribution to the broad patterns of our history; or*
- b. that are associated with the lives of persons significant in our past; or*
- c. that embody the distinctive characteristics of a type, period, or method of construction . . . ; or*
- d. that have yielded, or may be likely to yield, information important in prehistory or history.*

In addition to satisfying one or more of these general conditions, a significant cultural resource site in Utah will generally be considered as eligible for inclusion in the National Register if it should advance our current state of knowledge relating to chronology, cultural relationships, origins, and cultural life ways of prehistoric or historic groups in the area.

In a final review of any site's significance, the site must possess integrity and at least one of the above criteria to be considered eligible for nomination to the National Register of Historic Places.

## **Results of the Inventory**

Eight prehistoric cultural resource activity loci were recorded during the final archaeological evaluation of various units as shown on Maps 2, 4, and 5. These sites include 42DC 1146, 42DC 1148, 42UN 2526 through 42UN 2531. A brief description of each site, the site maps, cultural significance determinations, and mitigation recommendations are provided in this portion of the report.

**Site 42DC 1146 (see Maps 2, 3 & 6)** This site consists of an open occupation situated on the southern aspect of a terrace/outcrop. The site includes a deflated hearth and a single chipped stone tool -- an Early to Middle Archaic Side-notch dart point (see Figure 1). No other cultural debris was identified along the ridge. Much of the surface of the site is deflated with aeolian and fluvial deposition along tertiary drainages and areas with vegetation.

**National Register Status:** not significant — site lacks depth potential

**Potential for Project-related Disturbance:** none

**Recommendations:** none

**Site 42DC 1148 (see Maps 2, 3 & 7)** This site consists of scattered historic debris with some areas of higher density. A deteriorated oven consisting of fire bricks and a steel grate was constructed at the southeastern base of the ridge. Areas of higher density included two scatters of insulators and a scatter of deteriorating wood, wire, and cans. A number of hole in top and crimped cans and broken clear glass were scattered throughout the site area. The prehistoric component consisted of a low density scatter of lithic debitage primarily of Parachute Creek chert. The scatter surrounds the ridge beginning

at the southeastern aspect of the ridge extending along the northern margin. The site surface consists of deflated areas, rock outcrops, and regions of deposition.

**National Register Status:** this site is considered to have potential for National Register inclusion because aeolian depositions within the site demonstrate potential for stratified depth and contextual integrity.

**Potential for Project-related Disturbance:** none — site will be avoided during the construction of Unit 6-10.

**Recommendations:** none

**Site 42UN 2526 (see Maps 4 & 8)** This prehistoric site consists of an open occupation situated on the north slope of the top of an isolated mesa. The site occupies an area of ca. 60 x 60 meters. Much of the surface in the site area consists of aeolian sand which has become stabilized. Blow-out zones contain debitage indicating site has the potential for buried features and diagnostic materials. Lack of diagnostics hamper determination of site period of occupation, but it probably is no more recent than Late Archaic. Exposures in shallow drainage channels indicate presence of hearth features on the site. Food preparation on-site is suggested by the presence of a sandstone mano.

**National Register Status:** this site is considered to have potential for National Register inclusion because aeolian depositions within the site demonstrate potential for stratified depth and contextual integrity.

**Potential for Project-related Disturbance:** At the present, Inland Unit 11-36 extends into the southwestern portion of the site; thus, a high probability exists for site disruption during the blading and operations on Unit 11-36. This site cannot be avoided during the construction of Unit 11-36 if that proposed well pad remains in its present location.

**Recommendations:** AERC recommends that the site be avoided during the construction and operational phases associated with Unit 11-36. This can be facilitated by moving the pad's staked location 100 feet to the southwest to ensure site preservation during pad construction. AERC also recommends that the northern and eastern peripheries of the relocated well pad be fenced to facilitate the long-term preservation of the site from random vehicle traffic originating on the well pad location.

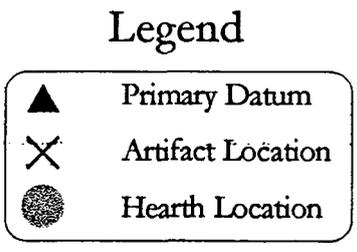
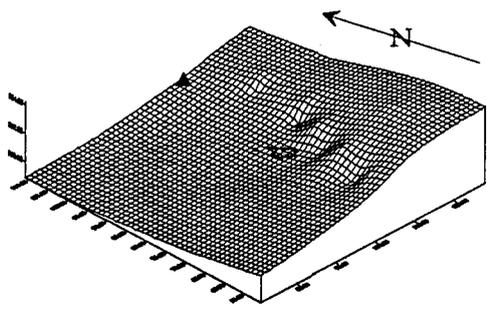
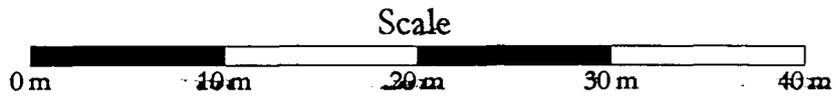
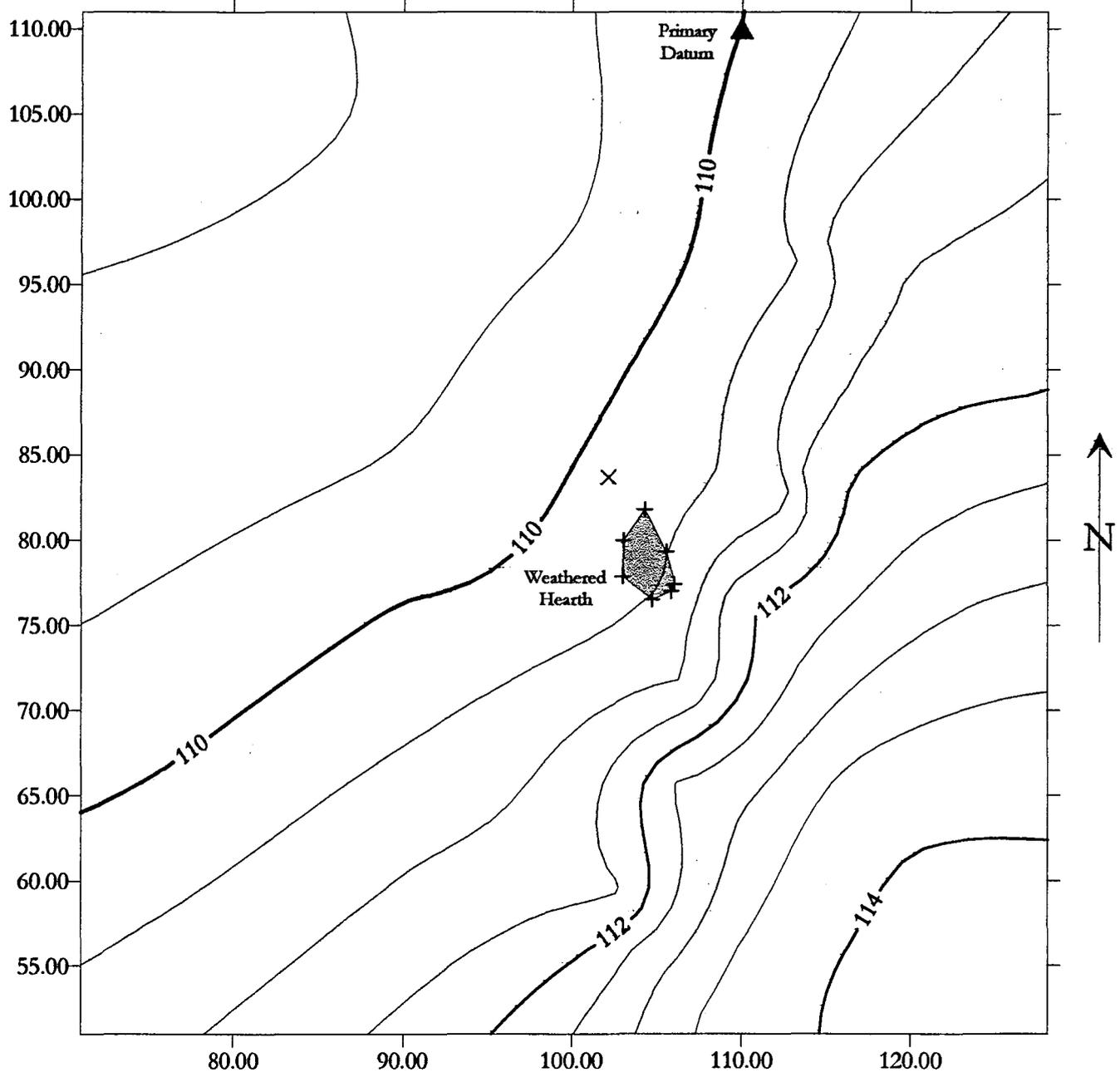
**Site 42UN 2527 (see Maps 4 & 9)** This site consists of a sparse scatter of highly patinated, expediency tools generally associated with the initial dismemberment of large game after a kill. Tools were probably prepared, used and discarded in the site area. The several opposing-flake biface choppers observed on the site are common to similar sites of the Early and Middle Archaic phases that have been previously recorded by this firm in the Northwestern Plains and Uintah Basin. The sawtooth edge on these tools facilitate their use in cutting through thick tendons while quartering game. The site measures ca. 40 meters in circumference and is exposed directly on a deflated, Pleistocene age, desert pavement.

**National Register Status:** not significant — site lacks depth potential and contextual integrity.

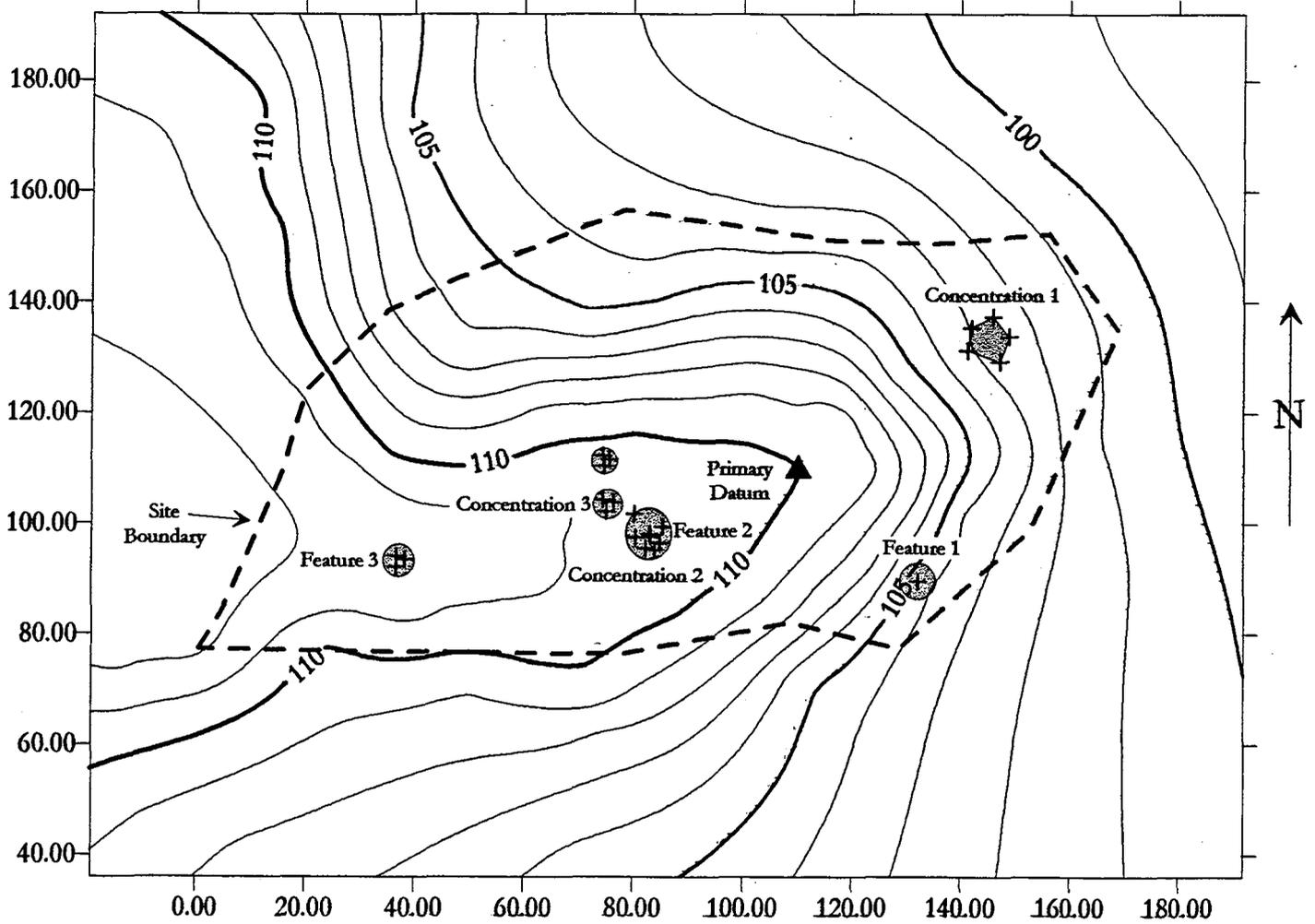
**Potential for Project-related Disturbance:** none — site is just north and outside the northern perimeter for Unit 7-36.

**Recommendations:** none

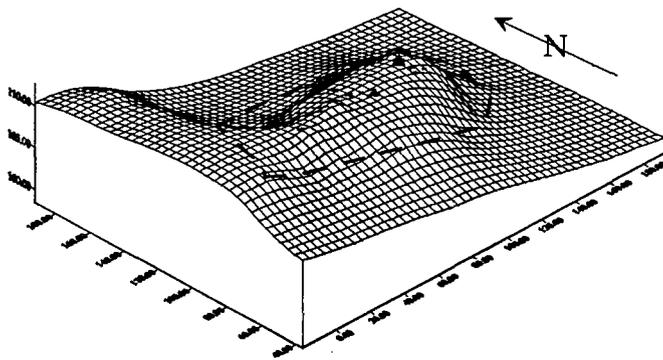
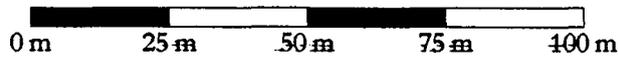
# MAP 6: Artifact Distribution at 42DC1146



# MAP 7: Artifact Distribution at 42DC1148



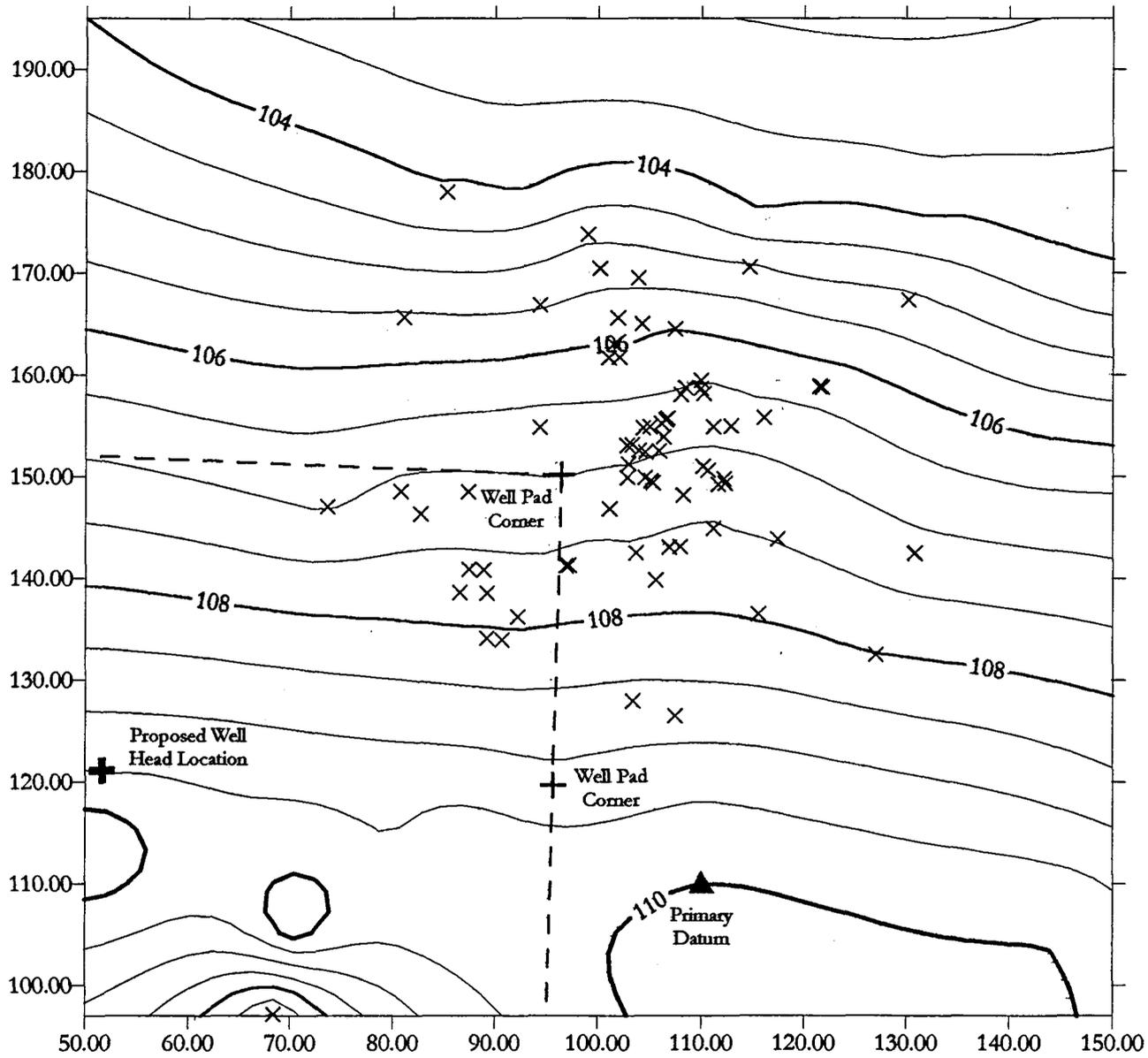
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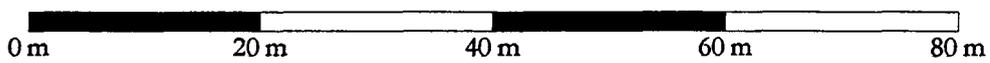
## Legend

- ▲ Primary Datum
- Artifact Concentration
- - - Site Boundary

# MAP 8: Artifact Distribution at 42UN2526

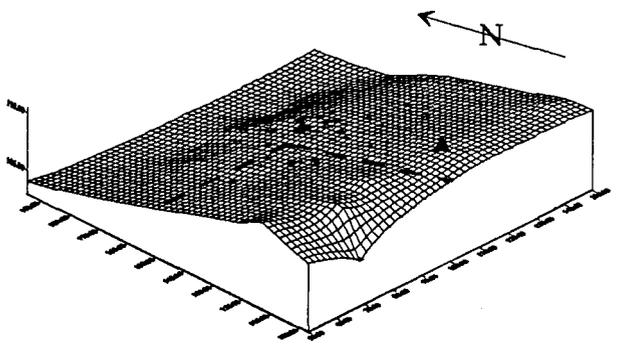


Scale

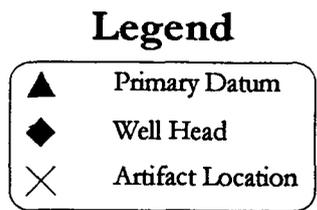
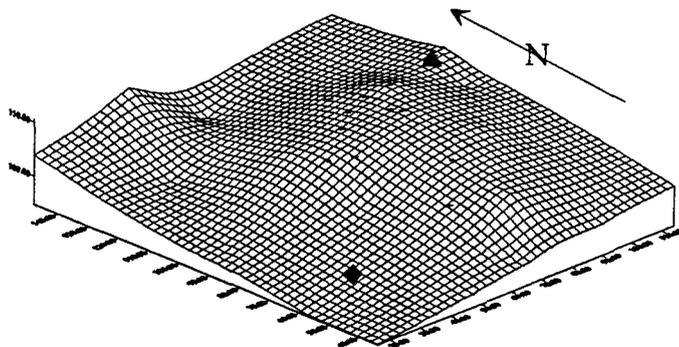
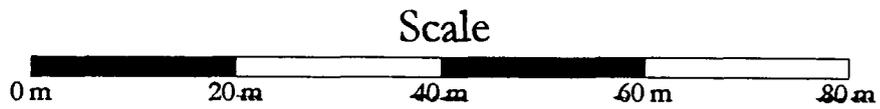
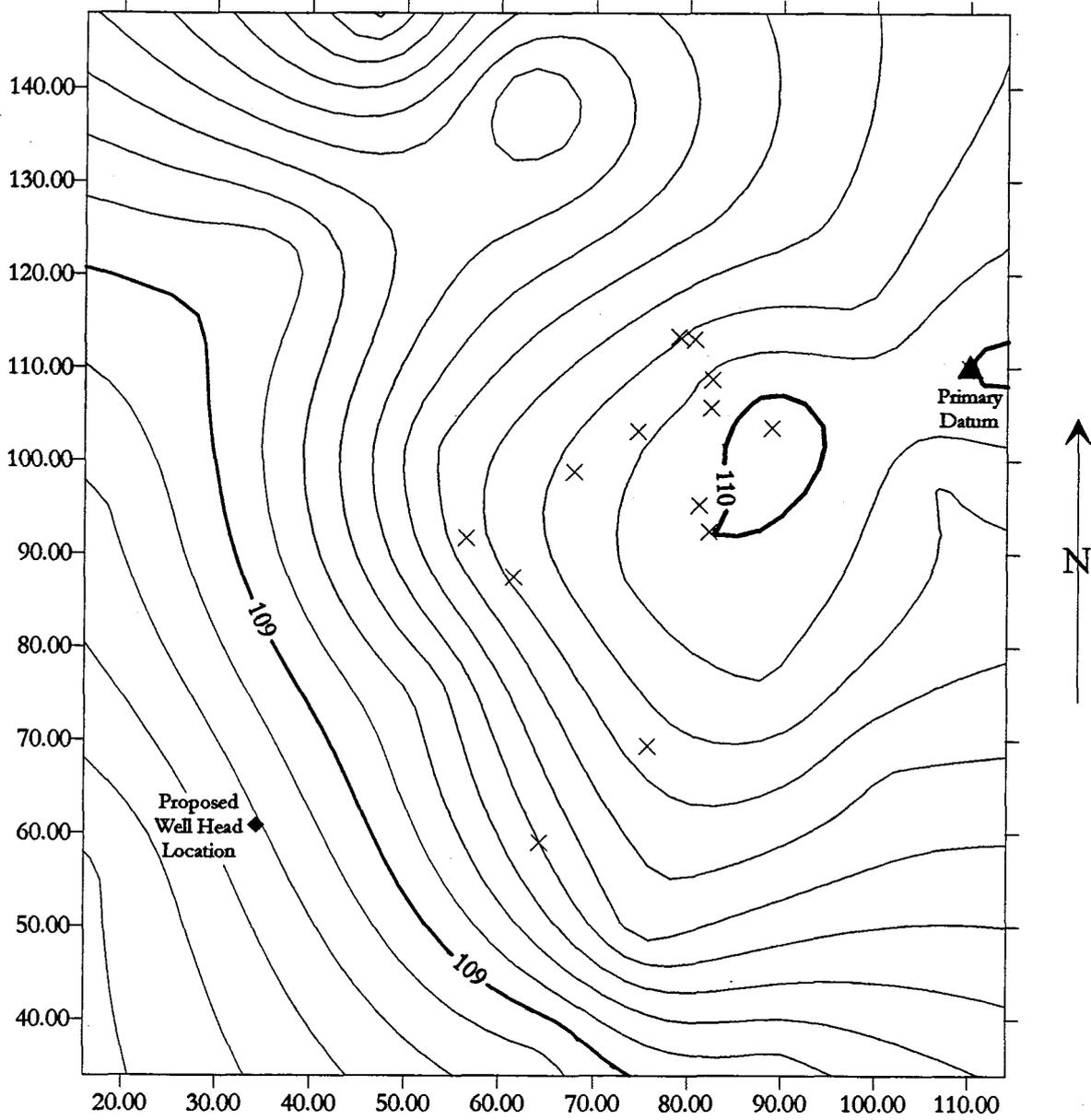


## Legend

- ▲ Primary Datum
- + Well Pad Corner
- ⊕ Well Head Location
- × Artifact Location



# MAP 9: Artifact Distribution at 42UN2527



**Site 42UN 2528 (see Maps 5 & 10)** This site consists of a diffuse scatter of 10+ lithic flakes in a 20 x 50 meter area. All debitage consists of the locally available Parachute Creek chert as primary and secondary flakes. A possible, highly deflated hearth feature is situated on the southeastern portion of the site. Shallow aeolian depositions on the site were carefully examined to determine depth potential with negative results.

**National Register Status:** not significant — site lacks depth potential and contextual integrity.

**Potential for Project-related Disturbance:** none — site is south and outside the southern perimeter for Unit 1-11.

**Recommendations:** none

**Site 42UN 2529 (see Maps 5 & 11)** This site consists of an open occupation located on the east side of a ridge along the edge of a dune field. It is currently eroding into a tributary drainage of Big Wash. Site measures ca. 40 x 70 meters in size and has depth potential. Site contains several biface tools, a deflated hearth, core materials and biface reduction materials. Cherts on the site include the localized Parachute Creek chert, a white chert and an unknown clear chert containing red speckles.

**National Register Status:** this site is considered to have potential for National Register inclusion because aeolian depositions within the site demonstrate potential for stratified depth and contextual integrity.

**Potential for Project-related Disturbance:** none — site is outside the perimeter of Unit 1-11 and can easily be avoided during the construction of that well location.

**Recommendations:** none

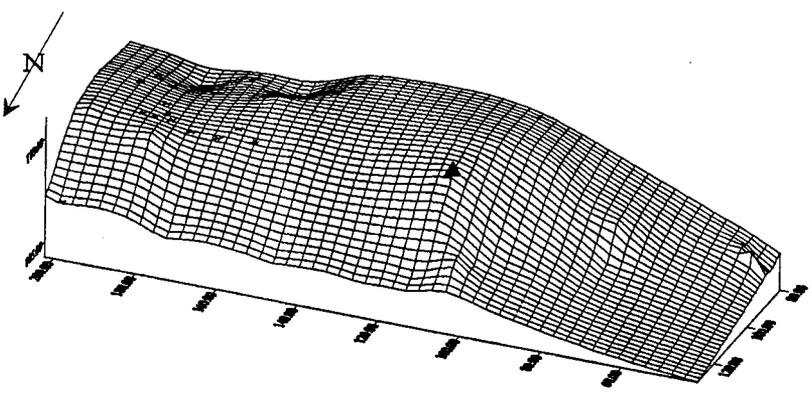
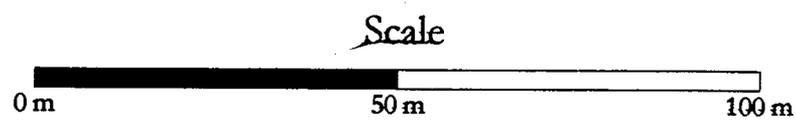
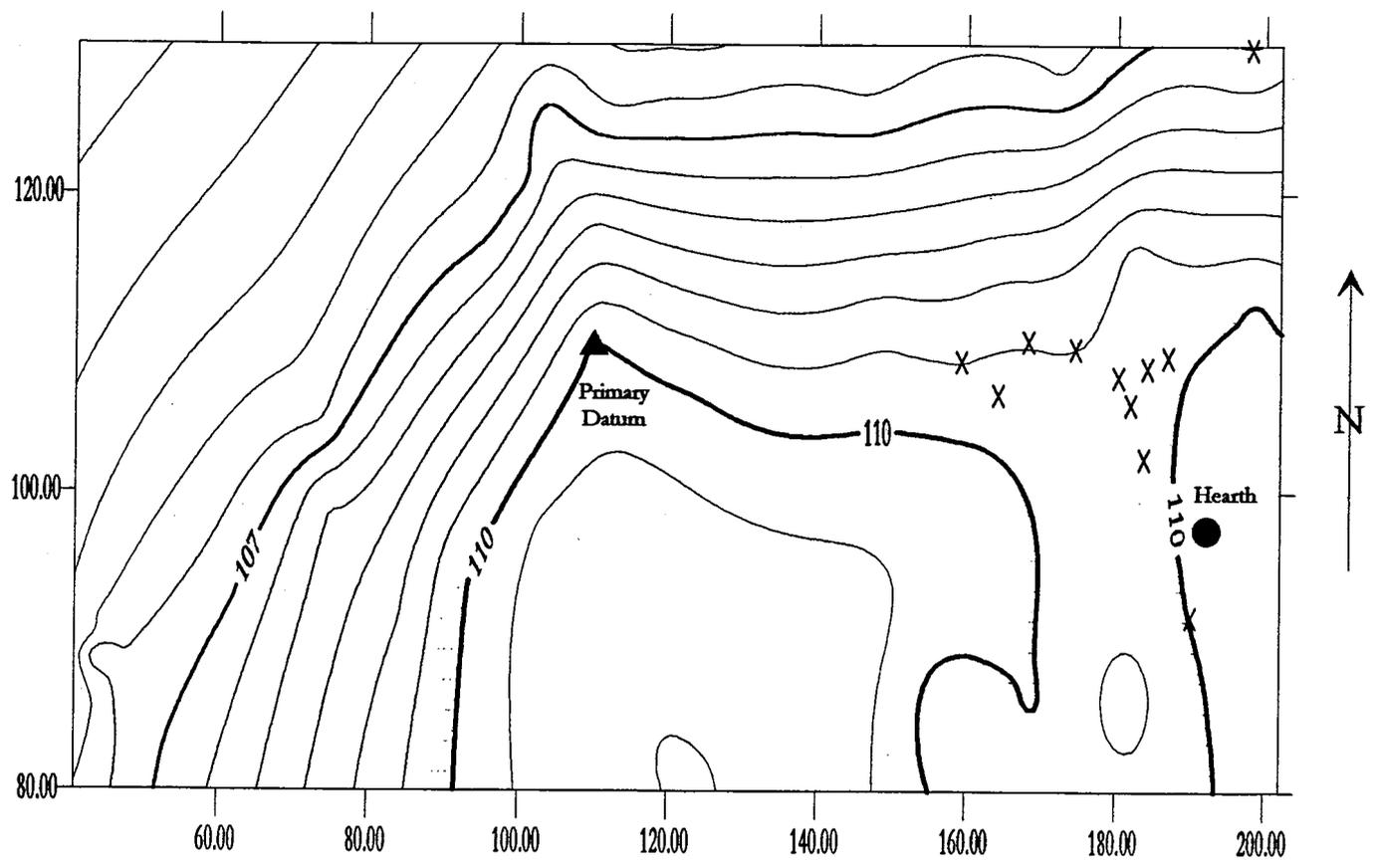
**Site 42UN 2530 (see Map 5 & 12)** This site consists of an open occupation located on the north slope and bench of a ridge on the south side of a tributary drainage of Big Wash. Site is ca. 50 x 100 meters in size and has depth potential. Site is adjacent to 42UN 1330 which is above and to the south in the adjacent section (11). Site contains an early PaleoIndian component based on the recovery of a Goshen (Plainview) base (see Figure 2). Site probably also contains Archaic components although no diagnostics were observed (see Figure 3). Dominant lithic material type on the site consists of Parachute Creek chert which is locally available in the form of thin-bedded float. Evidence of full range of biface reduction can be observed on the site in addition to evidence of tool use and discarding.

**National Register Status:** this site is considered to have potential for National Register inclusion because aeolian depositions within the site demonstrate potential for stratified depth and contextual integrity.

**Potential for Project-related Disturbance:** none — site is outside the perimeters of Units 1-11 and 16-2 and can easily be avoided during the construction of those well locations.

**Recommendations:** none

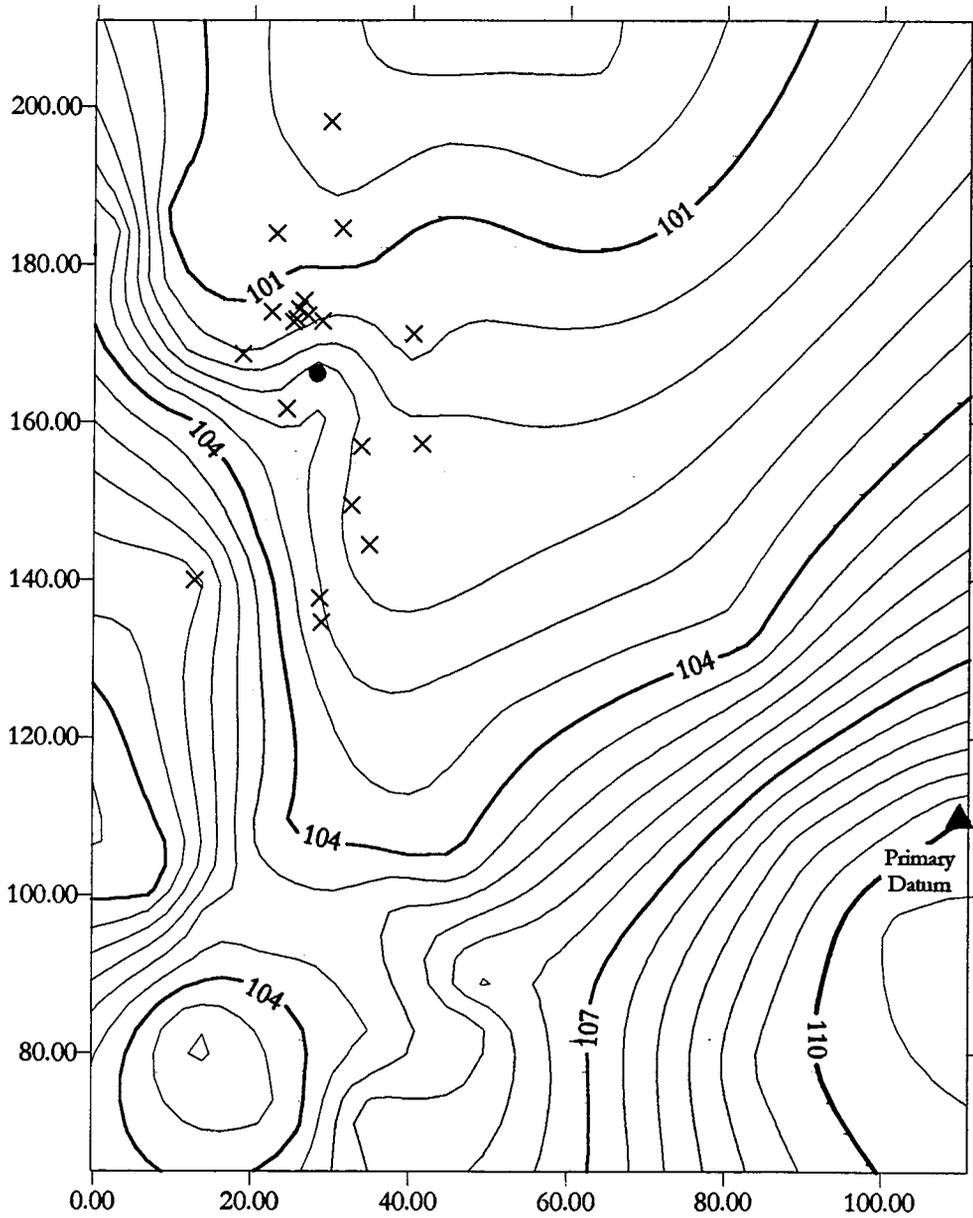
# MAP 10: Artifact Distribution at 42UN2528



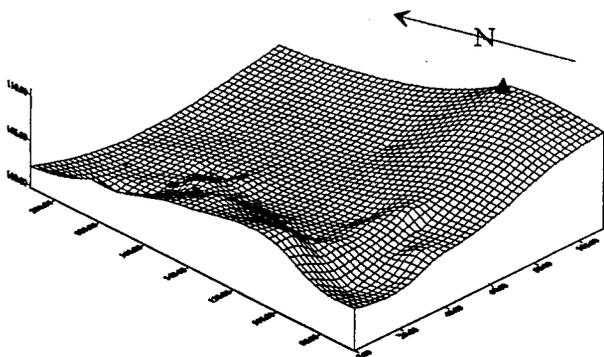
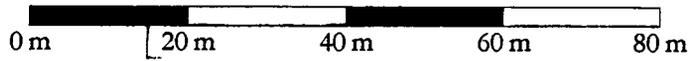
**Legend**

▲	Primary Datum
×	Artifact Location
●	Hearth

# MAP 11: Artifact Distribution at 42UN2529



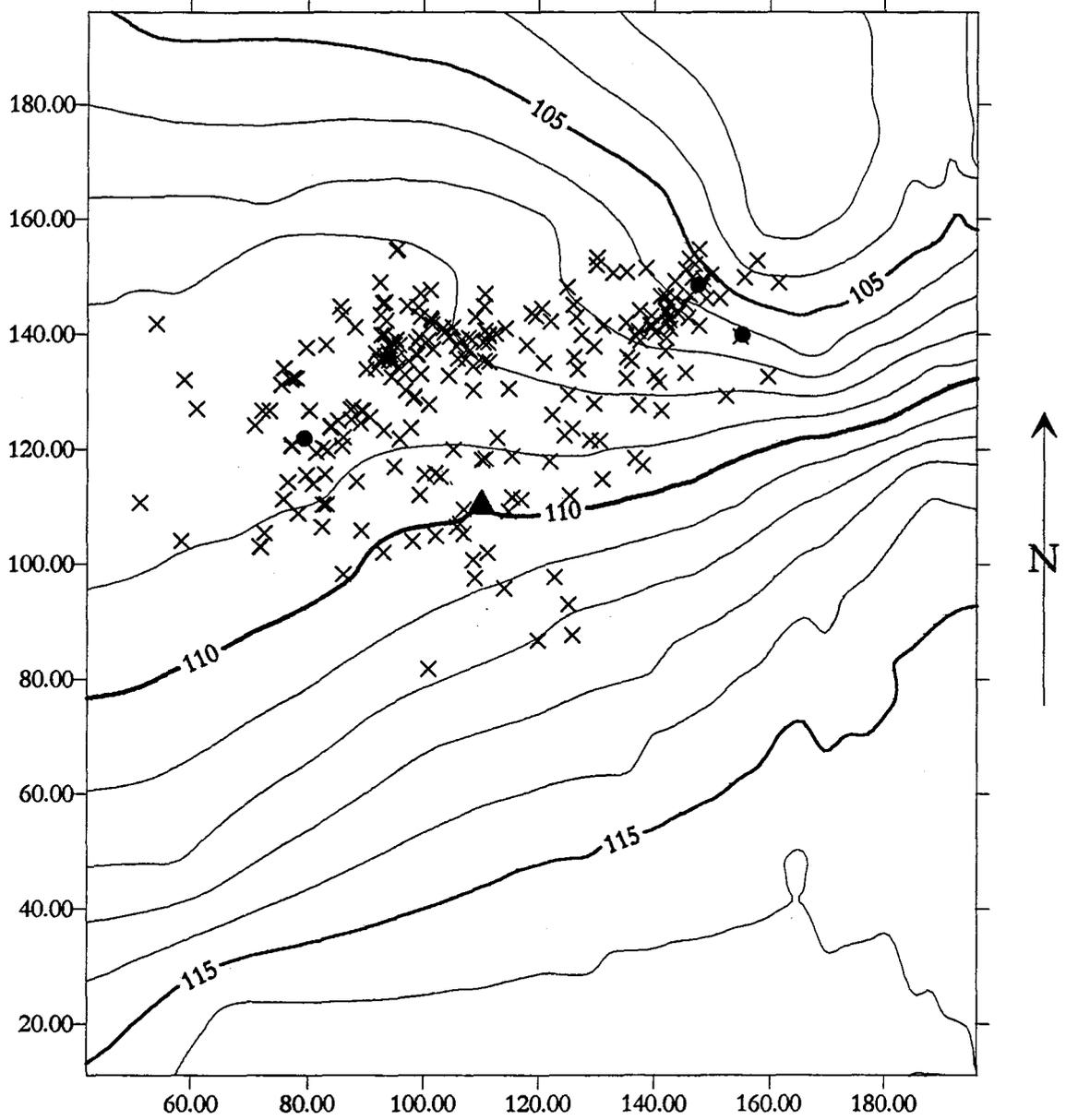
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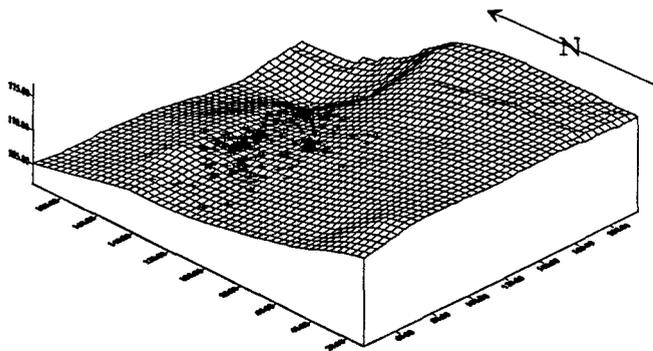
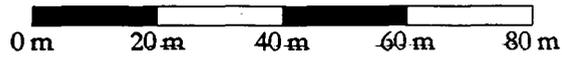
## Legend

- ▲ Primary Datum
- × Artifact Location
- Hearth

# MAP 12: Artifact Distribution at 42UN2530



Scale



## Legend

- ▲ Primary Datum
- Hearth
- × Artifact Location

**Site 42UN 2531 (see Maps 5 & 13)** This site consists of a sparse scatter of flakes and one biface expediency butchering tool. Site was apparently the locus of a butchering episode related to the dismemberment of a large mammal.

**National Register Status:** not significant — site lacks depth potential and contextual integrity.

**Potential for Project-related Disturbance:** none

**Recommendations:** none

One previously identified and recorded significant National Register eligible sites was noted during the survey being reported in this document. That site (42UN 1330) is situated immediately north of Unit 1-11. A brief description of that site follows:

**Site 42UN 1330 (see Map 5)** This large prehistoric site consists of an open occupation and lithic scatter that has been previously recorded. It is situated on the top and southern slope of a ridge overlooking the basin where Unit 1-11 has been staked.

**National Register Status:** this site is considered to have potential for National Register inclusion because aeolian depositions within the site demonstrate potential for stratified depth and contextual integrity.

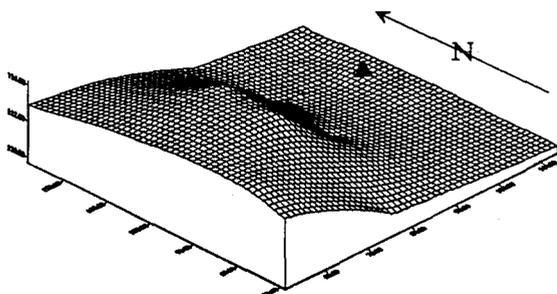
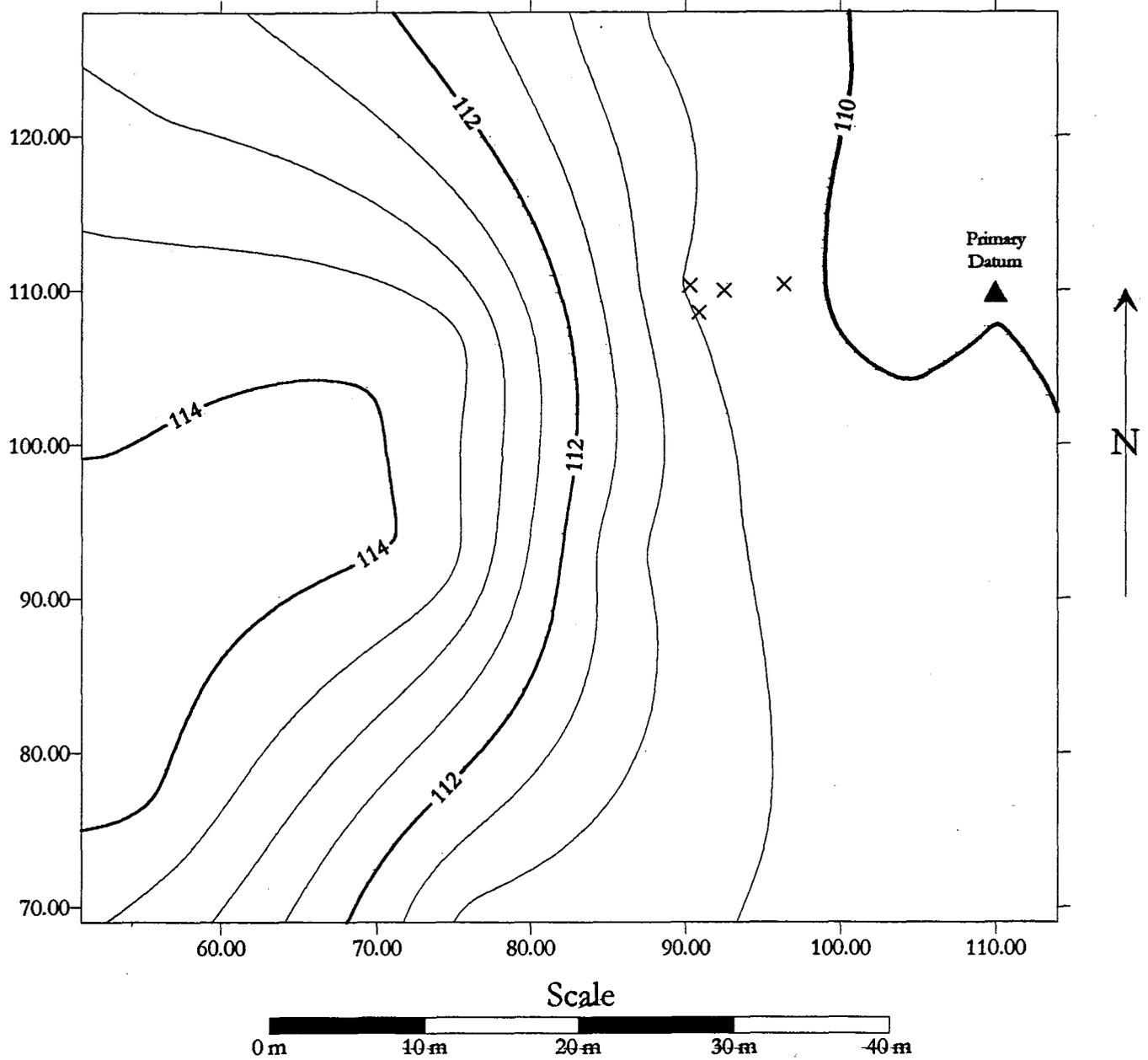
**Potential for Project-related Disturbance:** moderate due to proximity between site and well pad construction area for Unit 1-11.

**Recommendations:** avoidance — construction on adjacent Unit 1-11 should be restricted to the south side of the drainage that forms the site's southern and eastern periphery.

Two partially diagnostic, isolated artifacts were observed and recorded during the evaluations. These artifacts include 1597F/x1 (see Map 2 and Figure 4) and 1597K/x3, (see Map 5 and Figure 5). The first consists of a distal fragment of a bifacially prepared tool. The second isolate consists of a mid-section that appears to be a remnant of a PaleoIndian blade tool. Both were recovered for laboratory analysis and will be curated at AERC's established curatorial facility with other artifacts collected during this project.

No paleontological loci were observed during the survey. A paleontological report will be appended to the final AERC report for this project.

# MAP 13: Artifact Distribution at 42UN2531



## Legend

- ▲ Primary Datum
- × Artifact Location

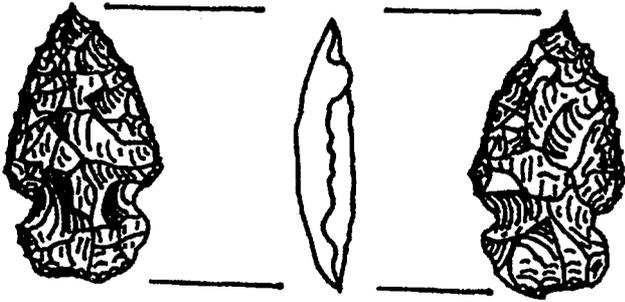


FIGURE 1:  
Side-notch Projectile Point  
recovered from 42DC1146

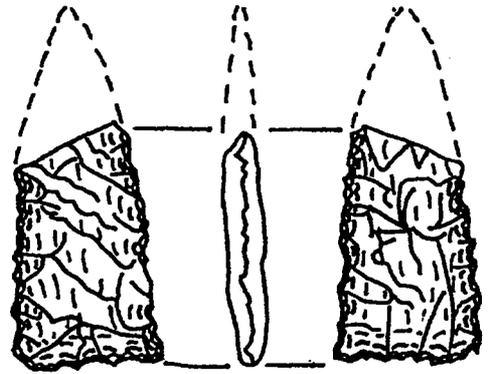


FIGURE 2:  
Goshen (Plainview) Style Projectile  
Point recovered from 42UN2530

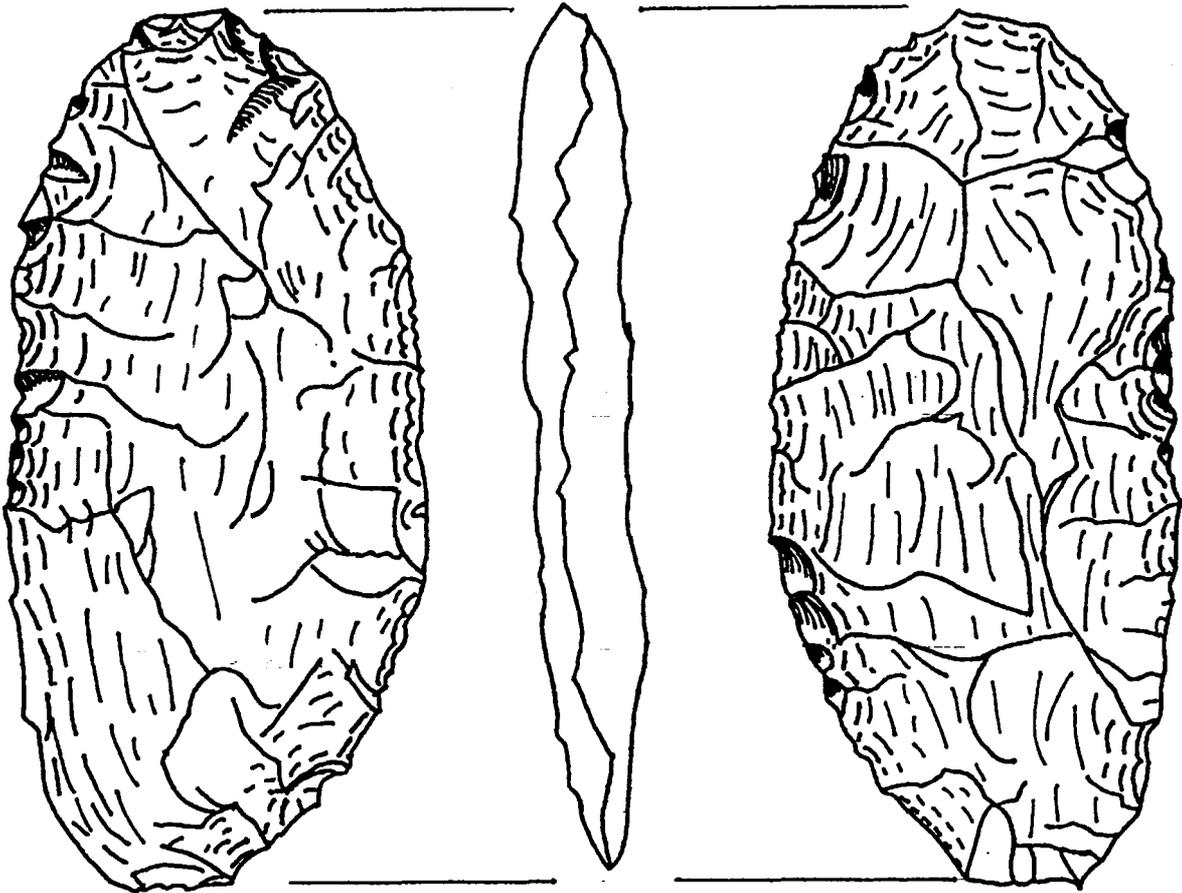


FIGURE 3:  
Knife recovered from  
42UN2530

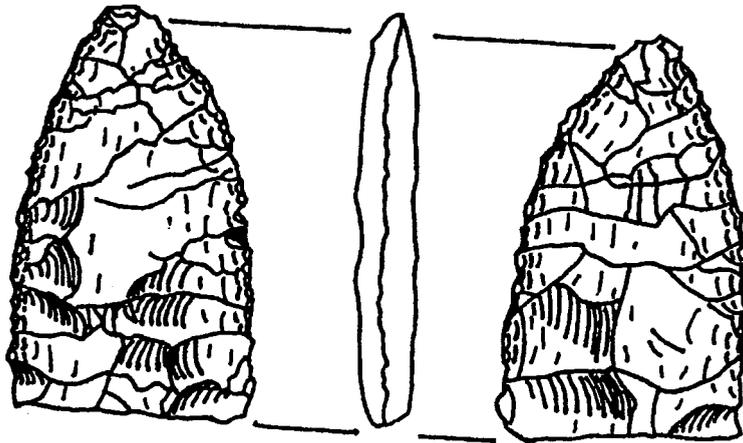


FIGURE 4:  
Isolated find 1597F/x1

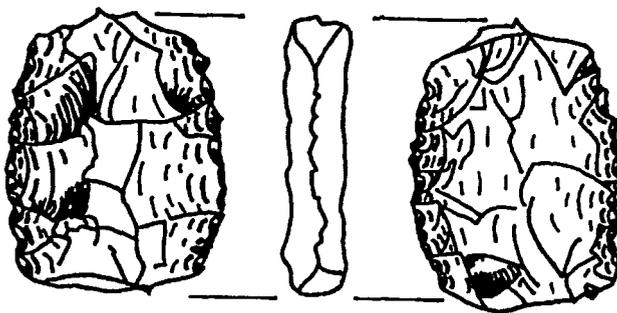


FIGURE 5:  
Isolated find 1597K/x3

## CONCLUSION AND RECOMMENDATIONS

Inland Units 6-10, 13-10, 7-36, 1-35, 7-35, 9-35, 9-2, 15-2, 16-2, 2-11, 3-11, 6-11, 7-11, 8-11 and their respective access routes as shown on Maps 2 through 5 in this document do not pose any significant threat to any known significant cultural resources. However, several significant cultural resource sites (42UN 2526, 42UN 1330) could be adversely impacted during the development and operation of Inland Resources, Inc.'s well locations 11-36 and 1-11 as cited in this report.

AERC recommends that a cultural resource clearance be granted to Inland Resources, Inc. relative to the development of these 16 proposed locations based upon adherence to the following stipulations:

1. Site 42UN 2526 should be avoided by moving the staked location for Unit 11-36 a minimum of 100 feet to the southwest to ensure site preservation during pad construction. In addition, the northern and eastern peripheries of the relocated well pad should be fenced to facilitate the long-term preservation of the site from random vehicle traffic originating on the well pad location;
2. Site 42UN 1330 should be avoided by restricting construction, operational, and vehicular activities to the south side of the drainage that forms that site's southern and eastern periphery;
3. all vehicular traffic, personnel movement, construction and restoration operations should be confined to the surveyed zones, to the flagged areas and corridors examined as referenced in this report, and to the existing roadways;
4. all personnel should refrain from collecting artifacts and from disturbing any cultural resources in the area; and
5. the authorized official should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the exploration area.



F. Richard Hauck, Ph.D.  
President and Principal  
Investigator

## References

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- 1992c Cultural Resource Evaluations of Seven Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-5, Archeological-Environmental Research Corporation, Bountiful.

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- 1992e Cultural Resource Evaluation of Seven Proposed Well Locations in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-92-8, Archeological-Environmental Research Corporation, Bountiful.
- 1993a Cultural Resource Evaluation of Nine Proposed Well Locations in the Castle Peak Draw Locality of Duchesne and Uintah Counties, Utah. Report prepared for Balcron Oil Company, BLCR-93-1, Archeological-Environmental Research Corporation, Bountiful.
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- 1996c Cultural Resource Evaluation of Two Proposed Well Locations in the Castle Peak Draw Locality - Big Wash Locality of Duchesne and Uintah Counties, Utah. Report prepared for Balcron Oil Company, BLCR-96-8C, Archeological-Environmental Research Corporation, Bountiful.
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- 1996f Cultural Resource Evaluation of Four Proposed Well Locations with Associated Access Road and Pipeline Corridor Complexes in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Inland Production Company, IPC-96-1, Archeological-Environmental Research Corporation, Bountiful.
- 1996g Cultural Resource Evaluation of Ten Proposed Well Locations with Associated Road Complexes in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Inland Production Company, IPC-96-2, Archeological-Environmental Research Corporation, Bountiful.
- 1996h Cultural Resource Evaluation of Five Proposed Monument Federal Well Locations in the Pariette Bench Locality of Uintah County, Utah. Report prepared for Equitable Resources Energy Company, BLCR-96-7, Archeological-Environmental Research Corporation, Bountiful.
- 1996i Cultural Resource Evaluation of 11 Proposed Monument Federal Well Locations in the Wells Draw, Castle Peak Draw, Pleasant Valley, & Pariette Bench Localities of Duchesne County, Utah. Report prepared for Equitable Resources Energy Company, BLCR-96-2, Archeological-Environmental Research Corporation, Bountiful.
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- 1998b Cultural Resource Evaluation of a Series of Potential Drilling Localities in the Castle Peak Draw Locality of Duchesne and Uintah Counties, Utah. Report prepared for Inland Resources, Inc., IPC-98-2, Archeological-Environmental Research Corporation, Bountiful.
- 1998c Cultural Resource Evaluation of a Series of Potential Drilling Localities in the Castle Peak Draw — Pariette Bench Localities of Duchesne and Uintah Counties, Utah. Report prepared for Inland Resources, Inc., IPC-98-3a, Archeological-Environmental Research Corporation, Bountiful.
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- 1995b Cultural Resource Evaluation of Nine Proposed Well Locations and Access Routes in the Castle Peak Draw and Eight Mile Flat Localities of Duchesne and Uintah Counties, Utah. Report prepared for Balcron Oil Company, BLCR-95-5, Archeological-Environmental Research Corporation, Bountiful.
- 1995c Cultural Resource Evaluation of a Series of Proposed Water Return Pipeline Routes in the Castle Peak Draw Locality of Duchesne County, Utah. Report prepared for Balcron Oil Company, BLCR-95-7, Archeological-Environmental Research Company, Bountiful.

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1989 Pariette Overlook -- A Paleo-Indian Quarry Site in the Pariette Draw Locality of Uintah County, Utah. AERC Paper No. 42 of the Archeological-Environmental Research Corporation, Bountiful.

Stokes, W.L.

1977 Physiographic Subdivisions of Utah. Map 43, Utah Geological and Mineral Survey, Salt Lake City.

Well name:	1-00 Inland CD 16-2-9-17	
Operator:	Inland	Project ID:
String type:	Surface	43-047-33240
Location:	Uintah Co.	

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

**Minimum design factors:**  
**Collapse:**  
Design factor 1.125

**Burst:**  
Design factor 1.00

**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: 262 ft

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

Cement top: 0 ft

**Burst**  
Max anticipated surface pressure: -2,574 psi  
Internal gradient: 9.018 psi/ft  
Calculated BHP 131 psi

No backup mud specified.

Non-directional string.

**Re subsequent strings:**  
Next setting depth: 300 ft  
Next mud weight: 8.400 ppg  
Next setting BHP: 131 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 300 ft  
Injection pressure 300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	300	8.625	24.00	J-55	ST&C	300	300	7.972	14.4

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	131	1370	10.47	131	2950	22.54	6	244	38.79 J

Prepared RJK  
by: Utah Dept. of Natural Resources

Date: January 3,2000  
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 300 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.  
In addition, burst strength is biaxially adjusted for tension.

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

Well name:	<b>1-00 Inland CD 16-2-9-17</b>	
Operator:	<b>Inland</b>	Project ID:
String type:	Production	43-047-33240
Location:	Uintah Co.	

**Design parameters:**

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

**Minimum design factors:**

**Collapse:**  
Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 166 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 300 ft

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.433 psi/ft  
Calculated BHP 2,813 psi

**Burst:**  
Design factor 1.00

Cement top: Surface

**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)

Non-directional string.

Tension is based on buoyed weight.  
Neutral point: 5,680 ft

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	6500	5.5	15.50	J-55	LT&C	6500	6500	4.825	203.7
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	2813	4040	1.44	2813	4812	1.71	88	217	2.46 J

Prepared RJK  
by: Utah Dept. of Natural Resources

Date: January 3,2000  
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 6500 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes.  
In addition, burst strength is biaxially adjusted for tension.

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

1-00 Inland CD 16-2-9-1

Casing Schematic

*Cement tops with  
1/2 hole washout*

Surface

8-5/8"  
MW 8.4  
Frac 19.3

TOC @  
0.  
TOC @  
0.  
Surface  
300. MD

*8%*

*12%*

5-1/2"  
MW 8.3

Production  
6500. MD



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

January 3, 2000

Inland Production Company  
P.O. Box 790233  
Vernal, UT. 84079

Re: Castle Draw 16-2-9-17 Well, 660' FSL, 660' FEL, SE SE, Sec. 2, T. 9 S., R. 17 E.,  
Uintah County, Utah

Gentlemen:

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

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33240.

Sincerely,

A handwritten signature in cursive script that reads "John R. Baza".

John R. Baza  
Associate Director

ecc

Enclosures

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

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: INLAND RESOURCES

Well Name: CASTLE DRAW 16-2-9-17

Api No.. 43-047-33240 Lease Type: STATE

Section 02 Township 09S Range 17E County UINTAH

Drilling Contractor UNION DRILLING RIG # 14

SPUDDED:

Date 03/06/2000

Time 7:30 PM

How DRY HOLE

Drilling will commence \_\_\_\_\_

Reported by PAT WISENER

Telephone # 1-435-823-7468

Date 03/06/2000 Signed: CHD

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**INLAND PRODUCTION COMPANY**

3. Address and Telephone No.

**Route 3 Box 3630 Myton, Utah 84052    435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

**660' FSL & 660' FEL    SE/SE  
Sec. 2.T 9S R 17E**

5. Lease Designation and Serial No.

**ML-45555**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**Castle Draw**

8. Well Name and No.

**#16-2-9-17**

9. API Well No.

**43-047-33240**

10. Field and Pool, or Exploratory Area

**MONUMENT BUTTE**

11. County or Parish, State

**Uintah County, Utah**

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

**TYPE OF SUBMISSION**

**TYPE OF ACTION**

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other **FORM 7**

Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Please find enclosed form 7 for water encountered.

**RECEIVED**

**MAR 15 2000**

**DIVISION OF  
OIL, GAS AND MINING**

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

Signed

*Pat Wisener*

Title

Drilling Foreman

Date

3/13/00

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

**CC: UTAH DOGM**

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**REPORT OF WATER ENCOUNTERED DURING DRILLING**

Well name and number: Castle Draw 16-2-9-17

API number: 43-047-33240

Well Location: QQ SE/SE Section 2 Township 9S Range 17E County UINTAH

Well Operator: INLAND PRODUCTION COMPANY

Address: Route 3 Box 3630

Myton, Utah 84052 Phone: 435-646-3721

Drilling Contractor: Union Drilling

Address: Drawer 40

Buckhannon, WV 26201 Phone: 304-472-4610

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
2100	2129'	Estimated @13.125 gals/HR	Fresh

Formation Tops: Surface ( Uinta ) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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

I hereby certify that this report is true and complete to the best of my knowledge. Date: 03/12/00

Name & Signature: *Pat W. ...* Time: 10:00 AM

# UNICHEM

A Division of BJ Services

P.O. Box 217  
Roosevelt, Utah 84066

Office (435) 722-5066  
Fax (435) 722-5727

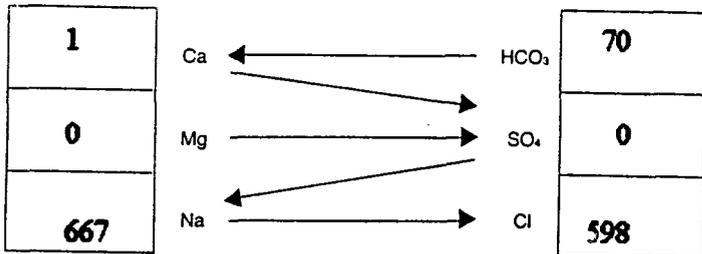
## WATER ANALYSIS REPORT

Company Inland Production Company Address \_\_\_\_\_ Date 3/9/00  
Source CD 16-2 Date Sampled \_\_\_\_\_ Analysis No. \_\_\_\_\_

Analysis	mg/l(ppm)	*Meg/l
1. PH	<u>9.3</u>	
2. H <sub>2</sub> S (Qualitative)	<u>1.0</u>	
3. Specific Gravity	<u>1.032</u>	
4. Dissolved Solids	<u>38,969</u>	
5. Alkalinity (CaCO <sub>3</sub> )	CO <sub>3</sub> <u>1,800</u>	÷ 30 <u>60</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )	HCO <sub>3</sub> <u>610</u>	÷ 61 <u>10</u> HCO <sub>3</sub>
7. Hydroxyl (OH)	OH <u>0</u>	÷ 17 <u>0</u> OH
8. Chlorides (Cl)	Cl <u>21,200</u>	÷ 35.5 <u>598</u> Cl
9. Sulfates (SO <sub>4</sub> )	SO <sub>4</sub> <u>0</u>	÷ 48 <u>0</u> SO <sub>4</sub>
10. Calcium (Ca)	Ca <u>16</u>	÷ 20 <u>1</u> Ca
11. Magnesium (Mg)	MG <u>2</u>	÷ 12.2 <u>0</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )	<u>50</u>	
13. Total Iron (Fe)	<u>1.6</u>	
14. Manganese		
15. Phosphate Residuals		

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meg/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>1</u>			<u>81</u>
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17				
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00		<u>69</u>		<u>5,796</u>
Na <sub>2</sub> SO <sub>4</sub>	71.03				
NaCl	58.46		<u>598</u>		<u>34,959</u>

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_

*Pat Wisner*



**PRODUCTION COMPANY**  
A Subsidiary of Inland Resources Inc.

March 13, 2000

**RECEIVED**

MAR 15 2000

**DIVISION OF  
OIL, GAS AND MINING**

*State of Utah  
Division of Oil, Gas & Mining  
Attn: Carol Daniels  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801*

*Dear Carol:*

*Please find enclosed Form 7, for the Castle Draw 16-2-9-17. If you have any questions feel free to call me @ 435-823-7468 cell, or 435-646-3721 office any time.*

*Sincerely,*

*PAT WISENER  
Drilling Foreman*

*Enclosures*

*pw*

STATE OF UTAH  
 DIVISION OF OIL, GAS AND MINING  
 ENTITY ACTION FORM - FORM 6

OPERATOR: INLAND PRODUCTION COMPANY  
 ADDRESS: RT. 3 BOX 3624  
MYTON, UT 84052

OPERATOR ACCT NO. N5160

ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	89999	12275	43-047-33240	Castle Draw 16-2-8-17	SESE	2	9S	17E	Uintah	March 6, 2000	
WELL 1 COMMENTS Union rig #14 spud at 7:30 am <i>Entity added 3/8/00 - Jmd.</i>											
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
WELL 2 COMMENTS											
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
WELL 3 COMMENTS											
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
WELL 4 COMMENTS											
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
WELL 5 COMMENTS											

ACTION CODES (See instructions on back of form)

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

*Core Mathisen*  
 Signature

Sr. Production Accounting Clerk March 8, 2000  
 Title Date

NOTE: Use COMMENT section to explain why each Action Code was selected



PRODUCTION COMPANY  
A Subsidiary of Inland Resources Inc.

March 13, 2000

State of Utah  
Division of Oil, Gas & Mining  
Attn: Carol Daniels  
1594 West North Temple - Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Dear Carol:

Please find enclosed Form 3160-5, for the Castle Draw 16-2-9-17. If you have any questions feel free to call me @ 435-823-7468 cell, or 435-646-3721 office any time.

Sincerely,

PAT WISENER  
Drilling Foreman

Enclosures

pw

RECEIVED  
MAR 17 2000  
DIVISION OF  
OIL, GAS AND MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

**ML-45555**

6. If Indian, Allottee or Tribe Name

**NA**

7. If Unit or CA, Agreement Designation

**Castle Draw**

8. Well Name and No.

**#16-2-9-17**

9. API Well No.

**43-047-33240**

10. Field and Pool, or Exploratory Area

**MONUMENT BUTTE**

11. County or Parish, State

**Uintah County, Utah**

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other

2. Name of Operator

**INLAND PRODUCTION COMPANY**

3. Address and Telephone No.

**Route 3 Box 3630 Myton, Utah 84052    435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

**660' FSL & 660' FEL    SE/SE  
Sec. 2.T 9S R 17E**

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

**TYPE OF SUBMISSION**

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

**TYPE OF ACTION**

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other **Spud Notice**

Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

MIRU UNION RIG # 14. Set equipment. Drill mouse hole & rat hole. **Spud well @ 7:30 AM 3/06/00.** Drill 17 1/4" hole and set 23' of 13 3/8" conductor. Nipple up cellar. Drill 12 1/4" hole with air mist to a depth of 345'. TIH w/ 8 5/8" J-55 csg. Landed @ 304.41'. Cement with \*141sks class "G" w/ 2% CaCL2 & 1/4#/sk Cello-flake mixed @ 15.8ppg.>1.17 YLD. Estimated 3 bbls cement to surface. WOC 4 hours. Break out & Nipple up BOP's. Pressure test Kelly, TIW, Choke manifold, & BOP's TO 2000 psi. Test 8 5/8" CSG. TO 1500 PSI. ALL TESTED GOOD. Vernal District BLM & Utah DOGM notified by phone. Drill 7 7/8" hole with water mist to a depth of 3821'. Drill 7 7/8" hole with water based mud to a depth of 5670'. Lay down drill string & BHA. Open hole log. PU & MU 67 jt's of 5 1/2" 15.5# J-55 & 65 jt's 15.5# K-55 csg. Set @ 5636.55'. Cement with \*250 sks Premlite II w/ 10% Gel & 3% KCL mixed @ 11.0 ppg >3.43 YLD. \* 400 sks 50/50 POZ w/ 2% GEL & 3% KCL mixed @ 14.4 ppg >1.24 YLD. Good circulation. Plug held. Nipple down BOP's and drop slips with 84,000 # string weight. Release rig 3:30 pm on 3/12/00. Wait on completion.

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

Signed

*Pat Wisener*

Title

**Drilling Foreman**

Date

**3/13/00**

(This space for Federal or State office use)

Approved by

Title

**MAR 17 2000**

Conditions of approval, if any:

**CC: UTAH DOGM**

**DIVISION OF**

**OIL, GAS AND MINERAL**

# INLAND PRODUCTION COMPANY - CASING & CEMENT REPORT

5 1/2" CASING SET AT 5636.55

LAST CASING 8 5/8" SET AT 304.41  
 DATUM 10' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 5661' LOGGER 5670'  
 HOLE SIZE 7 7/8'

OPERATOR INLAND PRODUCTION COMPANY  
 WELL Castle Draw #16-2-9-17  
 FIELD/PROSPECT NMB  
 CONTRACTOR & RIG # UNION RIG 14

**LOG OF CASING STRING:**

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		LANDING JT					12.4
65	5 1/2"	USED & INSPECTED LT&C	15.5	K-55	8rd	B	2786.25
66	5 1/2"	Maverick SC&T CSG	15.5	J-55	8rd	A	2800.06
		Float Collar ( auto fill )			8rd	A	0.6
1	5 1/2"	Maverick SC&T CSG	15.5	J-55	8rd	A	38.99
		SHOE - <b>GUIDE</b>			8rd	A	0.65

CASING INVENTORY BAL.	FEET	JTS	TOTAL LENGTH OF STRING	5638.95
TOTAL LENGTH OF STRING	5638.95	132	LESS CUT OFF PIECE	12.4
LESS NON CSG. ITEMS	13.65		PLUS DATUM TO T/CUT OFF CSG	10
PLUS FULL JTS. LEFT OUT	121.69	3	CASING SET DEPTH	<b>5636.55</b>

TOTAL	5746.99	135	} COMPARE
TOTAL CSG. DEL. (W/O THRDS)	5746.99	135	
TIMING	1ST STAGE	2nd STAGE	
BEGIN RUN CSG.	5:00AM		GOOD CIRC THRU JOB <u>YES</u>
CSG. IN HOLE	9:00AM		Bbls CMT CIRC TO SURFACE <u>6BBLS DYE WATER</u>
BEGIN CIRC	9:05AM		RECIPROCATED PIPE FOR <u>10 mins.</u> THRU <u>6'</u> FT STROKE
BEGIN PUMP CMT	9:53AM	10:14AM	DID BACK PRES. VALVE HOLD ? <u>yes</u>
BEGIN DSPL. CMT		10:36AM	BUMPED PLUG TO <u>2100</u> PSI
PLUG DOWN		<b>10:56AM</b>	

CEMENT USED	CEMENT COMPANY- <b>BJ</b>	
STAGE	# SX	CEMENT TYPE & ADDITIVES
1	250	Prem Lite II w/ 10% GEL & 3% KCL mixed to 11.0 ppg > 3.43 YLD
2	400	50/50 POZ w/ 2% GEL & 3% KCL mixed to 14.4 ppg > 1.24 YLD
3		

**CENTRALIZER & SCRATCHER PLACEMENT** SHOW MAKE & SPACING

1 on middle of first JT, 1 collar of the second & third JT. Then every third collar for a total of 20.



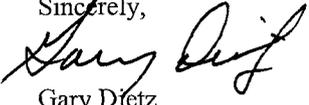
March 20, 2000

State of Utah  
Division of Oil, Gas & Mining  
Attn: Carol Daniels  
1594 West North Temple-Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

RECEIVED  
MAR 25 2000  
DIVISION OF  
OIL, GAS AND MINING

Dear Carol;

Please find enclosed Form 3160-5, for the Castle Draw 16-2-9-17. If you have any questions please call me at 435-823-4211 (CELL) or 435-646-3721 (OFFICE) any time.

Sincerely,  
  
Gary Dietz  
Completion Foreman

Enclosures

gd

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.  
**ML-45555**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Castle Draw 16-2-9-17**

9. API Well No.

43-047-33240

10. Field and Pool, or Exploratory Area

**Monument Butte**

11. County or Parish, State

Uintah County Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

**Inland Production Company**

3. Address and Telephone No.

**Rout #3 Box 3630 Myton, Utah 84052 435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

660' FSL & 660' FEL SE/SE Section 2, T9S, R17E

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

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other **Status report**

Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Status report for time period 3/13/00 through 3/19/00.  
Subject well had Completion procedures initiated on 3/18/00. No zones have been opened as of date.

*[Faint stamp: RECEIVED...]*

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

Signed

Gary Dietz

Title

**Completion Foreman**

Date

**20-Mar-00**

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

CC: Utah DOGM

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

\*See Instruction on Reverse Side



March 27, 2000

State of Utah  
Division of Oil, Gas & Mining  
Attn: Carol Daniels  
1594 West North Temple-Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

Dear Carol;

Please find enclosed Form 3160-5, for the Castle Draw 16-2-9-17. If you have any questions please call me at 435-823-4211 (CELL) or 435-646-3721 (OFFICE) any time.

Sincerely,

Gary Dietz  
Completion Foreman

Enclosures

gd

**RECEIVED**  
MAR 28 2000  
DIVISION OF  
OIL, GAS AND MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

**Inland Production Company**

3. Address and Telephone No.

**Rout #3 Box 3630 Myton, Utah 84052 435-646-3721**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)

660' FSL & 660' FEL SE/SE Section 2, T9S, R17E

5. Lease Designation and Serial No.

**ML-45555**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Castle Draw 16-2-9-17**

9. API Well No.

43-047-33240

10. Field and Pool, or Exploratory Area

**Monument Butte**

11. County or Parish, State

Uintah County Utah

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

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TYPE OF ACTION

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 Other **Status report**  
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 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Status report for time period 3/20/00 through 3/26/00.  
Subject well had 2 Green River zones perforated and hydraulically fractured. A third zone was perforated & broke down. Bridge plugs and sand plugs were removed from wellbore. Zones were swab tested to clean up sand. Production equipment was ran in well. Will begin producing on pump on 3/27/00.

**RECEIVED**

MAR 28 2000

DIVISION OF  
OIL, GAS AND MINING

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

Signed Gary Dietz Title **Completion Foreman** Date **27-Mar-00**

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:  
CC: Utah DOGM

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

\*See Instruction on Reverse Side



May 1, 2000

Mr. Dan Jarvis  
State of Utah  
Division of Oil, Gas and Mining  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Castle Draw #16-2-9-17  
Monument Butte Field, Castle Draw Unit, Lease #ML-45555  
Section 2-Township 9S-Range 17E  
Uintah County, Utah

UIC-259.1

Dear Mr. Jarvis:

Inland Production Company herein requests approval to convert the Castle Draw #16-2 from a producing oil well to a water injection well in the Monument Butte (Green River) Field.

I hope you find this application complete; however, if you have any questions or require additional information, please contact George Rooney at (303) 893-0102.

Sincerely,

NOTICE PREPARED

5/18/00

ED

VG



May 1, 2000

Mr. Dan Jarvis  
State of Utah  
Division of Oil, Gas and Mining  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

RE: Permit Application for Water Injection Well  
Castle Draw #16-2-9-17  
Monument Butte Field, Castle Draw Unit, Lease #ML-45555  
Section 2-Township 9S-Range 17E  
Uintah County, Utah

UIC-257.1

Dear Mr. Jarvis:

Inland Production Company herein requests approval to convert the Castle Draw #16-2 from a producing oil well to a water injection well in the Monument Butte (Green River) Field.

I hope you find this application complete; however, if you have any questions or require additional information, please contact George Rooney at (303) 893-0102.

Sincerely,

David Donegan  
Manager of Operations

**RECEIVED**  
MAY 08 2000  
DIVISION OF  
OIL, GAS AND MINING

**INLAND PRODUCTION COMPANY**  
**APPLICATION FOR APPROVAL OF CLASS II INJECTION WELL**  
**CASTLE DRAW #16-2**  
**CASTLE DRAW UNIT**  
**MONUMENT BUTTE (GREEN RIVER) FIELD**  
**LEASE #ML-45555**  
**MAY 1, 2000**

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STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR INJECTION WELL - UIC FORM 1

OPERATOR Inland Production Company  
ADDRESS 410 17th Street, Suite 700  
Denver, Colorado 80202

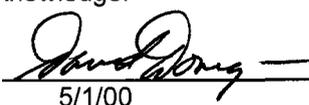
Well Name and number: Castle Draw #16-2-9-17  
Field or Unit name: Monument Butte (Green River) Castle Draw Unit Lease No. ML-45555  
Well Location: QQ SESE section 2 township 9S range 17E county Uintah

Is this application for expansion of an existing project? . . . . . Yes [ X ] No [ ]  
Will the proposed well be used for:   Enhanced Recovery? . . . . . Yes [ X ] No [ ]  
  Disposal? . . . . . Yes [ ] No [ X ]  
  Storage? . . . . . Yes [ ] No [ X ]  
Is this application for a new well to be drilled? . . . . . Yes [ ] No [ X ]  
If this application is for an existing well,  
has a casing test been performed on the well? . . . . . Yes [ ] No [ X ]  
Date of test: \_\_\_\_\_  
API number: 43-047-33240

Proposed injection interval: from 4526' to 5546'  
Proposed maximum injecti rate 500 bpd pressure 1660 psig  
Proposed injection zone contains [ x ] oil, [ ] gas, and/or [ ] fresh water within 1/2  
mile of the well.

IMPORTANT: Additional information as required by R615-5-2 should  
accompany this form.

List of Attachments: Attachments "A" through "H"

I certify that this report is true and complete to the best of my knowledge.  
Name: David Donegan Signature   
Title Manager of Operations Date 5/1/00  
Phone No. (303) 893-0102

(State use only)  
Application approved by \_\_\_\_\_ Title \_\_\_\_\_  
Approval Date \_\_\_\_\_

Comments:

# Castle Draw #16-2-9-17

Spud Date: 3/06/00  
 Put on Production: 3/27/00  
 GL: 5058.7' KB: 5968.7'

Initial Production: ?

## Proposed Injection Well Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (306.41')  
 DEPTH LANDED: 304.41' GL  
 HOLE SIZE: 12-1/4"

CEMENT DATA: 141 sxs Class "G" cmt w/ 2% caCl<sub>2</sub> &  
 1/4#/sk Cello-Flake @ 1.17 cf/sk & 15.8 ppg  
 3 bbl cement to surface

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55 & K-55  
 WEIGHT: 15.5#  
 LENGTH: 132 jts. (5625.3')  
 DEPTH LANDED: 5636.55' GL  
 HOLE SIZE: 7-7/8"

CEMENT DATA: 250 sxs Prem-Lite II w/ 10% Gel & 3% KCl  
 400 sxs 50/50 poz w/ 2% Gel & 3% KCl  
 6 bbl dye to sfc

### TUBING

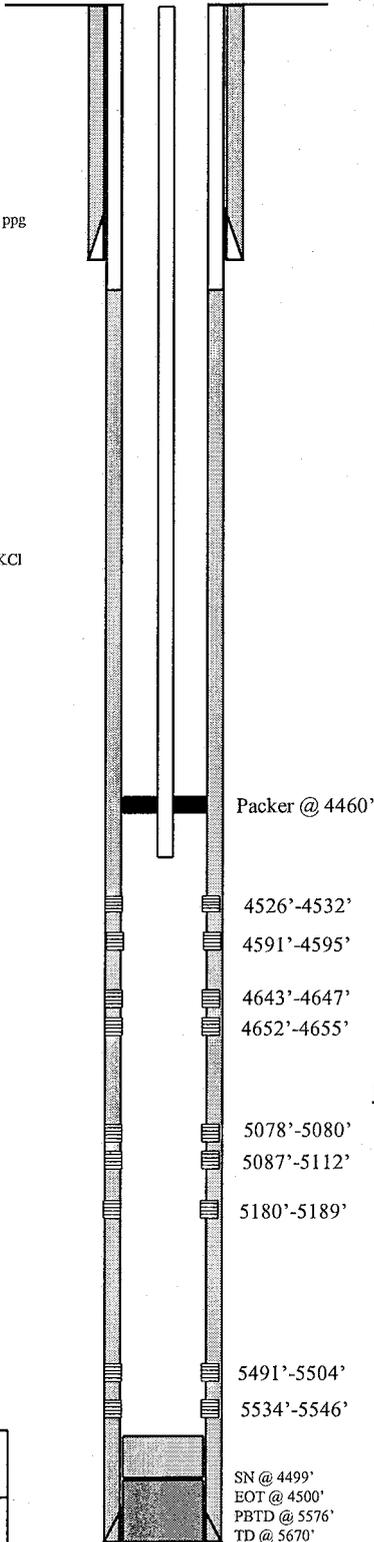
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 143 jts  
 PACKER: 4460'  
 SEATING NIPPLE: 2 - 7/8"  
 TOTAL STRING LENGTH: ? (EOT @ 4500')  
 SN LANDED AT: 4499'

### FRAC JOB

3/21/00 5491'-5546' **Frac CP sands as follows:**  
 69,588# of 20/40 sand in 481 bbls of  
 viking I-25. Breakdown @ 3182 psi.  
 Treated @ avg rate of 28.6 bpm w/avg  
 press of 1400 psi. ISIP-1680 psi, 5-min  
 1464 psi. Flowback on 12/64" ck for 5  
 hours and died.

3/23/00 5078'-5189' **Frac A/LDC sands as follows:**  
 96,787# of 20/40 sand in 584 bbls of  
 Viking I-25. Breakdown @ 2137 psi.  
 Treated @ avg rate of 31.5 bpm w/avg  
 press of 1600 psi. ISIP-2100 psi, 5-min  
 1950 psi. Flowback on 12/64" ck for 3  
 hours and died.

3/24/00 4526'-4595' **Break Down DS/D sand as follows:**  
 Break down 4591'-4595' perms down tbg  
 w/ hole full at 2000 psi. IR 1.7 BPM at  
 1700 psi. Break Down 4526'-4532' perms  
 down annulus at 2500 psi. IR 1.4 BPM  
 at 1750 psi.



Packer @ 4460'

4526'-4532'  
 4591'-4595'  
 4643'-4647'  
 4652'-4655'  
 5078'-5080'  
 5087'-5112'  
 5180'-5189'  
 5491'-5504'  
 5534'-5546'

### PERFORATION RECORD

Date	Interval	Type	Holes
3/20/00	5534'-5546'	4 JSPF	48 holes
3/20/00	5491'-5504'	4 JSPF	52 holes
3/22/00	5180'-5189'	4 JSPF	36 holes
3/22/00	5087'-5112'	2 JSPF	50 holes
3/22/00	5078'-5080'	4 JSPF	8 holes
3/24/00	4652'-4655'	4 JSPF	12 holes
3/24/00	4643'-4647'	4 JSPF	16 holes
3/24/00	4591'-4595'	4 JSPF	16 holes
3/24/00	4526'-4532'	4 JSPF	24 holes

SN @ 4499'  
 EOT @ 4500'  
 PBTD @ 5576'  
 TD @ 5670'



**Inland Resources Inc.**

**Castle Draw #16-2-9-17**

660' FSL 660' FEL

SESE Section 2-T9S-R17E

Uintah Co, Utah

API #43-047-33240; Lease #ML-45555

## WORK PROCEDURE FOR INJECTION CONVERSION

1. Rig up hot oil truck to casing. Pump water. Unseat pump. Flush rods. Trip out of hole with rods and pump.
2. Trip out of hole with tubing, breaking and doping every connection. Trip in hole with packer and tubing. Rig up water truck to casing. Pump packer fluid. Set packer.
3. Test casing and packer.
4. Rig down, move out.

**REQUIREMENTS FOR INJECTION OF FLUIDS INTO RESERVOIRS  
RULE R615-5-1**

1. **Operations to increase ultimate recovery, such as cycling of gas, the maintenance of pressure, the introduction of gas, water or other substances into a reservoir for the purpose of secondary or other enhanced recovery or for storage and the injection of water into any formation for the purpose of water disposal shall be permitted only by order of the Board after notice and hearing.**
2. **A request for agency action for authority for the injection of gas, liquified petroleum gas, air, water or any other medium into any formation for any reason, including but not necessarily limited to the establishment of or the expansion of waterflood projects, enhanced recovery projects, and pressure maintenance projects shall contain:**

**2.1 The name and address of the operator of the project.**

Inland Production Company  
410 17<sup>th</sup> Street, Suite 700  
Denver, Colorado 80202

**2.2 A plat showing the area involved and identifying all wells, including all proposed injection wells, in the project area and within one-half mile of the project area.**

See Attachment A

**2.3 A full description of the particular operation for approval is requested.**

Approval is requested to convert the Castle Draw #16-2 from a producing oil well to a water injection well in the Monument Butte (Green River) Field, Castle Draw Unit.

**2.4 A description of the pools from which the identified wells are producing or have produced.**

The proposed injection well will inject into the Green River Formation.

**2.5 The names, description and depth of the pool or pools to be affected.**

The injection zone is in the Green River Formation. In the Castle Draw #16-2 well, the proposed injection zone is from 4526' - 5546'. The confining strata directly above and below the injection zones are the top of the Garden Gulch formation and the Basal Carbonate. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

**2.6 A copy of a log of a representative well completed in the pool.**

The referenced log for the Castle Draw #16-2 is on file with the Utah Division of Oil, Gas and Mining.

- 2.7 A statement as to the type of fluid to be used for injection, its source and the estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water from the Johnson Water District supply line. The secondary type of fluid to be used for injection will be culinary water from the Johnson Water District commingled with produced water. The average estimated injection of fluids will be at a rate of 300 BPD, and the estimated maximum injection will be at a rate of 500 BPD.

- 2.8 A list of all operators and surface owners within one-half mile radius of the proposed project.**

See Attachment B.

- 2.9 An affidavit certifying that said operators or owners and surface owners within a one-half mile radius have been provided a copy of the petition for injection.**

See Attachment C.

- 2.10 Any additional information the Board may determine is necessary to adequately review the petition.**

Inland Production Company will supply any additional information requested by the Utah Division of Oil, Gas and Mining.

- 4.0 Establish recovery projects may be expanded and additional wells placed on injection only upon authority from the Board after notice and hearing or by administrative approval.**

This proposed injection well is on a State lease (Lease #ML-45555) in the Monument Butte (Green River) Field, and this request is for administrative approval.

**REQUIREMENTS FOR CLASS II INJECTION WELLS INCLUDING WATER DISPOSAL,  
STORAGE AND ENHANCED RECOVERY WELLS  
SECTION V – RULE R615-5-2**

1. **Injection well shall be completed, equipped, operated, and maintained in a manner that will prevent pollution and damage to any USDW, or other resources and will confine injected fluids to the interval approved.**
2. **The application for an injection well shall include a properly completed Form DOGM-UIC-1 and the following:**

- 2.1 **A plat showing the location of the injection well, all abandoned or active wells within a one-half mile radius of the proposed wells, and the surface owner and the operator of any lands or producing leases, respectively, within a one-half mile radius of the proposed injection well.**

See Attachments A and B.

- 2.2 **Copies of electrical or radioactive logs, including gamma ray logs, for the proposed well run prior to the installation of casing and indicating resistivity, spontaneous potential, caliper and porosity.**

All logs are on file with the Utah Division of Oil, Gas and Mining.

- 2.3 **A copy of a cement bond or comparable log run for the proposed injection well after casing was set and cemented.**

A copy of the cement bond log is on file with the Utah Division of Oil, Gas and Mining.

- 2.4 **Copies of logs already on file with the Division should be referenced, but need not be refiled.**

All copies of logs are on file with the Utah Division of Oil, Gas and Mining.

- 2.5 **A description of the casing or proposed casing program of the injection well and of the proposed method for testing the casing before use of the well.**

The casing program is 8-5/8", 24#, J-55 surface casing run to 304' GL, and 5-1/2" 15.5# J-55 casing run from surface to 5637' GL. A casing integrity test will be conducted at the time of conversion. See Attachment E.

- 2.6 **A statement as to the type of fluid to be used for injection, its source and estimated amounts to be injected daily.**

The primary type and source of fluid to be used for injection will be culinary water from the Johnson Water District supply line. The secondary type of fluid to be used for injection will be culinary water from the Johnson Water District commingled with produced water. The estimated average rate of injection will be 300 BPD, and the estimated maximum rate of injection will be 500 BPD.

- 2.7 **Standard laboratory analysis of the fluid to be injected, the fluid in the formation into which the fluid is being injected, and the compatibility of the fluids.**

See Attachment F, F-1, F-2, and F-3

**2.8 The proposed average and maximum injection pressures.**

The proposed average injection pressure will be approximately 1300 psig and the maximum injection pressure will not exceed 1660 psig.

**2.9 Evidence and data to support a finding that the proposed injection well will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter the fresh water strata.**

The minimum fracture gradient for the Castle Draw #16-2, for proposed zones (4526' - 5546') calculates at .737 psig/ft. The maximum injection pressures will be limited so as not to exceed this gradient. A step rate test will be performed periodically to ensure we are below parting pressure. The proposed maximum injection pressure is 1660 psig. See Attachment G through G-2.

**2.10 Appropriate geological data on the injection interval and confining beds, including the geologic name, lithologic description, thickness, depth, and lateral extent.**

In the Castle Draw #16-2, the injection zone (4526' - 5546') is in the Douglas Creek member of the Green River Formation. The reservoir is a very fine-grained sandstone with minor imbedded shale streaks. The estimated porosity is 13%. The Douglas Creek member is composed of porous and permeable lenticular calcareous sandstone and low porosity carbonates and calcareous shale. The porous and lenticular sandstone varies in thickness from 0-31' within the Monument Butte area. The stratum confining the injection zone is composed of tight, moderately calcareous, sandy lacustrine shale. All of the confining strata are impermeable, and will effectively seal off the oil, gas, and water of the injection zone from any strata directly above or below it.

**2.11 A review of the mechanical condition of each well within a one-half mile radius of the proposed injection well to assure that no conduit exists that could enable fluids to migrate up or down the wellbore and enter the improper intervals.**

See Attachments E through E-3.

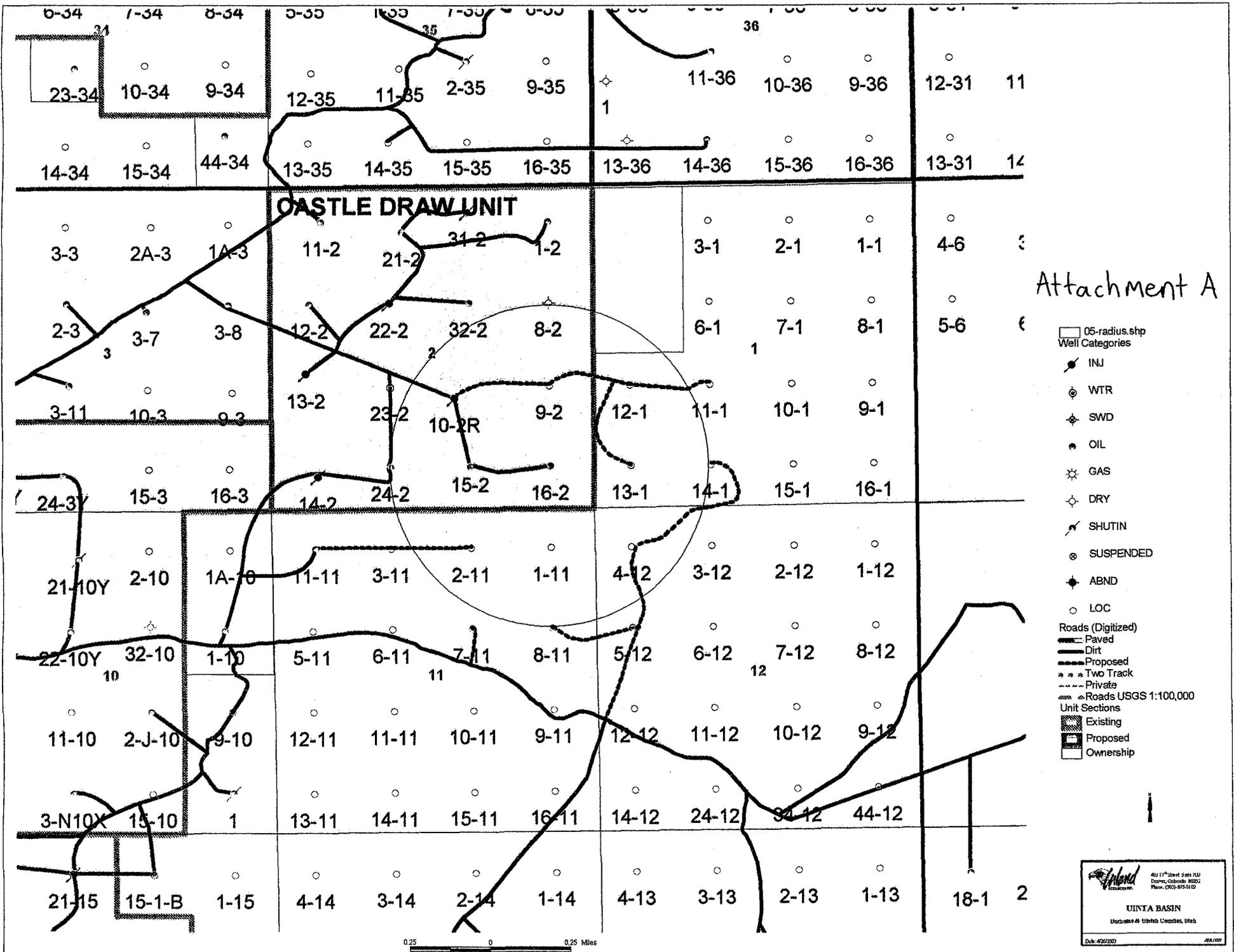
Additionally, the injection system will be equipped with high and low pressure shut down devices that will automatically shut in injection waters if a system blockage or leakage occurs. One way check valves will also ensure proper flow management. Relief valves will also be utilized for high-pressure relief.

**2.12 An affidavit certifying that a copy of the application has been provided to all operators or owners, and surface owners within a one-half mile radius of the proposed injection well.**

See Attachment C.

**2.13 Any other information that the Board or Division may determine is necessary to adequately review the application.**

Inland Production Company will supply any requested information to the Board or Division.



**CASTLE DRAW UNIT**

Attachment A

- 05-radius.shp
- Well Categories
  - INJ
  - ⊕ WTR
  - ⊕ SWD
  - OIL
  - ⊕ GAS
  - ⊕ DRY
  - ⊕ SHUTIN
  - ⊕ SUSPENDED
  - ⊕ ABND
  - LOC
- Roads (Digitized)
  - Paved
  - - - Dirt
  - - - Proposed
  - \* \* \* Two Track
  - - - Private
  - ⊕ Roads USGS 1:100,000
- Unit Sections
  - ▨ Existing
  - ▨ Proposed
  - Ownership

0.25 0 0.25 Miles

**Inland**  
 40 1/2" Steel Sigs RW  
 Denver, Colorado 80202  
 Phone: (303) 975-5100

**UINTA BASIN**  
 Uintah and Utah Counties, Utah

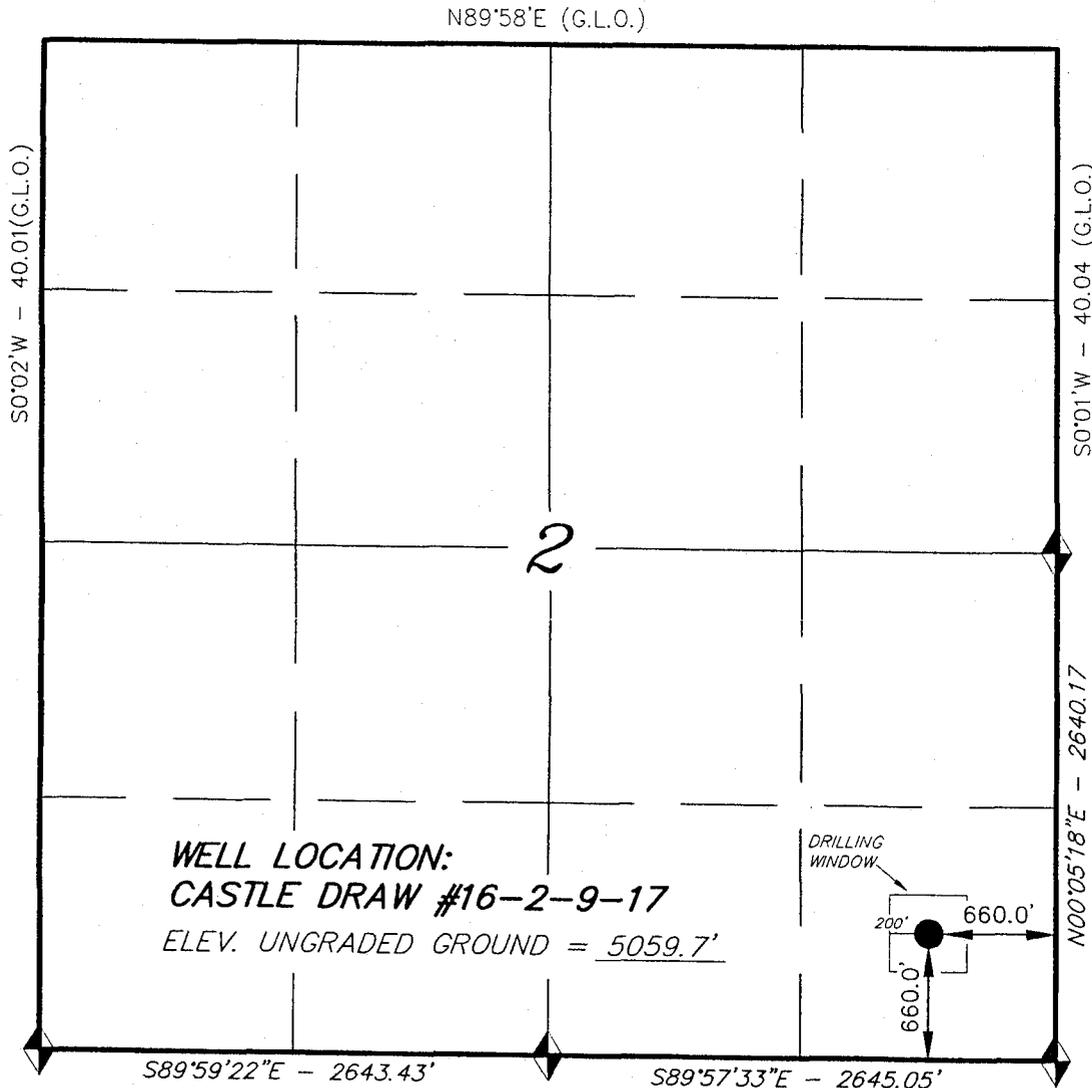
Date: 4/26/2000

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

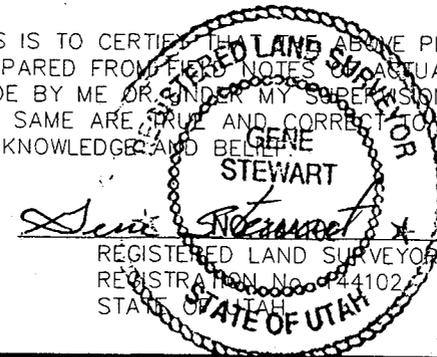
Attachment A-1

**INLAND PRODUCTION COMPANY**

WELL LOCATION, CASTLE DRAW #16-2-9-17,  
 LOCATED AS SHOWN IN THE SE 1/4 SE 1/4  
 OF SECTION 2, T9S, R17E, S.L.B.&M.  
 UINTAH COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE PLAT ABOVE 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.



**TRI STATE LAND SURVEYING & CONSULTING**

38 WEST 100 NORTH - VERNAL, UTAH 84078  
 (801) 781-2501

SCALE: 1" = 1000'	SURVEYED BY: D.S.
DATE: 10-4-98	WEATHER: WARM
REVISIONS: 10-12-98	FILE #

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

BASIS OF BEARINGS IS A GLOBAL POSITIONING SATELITE OBSERVATION

# Attachment B

Page 1

#	Land Description	Minerals Ownership & Expires	Minerals Leased By	Surface Rights
1	<u>Township 9 South Range 17 East</u> Section 2: All	ML-45555 HBP	Inland Production Company	(Surface Rights) State of Utah
2	<u>Township 9 South, Range 17 East</u> Section 1: Lots 1-3, S/2NE, SE/4NW/4 N/2S/2 Section 4: SE/4SE/4 Section 25: NE/4SW/4	UTU-65967 HBP	Inland Production Company Yates Petroleum Company ABO Petroleum Corporation Yates Drilling Company MYCO Industries	(Surface Rights) USA
3	<u>Township 9 South, Range 17 East</u> Section 1: Lot 4, SW/4NW/4	U-74871 11/2005	Wildrose Resources Corporation	(Surface Rights) USA

# Attachment B

Page 2

#	Land Description	Minerals Ownership & Expires	Minerals Leased By	Surface Rights
4	<u>Township 9 South, Range 17 East</u> Section 1: S/2S/2 Section 14: S/2NE/4, S/2 Section 23: E/2	U-64806 HBP	Inland Production Company Yates Petroleum Corporation ABO Petroleum Corporation Yates Drilling Company MYCO Industries	(Surface Rights) USA
5	<u>Township 9 South, Range 17 East</u> Section 10: W/2NE/4 Section 11: N/2 Section 24: All Section 31: SE/4SE/4	U-65210 HBP	Inland Production Company Yates Petroleum Corporation ABO Petroleum Corporation Yates Drilling Company MYCO Industries	(Surface Rights) USA
6	<u>Township 9 South, Range 17 East</u> Section 12: W/2NE/4	U-75234 HBP	Inland Production Company Yates Petroleum Corporation ABO Petroleum Corporation Yates Drilling Company MYCO Industries	(Surface Rights) USA

ATTACHMENT C

CERTIFICATION FOR SURFACE OWNER NOTIFICATION

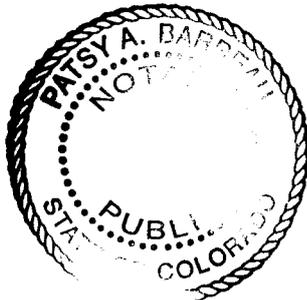
RE: Application for Approval of Class II Injection Well  
Castle Draw #16-2

I hereby certify that a copy of the injection application has been provided to all surface owners within a one-half mile radius of the proposed injection well.

Signed: David Donegan  
Inland Production Company  
David Donegan  
Manager of Operations

Sworn to and subscribed before me this 1st day of May, 2000.

Notary Public in and for the State of Colorado: Patsy A. Barreau



My Commission Expires 11/14/2000

# Attachment E

## Castle Draw #16-2-9-17

Spud Date: 3/06/00  
 Put on Production: 3/27/00  
 GL: 5058.7' KB: 5968.7'

Initial Production?:

Wellbore Diagram

**SURFACE CASING**

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (306.41')  
 DEPTH LANDED: 304.41' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 141 sxs Class "G" cmt w/ 2% caCl<sub>2</sub> &  
 1/4#/sk Cello-Flake @ 1.17 cf/sk & 15.8 ppg  
 3 bbl cement to surface

**PRODUCTION CASING**

CSG SIZE: 5-1/2"  
 GRADE: J-55 & K-55  
 WEIGHT: 15.5#  
 LENGTH: 132 jts. (5625.3')  
 DEPTH LANDED: 5636.55' GL  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 250 sxs Prem-Lite II w/ 10% Gel & 3% KCl  
 400 sxs 50/50 poz w/ 2% Gel & 3% KCl  
 6 bbl dye to sfc

**TUBING**

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 175 jts  
 TUBING ANCHOR: 5344'  
 SEATING NIPPLE: 2 - 7/8" (1.10')  
 TOTAL STRING LENGTH: ? (EOT @ 5502')  
 SN LANDED AT: 5377'

**SUCKER RODS**

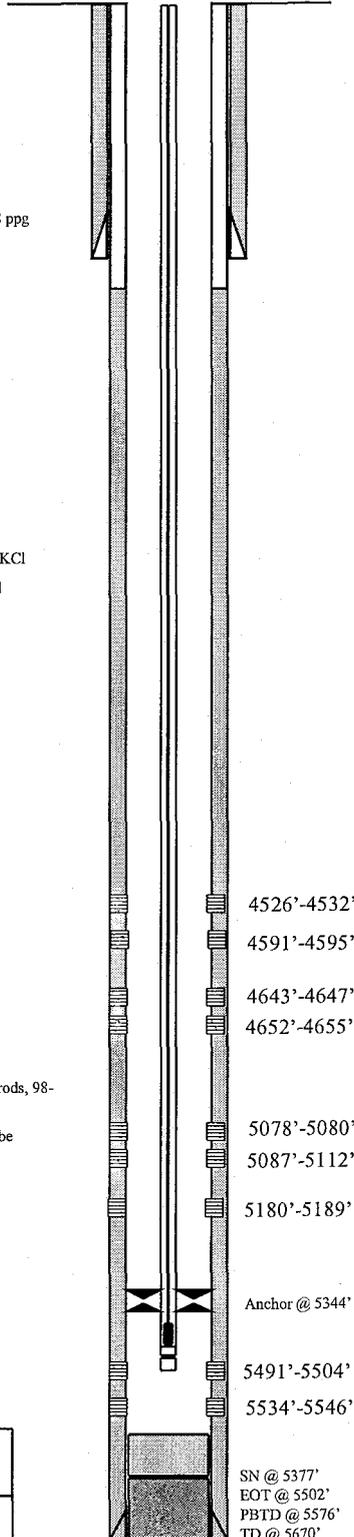
POLISHED ROD: 1-1/2" x 22'  
 SUCKER RODS: 1-8", 1-4", 1-2" x 3/4" pony rods 99-3/4" scraped rods, 98-3/4" slick rods, 13 3/4" scraped rods, 4 1-1/2" x 25' weight bars  
 PUMP SIZE: 2-1/2" x 1-1/2" x 14-1/2" RHAC rod pump w/ 10' diptube  
 STROKE LENGTH: 72"  
 PUMP SPEED, SPM: 6 SPM  
 LOGS: DIGL, SP, compensated density, caliper, neutron, GR

**FRAC JOB**

3/21/00 5491'-5546' **Frac CP sands as follows:**  
 69,588# of 20/40 sand in 481 bbls of viking I-25. Breakdown @ 3182 psi. Treated @ avg rate of 28.6 bpm w/avg press of 1400 psi. ISIP-1680 psi, 5-min 1464 psi. Flowback on 12/64" ck for 5 hours and died.

3/23/00 5078'-5189' **Frac A/LDC sands as follows:**  
 96,787# of 20/40 sand in 584 bbls of Viking I-25. Breakdown @ 2137 psi. Treated @ avg rate of 31.5 bpm w/avg press of 1600 psi. ISIP-2100 psi, 5-min 1950 psi. Flowback on 12/64" ck for 3 hours and died.

3/24/00 4526'-4595' **Break Down DS/D sand as follows:**  
 Break down 4591'-4595' perfs down tbg w/ hole full at 2000 psi. IR 1.7 BPM at 1700 psi. Break Down 4526'-4532' perfs down annulus at 2500 psi. IR 1.4 BPM at 1750 psi.



**PERFORATION RECORD**

Date	Interval	Tool	Holes
3/20/00	5534'-5546'	4 JSPF	48 holes
3/20/00	5491'-5504'	4 JSPF	52 holes
3/22/00	5180'-5189'	4 JSPF	36 holes
3/22/00	5087'-5112'	2 JSPF	50 holes
3/22/00	5078'-5080'	4 JSPF	8 holes
3/24/00	4652'-4655'	4 JSPF	12 holes
3/24/00	4643'-4647'	4 JSPF	16 holes
3/24/00	4591'-4595'	4 JSPF	16 holes
3/24/00	4526'-4532'	4 JSPF	24 holes



**Inland Resources Inc.**

**Castle Draw #16-2-9-17**

660' FSL 660' FEL

SESE Section 2-T9S-R17E

Uintah Co, Utah

API #43-047-33240; Lease #ML-45555

# Attachment E-1 Castle Draw #15-2

Spud Date: 2/27/00  
Put on Production: 3/25/00  
GL: 5066.5' KB: 5076.5'

Initial Production: ?

Wellbore Diagram

### SURFACE CASING

CSG SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 7 jts. (295.5')  
DEPTH LANDED: 307' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 141 sxs lass "G" w/ 2% CaCl2 & 1/4#/sk Cello-Flake  
2 bbl to surface

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
GRADE: J-55 & N-80  
WEIGHT: 15.5# (J-55) 17# (N-80)  
LENGTH: 133 jts. (5675')  
DEPTH LANDED: 5686' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 250 sxs Prem Lite II w/ 10% Gel & 3% LCI  
400 sxs 50/50 poz w/ 2% Gel & 3% KCl  
12 bbl dye water to surface

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
NO. OF JOINTS: 177 jts (5519')  
TUBING ANCHOR: 5403.2'  
SEATING NIPPLE: 2 - 7/8" (1.10')  
TOTAL STRING LENGTH: ? (EOT @ 5565')  
SN LANDED AT: 5438'

### SUCKER RODS

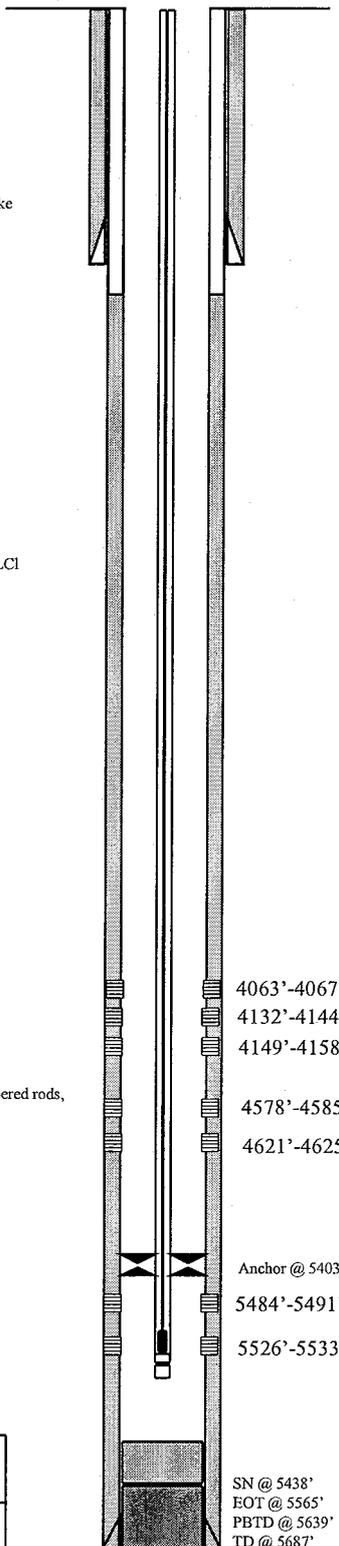
POLISHED ROD: 1-1/2" x 22'  
SUCKER RODS: 90-3/4" scraped, 112-3/4" plain rods, 10 3/4" scraped rods, 4-1-1/2" weight rods  
PUMP SIZE: 2-1/2" x 1-1/2" x 14.5 RHAC rod pump w/ 12" diptube  
STROKE LENGTH: 72"  
PUMP SPEED, SPM: 10 SPM  
LOGS: DIGL, Compensated Density Neutron, GR, Caliper

### FRAC JOB

3/21/00 5484'-5533' **Frac CP sand as follows:**  
78,192# of 20/40 sand in 504 bbls of Viking I-25. Breakdown @ 2300psi. Treated @ avg rate of 29.5 bpm w/avg press of 1500 psi. ISIP-1850 psi, 5-min 1698 psi. Flowback on 12/64" ck for 5 hours and died.

3/22/00 4578'-4585' **Break Down DS/D sand as follows:**  
Perfs broke at 1500 psi. IR 3.2 BPM @ 1200 psi. Lost 1 bbl fluid.

3/23/00 4063'-4158' **Frac GB sand as follows:**  
87,706# of 20/40 sand in 558 bbls of Viking I-25. Breakdown @ 2137 psi. Treated @ avg rate of 27 bpm w/avg press of 1800 psi. ISIP-2450 psi, 5-min 2272 psi. Flowback on 12/64" ck for 2-1/2 hours and died.



### PERFORATION RECORD

Date	Depth Range	Perforations	Holes
3/22/00	4063'-4067'	4 JSPF	16 holes
3/22/00	4132'-4144'	4 JSPF	48 holes
3/22/00	4149'-4158'	4 JSPF	36 holes
3/22/00	4578'-4585'	4 JSPF	28 holes
3/22/00	4621'-4625'	4 JSPF	16 holes
3/20/00	5484'-5491'	4 JSPF	28 holes
3/20/00	5526'-5533'	4 JSPF	28 holes



**Inland Resources Inc.**  
**Castle Draw #15-2**  
 661' FSL 1980' FNL  
 SWSE Section 2-T9S-R17E  
 Uintah Co, Utah  
 API #43-047-33239; Lease #ML-45555

# Attachment E-2 Castle Draw #10-2r

## Injection Diagram

Elev. - 5050' GR  
10' KB

### SURFACE CASING

SIZE: 9-5/8"  
GRADE: K-55  
WEIGHT: 36#  
LENGTH: 261.25' (6 jts)  
DEPTH LANDED: 290' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs class "G" + 2% CCI +  
1/4#/sk celloflake

### PRODUCTION CASING

SIZE: 5-1/2"  
GRADE: N-80  
WEIGHT: 17#  
LENGTH: 5779.79' (138 jts)  
DEPTH LANDED: 6149'  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 620 sx  
CEMENT TOP AT: 1850 CBL

### TUBING RECORD

KB: 10'  
SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
153 jnts @ 4035"  
SEAT NIPPLE: 2-7/8" X 1.10'  
CROSS OVER: 2-7/8" X 2-3/8" @ 0.42'  
SN @ 4813.55' KB  
RET CSG PACKER 2-3/8" X 6.20'  
MODEL: Arrow Set-1  
PACKER LANDED @ 4035'

### FRAC JOB

Date Unknown	5178'-5210'	41,100 gal Versagel, 94,000# sand
Date Unknown	4790'-4797'	24,660 gal Versagel, 56,000# sand
Date Unknown	4085'-4171'	28,630 gal Versagel, 88,000# sand



Packer @ 4035'

4085'-4083'  
4161'-4171'

4790'-97'

5178'-5210'

TD @ 6150' KB

### Perforation Record

5178'-5210'	65 shots
4790'-4797'	22 shots
4161'-4171'	7 shots
4085'-4093'	7 shots



Inland Resources Inc.

CASTLE DRAW #10-2R-9-17  
NW SE Section 2-T9S-R17E  
Lease #ML-45555  
Monument Butte Field  
Castle Draw Unit  
Uintah County, Utah

43-04-31195

# Attachment E-3 Monument State #24-2

Elev. - 5042' GL  
KB - 5052' KB (10')

Wellbore Diagram

**SURFACE CASING**

SIZE: 8-5/8"  
GRADE: J-55  
WEIGHT: 24#  
LENGTH: 253.9' (6 jts)  
DEPTH LANDED: 263.9' KB  
HOLE SIZE: 12-1/4"  
CEMENT DATA: 160 sxs class "G" + 2% CCI + 1/4#/sk celloflake

**PRODUCTION CASING**

SIZE: 5-1/2"  
GRADE: J-55  
WEIGHT: 15.5#  
LENGTH: 5669.77' (135 jts)  
DEPTH LANDED: 5678.77' KB  
HOLE SIZE: 7-7/8"  
CEMENT DATA: 230 sxs super class "G" + (47# class "G" + 20#Poz+17#CSE+1/4#celloseal+2#HSeal)/sk +3%salt + 2%gel. Tail w/ 223 sxs 50-50 POZ + 2%gel + (1/4# celloseal+2#HSeal)/sk

CEMENT TOP AT: 1852' KB

**TUBING RECORD**

SIZE/GRADE/WT.: 2-7/8" / 6.5# / J-55  
NO. OF JOINTS: 164 jts (5090.18')  
TUBING ANCHOR: 2.80' @ 5100.18' KB  
NO. OF JOINTS: 2 jts (62.26')  
SEATING NIPPLE: 1.1' @ 5165.24' KB

MUD ANCHOR: 1 jt - w/ NC 32.26'  
STRING LENGTH: EOT @ 5198.60' KB  
SN at: 5165.24' KB

**SUCKER ROD RECORD**

POLISHED ROD: 1-1/2" x 22'  
SUCKER RODS: 30 - 3/4" scraped (btm)  
167 - 3/4" x 25' D-16 Plain  
80 - 3/4" Scrapered (top)

Stoke Length: 74" SL  
Strokes/Minute: 5 SPM

PUMP SIZE: BHP 2-1/2 x 1-1/2 x 16' RHAC  
w/ SM plunger

**ACID JOB / BREAKDOWN JOB**

2/27/95 Western 5116'-5124' : 2814 gal 2% KCl wtr w/ 64 balls. balled off, ATR-5bpm, ATP-2600, ISIP-1900

3/2/95 Western 4078'-4114' : 2856 gal 2% KCl wtr, w/ 174 balls. Balled off. ATR-6bpm, ATP-3500, ISIP-1400

**FRAC JOB**

3/27/95 Western 5116'-24' : 2000gal 2% KCl pad, 15,876 gal 2% KCl w/ 17,740# 20/40 & 24,120# 16/30 sand, flush w/ 5040 gal 2% KCl wtr. ISIP-2800 ATP-3270, ATR-30.0bpm, 5min-2230, 10min-2020, 15min-1860, 30min-1540.

3/2/95 Western 4078'-4114' : 5000gal 2% KCl pad, 101,820# 16/30 sand w/ 27,594gal 2% KCl wtr. Flush w/ 3990gal 2% KCl. ATR-29.8bpm, ATP-2250, ISIP-2500, 5min-2350, 10min-2180, 15min-1880, 30min-1570

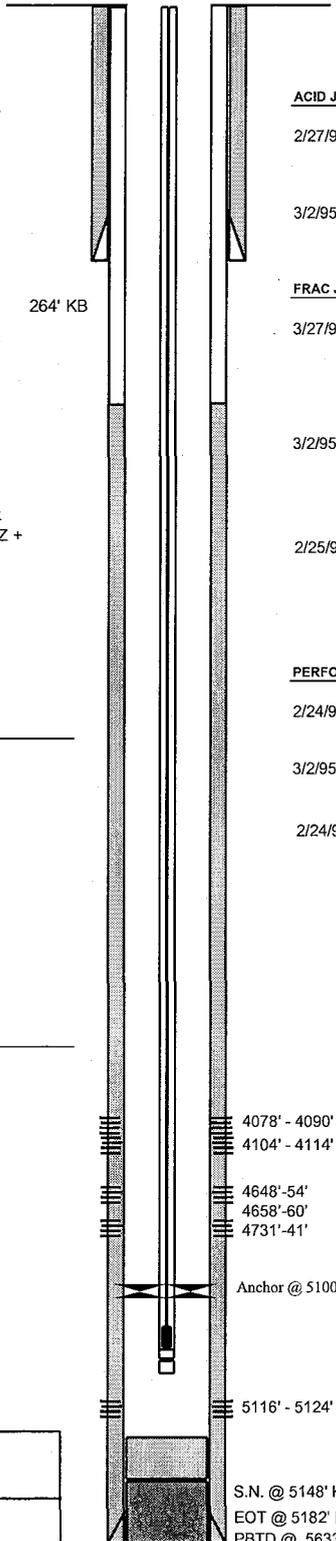
2/25/98 Halliburton 4648'-4741' : 102,400# 20/40 sand in 426 bbls Delta Frac. ATR - 26 BPM, ATP - 7000 psi, ISIP - 2065 psi, 5-min - 1956 psi

**PERFORATION RECORD**

2/24/95 Schlumberger 5116' - 5124' 4 SPF 8 ft 32 holes

3/2/95 Schlumberger 4078' - 4090' 4 SPF 12 ft 48 holes  
4104' - 4114' 4 SPF 10 ft 40 holes

2/24/98 HLS 4648'-4654' 4 SPF 24 holes  
4658'-4660' 4 SPF 8 holes  
4731'-4741' 4 SPF 40 holes



S.N. @ 5148' KB  
EOT @ 5182' KB  
PBD @ 5633' KB  
TD @ 5679' KB

**Inland Resources Inc.**

**BALCRON MONUMENT STATE #24-2**

**SW SE Sec.2 T9S R17E**

**Lease #ML-45555**

**Castle Draw Unit, Monument Butte Field**

**Uintah County, Utah**

43-047-32612

435 722 5727

# UNICHEM

A Division of BJ Services

## Attachment F

P.O. Box 217  
Roosevelt, Utah 84066

Office (435) 722-5066  
Fax (435) 722-5727

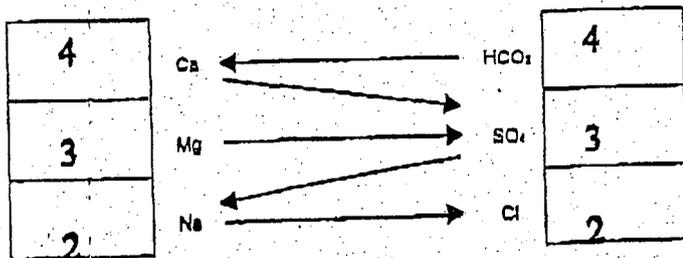
### WATER ANALYSIS REPORT

Company INLAND PRODUCTION Address \_\_\_\_\_ Date 1-27-00  
Source JOHNSON Data Sampled 1-26-00 Analysis No. \_\_\_\_\_

	Analysis	mg/l(ppm)	*Meq/l
1. PH	<u>7.4</u>		
2. H <sub>2</sub> S (Qualitative)	<u>0.5</u>		
3. Specific Gravity	<u>1.001</u>		
4. Dissolved Solids		<u>600</u>	
5. Alkalinity (CaCO <sub>3</sub> )		CO <sub>3</sub> <u>0</u>	+ 30 <u>0</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )		HCO <sub>3</sub> <u>240</u>	+ 61 <u>4</u> HCO <sub>3</sub>
7. Hydroxyl (OH)		OH <u>0</u>	+ 17 <u>0</u> OH
8. Chlorides (Cl)		Cl <u>71</u>	+ 35.5 <u>2</u> Cl
9. Sulfates (SO <sub>4</sub> )		SO <sub>4</sub> <u>130</u>	+ 48 <u>3</u> SO <sub>4</sub>
10. Calcium (Ca)		Ca <u>72</u>	+ 20 <u>4</u> Ca
11. Magnesium (Mg)		MG <u>41</u>	+ 12.2 <u>3</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )		<u>350</u>	
13. Total Iron (Fe)		<u>0.6</u>	
14. Manganese			
15. Phosphate Residuals			

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Eq. Wt.	X	Meq/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>4</u>			<u>324</u>
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17				
MgSO <sub>4</sub>	60.19	<u>3</u>			<u>181</u>
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	64.00				
Na <sub>2</sub> SO <sub>4</sub>	71.03				
NaCl	58.48	<u>2</u>			<u>117</u>

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS \_\_\_\_\_

Received Time Jan. 27. 5:28PM

# UNICHEM

A Division of BJ Services

P.O. Box 217  
Roosevelt, Utah 84088

Office (435) 722-5066  
Fax (435) 722-5727

Attachment F-1

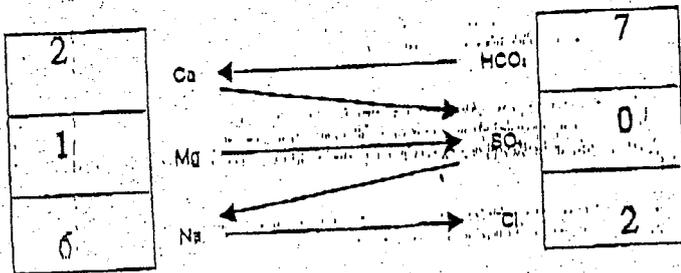
## WATER ANALYSIS REPORT

Company INLAND PRODUCTION Address \_\_\_\_\_ Date 8-25-99  
Source MBIF Date Sampled 8-25-99 Analysis No. \_\_\_\_\_

	Analysis	mg/l(ppm)	*Mg/l
1. PH	<u>8.0</u>		
2. H <sub>2</sub> S (Qualitative)	<u>0</u>		
3. Specific Gravity	<u>1.001</u>		
4. Dissolved Solids		<u>688</u>	
5. Alkalinity (CaCO <sub>3</sub> )		<u>0</u>	+ 30 <u>0</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )		<u>430</u>	+ 61 <u>7</u> HCO <sub>3</sub>
7. Hydroxyl (OH)		<u>0</u>	+ 17 <u>0</u> OH
8. Chlorides (Cl)		<u>71</u>	+ 35.5 <u>2</u> Cl
9. Sulfates (SO <sub>4</sub> )		<u>0</u>	+ 48 <u>0</u> SO <sub>4</sub>
10. Calcium (Ca)		<u>40</u>	+ 20 <u>2</u> Ca
11. Magnesium (Mg)		<u>12</u>	+ 12.2 <u>1</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )		<u>150</u>	
13. Total Iron (Fe)		<u>13</u>	
14. Manganese		<u>0</u>	
15. Phosphate Residuals			

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Saturation Values

CaCO<sub>3</sub>  
CaSO<sub>4</sub> · 2H<sub>2</sub>O  
MgCO<sub>3</sub>

Distilled Water 20°C

13 Mg/l  
2,090 Mg/l  
103 Mg/l

Compound	Eq. Wt.	X	Mg/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>2</u>			<u>162</u>
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	65.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	<u>1</u>			<u>73</u>
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00	<u>4</u>			<u>336</u>
Na <sub>2</sub> SO <sub>4</sub>	71.03				
NaCl	58.48	<u>2</u>			<u>117</u>

REMARKS \_\_\_\_\_

Received Time Aug. 25. 3:48PM

# UNICHEM

A Division of BJ Services

Attachment F-2

P.O. Box 217  
Roosevelt, Utah 84066

Office (435) 722-5066  
Fax (435) 722-5727

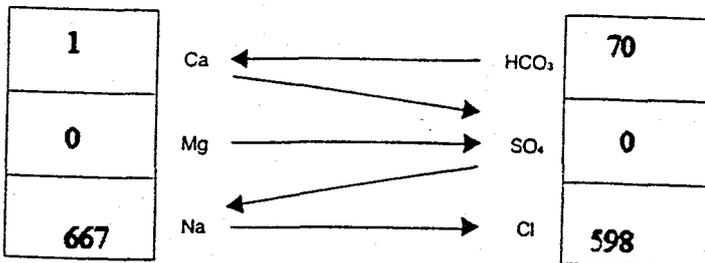
## WATER ANALYSIS REPORT

Company Inland Production Company Address \_\_\_\_\_ Date 3/9/00  
Source CD 16-2 Date Sampled \_\_\_\_\_ Analysis No. \_\_\_\_\_

Analysis	mg/l(ppm)	*Meg/l
1. PH	<u>9.3</u>	
2. H <sub>2</sub> S (Qualitative)	<u>1.0</u>	
3. Specific Gravity	<u>1.032</u>	
4. Dissolved Solids	<u>38,969</u>	
5. Alkalinity (CaCO <sub>3</sub> )	<u>1,800</u>	÷ 30 <u>60</u> CO <sub>3</sub>
6. Bicarbonate (HCO <sub>3</sub> )	<u>610</u>	÷ 61 <u>10</u> HCO <sub>3</sub>
7. Hydroxyl (OH)	<u>0</u>	÷ 17 <u>0</u> OH
8. Chlorides (Cl)	<u>21,200</u>	÷ 35.5 <u>598</u> Cl
9. Sulfates (SO <sub>4</sub> )	<u>0</u>	÷ 48 <u>0</u> SO <sub>4</sub>
10. Calcium (Ca)	<u>16</u>	÷ 20 <u>1</u> Ca
11. Magnesium (Mg)	<u>2</u>	÷ 12.2 <u>0</u> Mg
12. Total Hardness (CaCO <sub>3</sub> )	<u>50</u>	
13. Total Iron (Fe)	<u>1.6</u>	
14. Manganese		
15. Phosphate Residuals		

\*Milli equivalents per liter

### PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meg/l	=	Mg/l
Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	<u>1</u>	<u>81</u>		
CaSO <sub>4</sub>	68.07				
CaCl <sub>2</sub>	55.50				
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17				
MgSO <sub>4</sub>	60.19				
MgCl <sub>2</sub>	47.62				
NaHCO <sub>3</sub>	84.00	<u>69</u>	<u>5,796</u>		
Na <sub>2</sub> SO <sub>4</sub>	71.03				
NaCl	58.46	<u>598</u>	<u>34,959</u>		

Saturation Values	Distilled Water 20°C
CaCO <sub>3</sub>	13 Mg/l
CaSO <sub>4</sub> · 2H <sub>2</sub> O	2,090 Mg/l
MgCO <sub>3</sub>	103 Mg/l

REMARKS

*Pat Wister*

435 722 5727

## Attachment F-3

## AQUAMIX SCALING PREDICTIONS

COMPANY: INLAND PRODUCTION CO  
 LOCATION:  
 SYSTEM:

4-26-2000

WATER DESCRIPTION:	JOHNSON WATER	CD 16-2
P-ALK AS PPM CaCO <sub>3</sub>	0	3006
M-ALK AS PPM CaCO <sub>3</sub>	393	1000
SULFATE AS PPM SO <sub>4</sub>	130	0
CHLORIDE AS PPM Cl	71	21200
HARDNESS AS PPM CaCO <sub>3</sub>	0	0
CALCIUM AS PPM CaCO <sub>3</sub>	180	40
MAGNESIUM AS PPM CaCO <sub>3</sub>	169	8
SODIUM AS PPM Na	46	15344
BARIIUM AS PPM Ba	0	0
STRONTIUM AS PPM Sr	0	0
CONDUCTIVITY	0	0
TOTAL DISSOLVED SOLIDS	600	38969
TEMP (DEG-F)	100	100
SYSTEM pH	7.4	9.3

## WATER COMPATIBILITY CALCULATIONS

JOHNSON WATER AND CD 16-2

CONDITIONS: pH=8.4. TEMPERATURE ESTIMATED FROM COMPONENT WATERS.

WATER ONE IS JOHNSON WATER

% Water	STIFF DAVIS CaCO <sub>3</sub> INDEX	lbs/1000 BBL EXCESS CaCO <sub>3</sub>	mg/l BaSO <sub>4</sub> IN EXCESS OF SATURATION	mg/l SrO <sub>4</sub> IN EXCESS OF SATURATION	mg/l Gypsum IN EXCESS OF SATURATION
100	1.33	57	0	0	0
90	1.16	52	0	0	0
80	.97	45	0	0	0
70	.78	38	0	0	0
60	.68	32	0	0	0
50	.58	27	0	0	0
40	.47	21	0	0	0
30	.37	15	0	0	0
20	.27	10	0	0	0
10	.15	5	0	0	0
0	0	0	0	0	0

**Attachment "G"**

**Castle Draw #16-2-9-17  
Proposed Maximum Injection Pressure**

Frac Interval (feet)		Avg. Depth (feet)	ISIP (psi)	Calculated Frac Gradient (psi/ft)	Pmax
Top	Bottom				
5078	5189	5134	2100	0.842	2066
5491	5546	5519	1680	0.737	1660
				<b>Minimum</b>	<u><u>1660</u></u>

Calculation of Maximum Surface Injection Pressure  
 $P_{max} = (\text{Frac Grad} - (0.433 \times 1.005)) \times \text{Depth of Top Perf}$   
 where pressure gradient for the fresh water is .433 psi/ft and  
 specific gravity of the injected water is 1.005.

$\text{Frac Gradient} = (\text{ISIP} + (0.433 \times \text{Avg. Depth})) / \text{Avg. Depth}$



Attachment G-1

DAILY COMPLETION REPORT

WELL NAME: Castle Draw 16-2-9-17 Report Date: 3/24/00 Completion Day: 05

Present operation: Perf & breakdown DS/D sands Rig: Pennant #4

WELL STATUS

Surf Csg: 8 5/8 @ 304' KB Production csg: 5 1/2" 15.5# K-55 & 15.5# J-55 @ 5686' Csg PBTD: 5576'
Tbg: Size: 2 7/8 Wt: 6.5# Grd: J-55 Pkr/EOT: 0 BP/Sand PBTD: 5238'

PERFORATION RECORD

Table with 6 columns: Zone, Perfs, SPF/#shots, Zone, Perfs, SPF/#shots. Rows include A/LDC sds and CP sds with various depth ranges and shot counts.

CHRONOLOGICAL OPERATIONS

Date Work Performed: 23-Mar-00 SITP: SICIP: 0

NU isolation tool. RU BJ Services and frac A/LDC sds W/ 96,787# 20/40 sd in 584 bbls Viking I-25 fluid. Hole filled W/ 102 bbls. Perfs broke dn @ 2137 psi. Treated @ ave press of 1600 psi W/ ave rate of 31.5 BPM. ISIP-2100 psi, 5 min-1950 psi. RD BJ. Flow A/LDC frac back on 12/64" choke for 3 hrs & died. Rec 120 BTF (est 21% of load). ND isolation tool. TIH W/ RH & tbg. Tbg displaced 12 BTF on TIH. Tag sd @ 5151'. Rev circ out sd to RBP @ 5238'. Release plug. Pull up & re-set plug @ 4700'. Press test plug to 3000 psi. TOH W/ tbg & RH. SIFN W/ est 689 BWTR.

FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 237 Starting oil rec to date: 0
Fluid lost/recovered today: 452 Oil lost/recovered today: 0
Ending fluid to be recovered: 689 Cum oil recovered: 0
IFL: FFL: FTP: Choke: 12/64 Final Fluid Rate: Final oil cut:

STIMULATION DETAIL

COSTS

Base Fluid used: Viking I-25 Job Type: Sand frac
Company: BJ Services

Table with 2 columns: Cost Item, Amount. Items include Pennant rig (\$2,335), BOP (\$130), BJ Services--frac (\$29,921), Fuel gas (+/- 300mcf) (\$900), Frac tks (3 X 5 days) (\$150), IPC Supervision (\$200).

Procedure or Equipment detail:

- 3500 gals of pad
1000 gals W/ 1-5 ppg of 20/40 sand
12,000 gals W/ 5-8 ppg of 20/40 sand
3002 gals W/ 8-9 ppg of 20/40 sand
Flush W/ 5040 gals of slick water

Max TP: 2566 Max Rate: 32 BPM Total fluid pmpd: 584 bbls
Avg TP: 1600 Avg Rate: 31.5 BPM Total prop pmpd: 96,787#
ISIP: 2100 5 min: 1950 10 min: 15 min:

Completion Supervisor: Gary Dietz

DAILY COST: \$33,636
TOTAL WELL COST: \$229,111



Attachment G-2

DAILY COMPLETION REPORT

WELL NAME: Castle Draw 16-2-9-17 Report Date: 3/22/00 Completion Day: 03
Present operation: Set plug over CP/ Swab FL dn & perf A/LDC sds Rig: Pennant #4

WELL STATUS

Surf Csg: 8 5/8 @ 304' KB Production csg: 5 1/2" 15.5# K-55 & 15.5# J-55 @ 5686' Csg PBTD: 5576'
Tbg: Size: 2 7/8 Wt: 6.5# Grd: J-55 Pkr/EOT: 0 BP/Sand PBTD: 5576'

PERFORATION RECORD

Table with 6 columns: Zone, Perfs, SPF/#shots, Zone, Perfs, SPF/#shots. Rows include CP sds 5491-5504' (4/52) and CP sds 5534-5546' (4/48).

CHRONOLOGICAL OPERATIONS

Date Work Performed: 21-Mar-00 SITP: SICP: 0
NU isolation tool. RU BJ Services and frac CP sds W/ 69,588# 20/40 sand in 481 bbls Viking I-25 fluid. Hole filled W/ 116 bbls. Perfs broke dn @ 3182 psi. Treated @ ave press of 1400 psi W/ ave rate of 28.6 BPM. ISIP-1680 psi, 5 min-1464 psi. Flow CP sds back on 12/64" choke for 3 hrs & died. Recovered 125 BTF (est 26% of frac load). Pull isolation tool. SIFN W/ est 356 BWTR.

FLUID RECOVERY (BBLs)

Starting fluid load to be recovered: 0 Starting oil rec to date: 0
Fluid lost/recovered today: 356 Oil lost/recovered today: 0
Ending fluid to be recovered: 356 Cum oil recovered: 0
IFL: FFL: FTP: Choke: 12/64 Final Fluid Rate: Final oil cut:

STIMULATION DETAIL

Base Fluid used: Viking I-25 Job Type: Sand frac
Company: BJ Services
Procedure or Equipment detail:
3000 gals of pad
1000 gals W/ 1-5 ppg of 20/40 sand
8000 gals W/ 5-8 ppg of 20/40 sand
2760 gals W/ 8-9 ppg of 20/40 sand
Flush W/ 5460 gals of slick water

COSTS

Table with 2 columns: Item, Cost. Items include Pennant rig (\$1,778), BOP (\$130), BJ Services-frac (\$23,763), IPC Supervison (\$200).

Max TP: 2167 Max Rate: 29.2 BPM Total fluid pmpd: 481 bbls
Avg TP: 1400 Avg Rate: 28.6 BPM Total Prop pmpd: 69,588#
ISIP: 1680 5 min: 1464 10 min: 15 min:
Completion Supervisor: Gary Dietz

DAILY COST: \$25,871
TOTAL WELL COST: \$188,939

## ATTACHMENT H

### WORK PROCEDURE FOR PLUGGING AND ABANDONMENT

1. **Plug #1** Set 185' plug from 5391'-5576' with 32 sxs Class "G" cement.
2. **Plug #2** Set 261' plug from 4978'-5239' with 40 sxs Class "G" cement.
3. **Plug #3** Set 279' plug from 4426'-4705' with 42 sxs Class "G" cement.
4. **Plug #4** Set 200' plug from 2000'-2200' with 25 sxs Class "G" cement.
5. **Plug #5** Set 100' plug from 254'-354' with 15 sxs Class "G" cement. (50' on either side of casing shoe)
6. **Plug #6** Set 50' plug from surface with 10 sxs Class "G" cement
7. **Plug #7** Pump 50 sxs Class "G" cement down the 8-5/8" x 5-1/2" annulus to cement to surface.

# Attachment H-1

## Castle Draw #16-2-9-17

Initial Production:?

Spud Date: 3/06/00  
 Put on Production: 3/27/00  
 GL: 5058.7' KB: 5968.7'

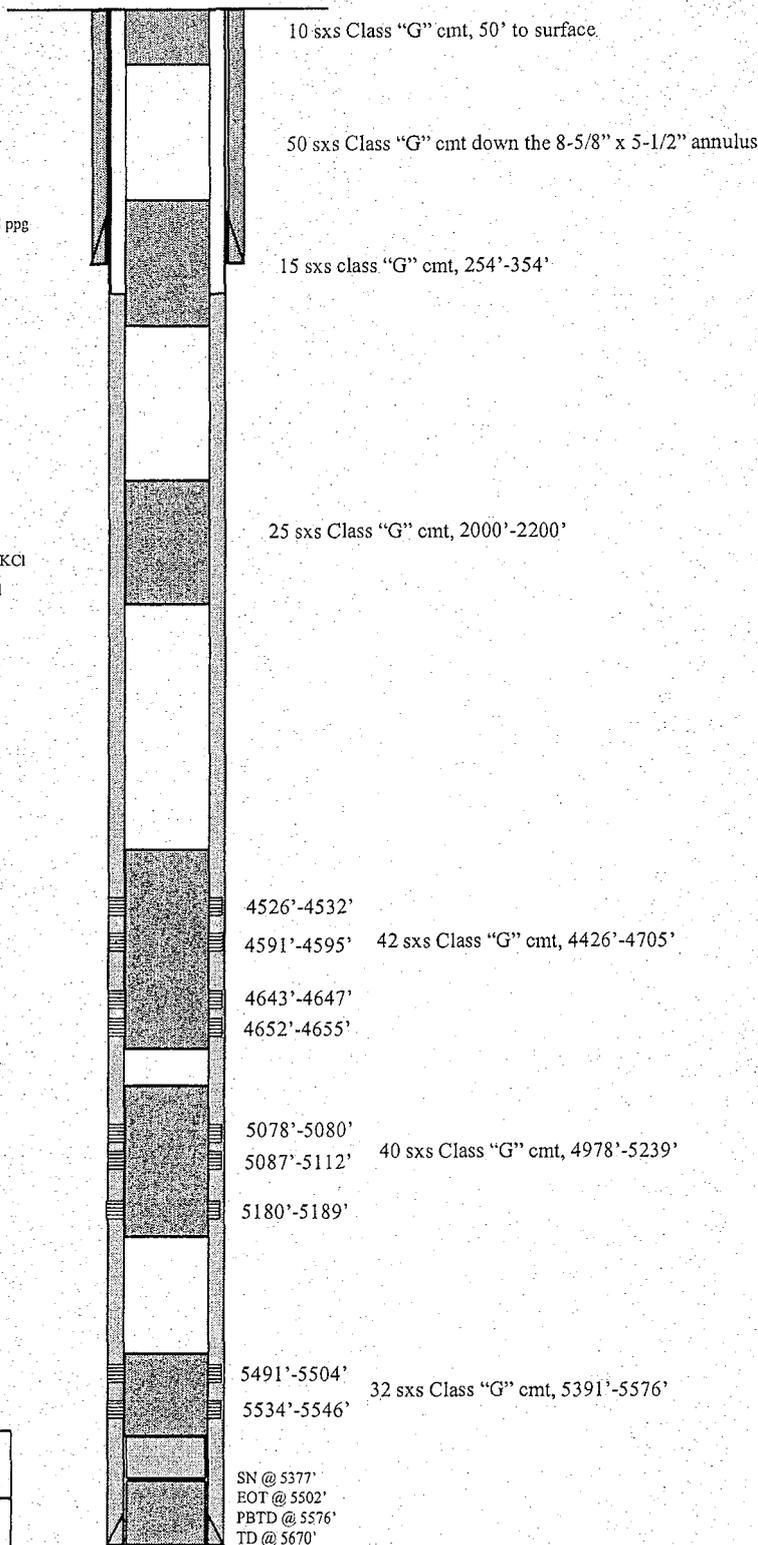
### SURFACE CASING

CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (306.41')  
 DEPTH LANDED: 304.41' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 141 sxs Class "G" cmt w/ 2% caCl, & 1/4#/sk Cello-Flake @ 1.17 cf/sk & 15.8 ppg  
 3 bbl cement to surface

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55 & K-55  
 WEIGHT: 15.5#  
 LENGTH: 132 jts. (5625.3')  
 DEPTH LANDED: 5636.55' GL  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 250 sxs Prem-Lite II w/ 10% Gel & 3% KCl  
 400 sxs 50/50 poz w/ 2% Gel & 3% KCl  
 6 bbl dye to sfc

Proposed P&A  
 Wellbore Diagram



 **Inland Resources Inc.**  
 Castle Draw #16-2-9-17  
 660' FSL 660' FEL  
 SESE Section 2-T9S-R17E  
 Uintah Co, Utah  
 API #43-047-33240; Lease #ML-45555

B

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

---ooOoo---

IN THE MATTER OF THE	:	NOTICE OF AGENCY
APPLICATION OF FOR	:	ACTION
ADMINISTRATIVE APPROVAL OF	:	
THE Castle Draw #16-2-9-17 WELL	:	CAUSE NO. UIC-257
LOCATED IN SECTION 2,	:	
TOWNSHIP 9S, RANGE 17E, Salt	:	
Lake Base , UINTAH COUNTY, UTAH,	:	
AS A CLASS II INJECTION WELL	:	

---ooOoo---

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

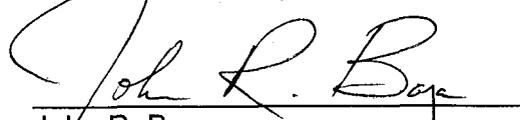
Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of Inland Production Company for administrative approval of the Castle Draw #16-2-9-17 well, located in Section 2, Township 9S, Range 17E, UINTAH County, Utah, for a Class II injection well. The proceeding will be conducted in accordance with Utah Admin. R649-10, Administrative Procedures.

Selective zones in the GREEN RIVER Formation will be used for water injection. The maximum requested injection pressure and rate will be determined on each individual well based on fracture gradient information submitted by Inland Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. If such a protest or notice of intervention is received, a hearing will be scheduled before the Board of Oil, Gas and Mining. Protestants and/or interveners should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this 19th day of May, 2000.

STATE OF UTAH  
DIVISION OF OIL, GAS & MINING



John R. Baza  
Associate Director, Oil & Gas

**Inland Production Company  
Castle Draw #16-2-9-17  
Cause No. UIC-257**

Publication Notices were sent to the following:

Inland Production Company  
410 Seventeenth Street, Suite 700  
Denver CO 80202

Vernal Express  
PO Box 1000  
Vernal, UT 84078-1000  
(VIA Fax 435-789-8690)

Salt Lake Tribune  
143 South Main  
Salt Lake City, UT 84111  
(VIA Fax 801-237-2776)

Vernal District Office  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

Inland Production Company  
Route 3, Box 3630  
Myton, UT 84052

Dan Jackson  
US EPA Region VIII, Suite 5000  
999 18th Street  
Denver, CO 80202-2466

  
Earlene Russell  
Secretary  
May 22, 2000



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

May 22, 2000

SENT VIA E-MAIL AND FAX

Salt Lake Tribune  
143 South Main  
Salt Lake City, UT 84111  
(VIA Fax 801-237-2776)

RE: Notice of Agency Action - Cause No. UIC-257

*Correction  
of  
County*

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

*Earlene Russell*  
Earlene Russell  
Secretary

encl.

*\* Do not use the one  
That says Duchesne*

TRANSACTION REPORT

P. 01

MAY-22-2000 MON 02:21 PM

FOR: OIL, GAS & MINING

801 359 3940

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
MAY-22	02:20	PM 2372776	44"	2	SEND	OK	639	
TOTAL :						44S	PAGES:	2



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
 Governor  
 Kathleen Clarke  
 Executive Director  
 Lowell P. Braxton  
 Division Director

1594 West North Temple, Suite 1210  
 PO Box 145801  
 Salt Lake City, Utah 84114-5801  
 801-538-5340  
 801-359-3940 (Fax)  
 801-538-7223 (TDD)

May 22, 2000

SENT VIA E-MAIL AND FAX

Salt Lake Tribune  
 143 South Main  
 Salt Lake City, UT 84111  
 (VIA Fax 801-237-2776)

RE: Notice of Agency Action - Cause No. UIC-257

*Correction of County*

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

TRANSACTION REPORT

P. 01

MAY-22-2000 MON 02:20 PM

FOR: OIL, GAS & MINING

801 359 3940

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
MAY-22	02:19 PM	14357898690	37"	2	SEND	OK	638	
TOTAL :						37S PAGES:	2	



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
 Governor  
 Kathleen Clarke  
 Executive Director  
 Lowell P. Braxton  
 Division Director

1594 West North Temple, Suite 1210  
 PO Box 145801  
 Salt Lake City, Utah 84114-5801  
 801-538-5340  
 801-359-3940 (Fax)  
 801-538-7223 (TDD)

May 22, 2000

SENT VIA FAX

Vernal Express  
 PO Box 1000  
 Vernal, UT 84078-1000  
 (VIA Fax 435-789-8690)

RE: Notice of Agency Action - Cause No. UIC-257

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,



**Inland Production Company  
Castle Draw #16-2-9-17  
Cause No. UIC-257**

Publication Notices were sent to the following:

Inland Production Company  
410 Seventeenth Street, Suite 700  
Denver CO 80202

~~Uintah Basin Standard  
268 South 200 East  
Roosevelt, UT 84066-3109  
(VIA Fax 435-722-4140)~~

Salt Lake Tribune  
143 South Main  
Salt Lake City, UT 84111  
(VIA Fax 801-237-2776)

Vernal District Office  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

Inland Production Company  
Route 3, Box 3630  
Myton, UT 84052

Dan Jackson  
US EPA Region VIII, Suite 5000  
999 18th Street  
Denver, CO 80202-2466

*Earlene Russell*

Earlene Russell  
Secretary  
May 22, 2000

TRANSACTION REPORT

P.01

MAY-22-2000 MON 11:26 AM

FOR: OIL, GAS & MINING

801 359 3940

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
MAY-22	11:25 AM	2372776	1' 33"	6	SEND	OK	628	

TOTAL : 1M 33S PAGES: 6



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

May 22, 2000

SENT VIA E-MAIL AND FAX

Salt Lake Tribune  
143 South Main  
Salt Lake City, UT 84111  
(VIA Fax 801-237-2776)

RE: Notice of Agency Action - Cause No. UIC-255

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

\*\*\*\*\*  
 \* P. 01 \*  
 \* TRANSACTION REPORT \*  
 \* MAY-22-2000 MON 11:28 AM \*  
 \* FOR: OIL, GAS & MINING 801 359 3940 \*  
 \* DATE START RECEIVER TX TIME PAGES TYPE NOTE M# DP \*  
 \* MAY-22 11:27 AM 14357224140 1'34" 6 SEND OK 629 \*  
 \* TOTAL : 1M 34S PAGES: 6 \*  
 \*\*\*\*\*



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
 Governor  
 Kathleen Clarke  
 Executive Director  
 Lowell P. Braxton  
 Division Director

1594 West North Temple, Suite 1210  
 PO Box 145801  
 Salt Lake City, Utah 84114-5801  
 801-538-5340  
 801-359-3940 (Fax)  
 801-538-7223 (TDD)

May 22, 2000

SENT VIA FAX

Uintah Basin Standard  
 268 South 200 East  
 Roosevelt, UT 84066-3109  
 (VIA Fax 435-722-4140)

RE: Notice of Agency Action - Cause No. UIC-257

Gentlemen:

Enclosed is a copy of the referenced Notice of Agency Action. Please publish the Notice, once only, as soon as possible. Please send proof of publication and billing to the Division of Oil, Gas and Mining, Suite 1210, PO Box 145801, Salt Lake City, Utah 84114-5801.

Sincerely,

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

---ooOoo---

IN THE MATTER OF THE :  
APPLICATION OF INLAND PRODUCTION COMPANY  
(operator)

NOTICE OF AGENCY  
ACTION

CAUSE NO. UIC- 257

FOR ADMINISTRATIVE APPROVAL :

OF THE \_\_\_\_\_ :

CASTLE DRAW 16-2-9-17 :

\_\_\_\_\_ WELLS

LOCATED IN SECTIONS 2

TOWNSHIP 9S,

RANGE 17E,

S.L.M. or U.S.M.

DUCHESENE COUNTY, UTAH,

AS CLASS II INJECTION WELLS

A

---ooOoo---

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE ENTITLED MATTER.

Notice is hereby given that the Division of Oil, Gas and Mining (the "Division") is commencing an informal adjudicative proceeding to consider the application of (operator - same as above) for administrative approval of the (same as above) well, located in Section (same as above), Township (same as above), Range (same as above), S.L.M. or U.S.M., (same as above) County, Utah, for conversion to Class II injection well. The proceeding will be conducted in accordance with Utah Admin. R.649-10, Administrative Procedures.

The GREEN RIVER Formation will be selectively perforated for water injection. The maximum injection pressure and rate will be determined on each individual well based on fracture gradient information submitted by Inland Production Company.

Any person desiring to object to the application or otherwise intervene in the proceeding, must file a written protest or notice of intervention with the Division within fifteen days following publication of this notice. If such a protest or notice of intervention is received, a hearing will be scheduled before the Board of Oil, Gas and Mining. Protestants and/or intervenors should be prepared to demonstrate at the hearing how this matter affects their interests.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 199\_\_.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NO.

ML-45555

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

7. UNIT AGREEMENT NAME

CASTLE DRAW

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

8. FARM OR LEASE NAME

CASTLE DRAW 16-2-9-17

2. NAME OF OPERATOR  
INLAND RESOURCES INC.

9. WELL NO.

16-2-9-17

3. ADDRESS OF OPERATOR  
410 17th St. Suite 700 Denver, CO 80202

10. FIELD AND POOL, OR WILDCAT

4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)\*

At surface  
SESE 660' FSL & 660' FEL

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Section 2, T09S R17E

At top prod. interval reported below

At total depth

14. API NO. 43-047-33240 DATE ISSUED 1/3/2000

12. COUNTY UINTAH 13. STATE UT

15. DATE SPUNDED 3/6/00 16. DATE T.D. REACHED 3/11/00 17. DATE COMPL. (Ready to prod.) or (Plug & Abd.) 3/27/00 18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 5059' GR 5069' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5670' TVD 21. PLUG BACK T.D., MD & TVD 5576' TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY -----> 23. INTERVALS ROTARY TOOLS X 23. INTERVALS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD) Green River 4526' - 5546' 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN DIGL/SP/GR/CAL - CN/CD/GR - CBL/CO/GP 27. WAS WELL CORED? YES  NO  (Submit analysis) DRILL STEM TEST? YES  NO  (See reverse side)

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24#	304'	12-1/4	141 sx Class "G"	
5-1/2	15.5#	5636'	7-7/8	250 sx Premium Lite & 400 sx 50/50 POZ	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8	EOT @ 5502'	TA @ 5344'

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

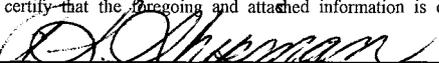
INTERVAL	SIZE	NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5491-5504 & 5534-5546'	4 SPF	100	5491-5546'	69,588# 20/40 sd in 481 bbls gelled water
5078-80'; 5087-5112' & 5180-5189'	4/2 1/4 SPF	94	5078-5189'	96,787# 20/40 sd in 584 bbls gelled water
4526-32, 4591-95, 4643-47 & 4652-55'	4 SPF	68		

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)	WELL STATUS (Producing or shut-in)					
3/27/00	2-1/2" x 1-1/2" x 14-1/2' RHAC	Producing					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF	WATER--BBL.	GAS-OIL RATIO
10 day avg 4/00	24		----->	95	91	3	958
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)	
		----->					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold & Used for Fuel TEST WITNESSED BY

35. LIST OF ATTACHMENTS  
Logs listed in item #26

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED  TITLE Operations Secretary DATE 5/5/00

See Spaces for Additional Data on Reverse Side

### INSTRUCTIONS

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.  
 ITEMS: 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instruction for items 22 and 24 above).

37. SUMMARY OF POROUS ZONES:

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

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP TRUE VERT. DEPTH
Garden Gulch Mkr	3673'					
Garden Gulch 2	3971'					
Point 3 Mkr	4223'					
X Mkr	4455'					
Y-Mkr	4489'					
Douglas Creek Mkr	4618'					
BiCarbonate Mkr	4861'					
B Limestone Mkr	4984'					
Castle Peak	5441'					
Basal Carbonate	NDE					
Total Depth	5670'					

RECEIVED

MAY 08 2000

DIVISION OF  
OIL, GAS AND MINING

CASTLE DRAW 16-2-9-17



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

July 19, 2000

Inland Production Company  
410 Seventeenth Street, Suite 700  
Denver, Colorado 80202

Re: Castle Draw Unit Well: Castle Draw 16-2-9-17, Section 2, Township 9 South, Range 17 East, Uintah County, Utah

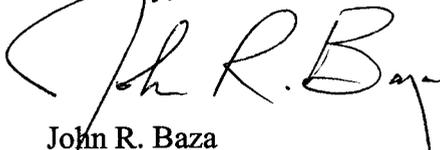
Gentlemen:

Pursuant to Utah Admin. Code R649-5-3-3, the Division of Oil, Gas and Mining (the "Division") issues its administrative approval for conversion of the referenced well to a Class II injection well. Accordingly, the following stipulations shall apply for full compliance with this approval:

1. Compliance with all applicable requirements for the operation, maintenance and reporting for Underground Injection Control ("UIC") Class II injection wells pursuant to Utah Admin. Code R649-1 et seq.
2. Conformance with all conditions and requirements of the complete application submitted by Inland Production Company.
3. A casing\tubing pressure test shall be conducted prior to commencing injection.

If you have any questions regarding this approval or the necessary requirements, please contact Brad Hill or Dan Jarvis at this office.

Sincerely,



John R. Baza  
Associate Director, Oil and Gas

cc: Dan Jackson, Environmental Protection Agency  
Bureau of Land Management, Vernal  
Inland Production Company, Myton  
SITLA, Salt Lake City

DIVISION OF OIL, GAS AND MINING  
UNDERGROUND INJECTION CONTROL PROGRAM

**PERMIT  
STATEMENT OF BASIS**

**Applicant:** Inland Production Company      **Well:** Castle Draw 16-2-9-17  
**Location:** 2/9S/17E      **API:** 43-047-33240

**Ownership Issues:** The proposed well is located on State land. The well is located in the Castle Draw Unit. Lands in the one-half mile radius of the well are administered by the State of Utah (SITLA) and the BLM. The State of Utah (SITLA) and the Federal Government are the mineral owners within the area of review. Inland and various other individuals hold the leases in the unit. Inland has provided a list of all surface, mineral and lease holders in the half-mile radius. Inland is the operator of the Castle Draw Unit. Inland has submitted an affidavit stating that all owners and interest owners have been notified of their intent.

**Well Integrity:** The proposed well has surface casing set at 304 feet and has a cement top at the surface. A 5 ½ inch production casing is set at 5637 feet and has a cement top at 915 feet. A cement bond log verifies adequate bond well above the injection zone. A 2 7/8 inch tubing with a packer will be set at 4460 feet. A mechanical integrity test will be run on the well prior to injection. There are 2 producing wells and 1 injection well in the area of review. All of the wells have adequate casing and cement. No corrective action will be required.

**Ground Water Protection:** According to Technical Publication No. 92 the base of moderately saline water is at a depth of approximately 100 feet. Injection shall be limited to the interval between 4526 feet and 5546 feet in the Green River Formation. Information submitted by Inland indicates that the fracture gradient for the 16-2-9-17 well is .737 psi/ft., which was the lowest reported fracture gradient for the injection zone. The resulting minimum fracture pressure for the proposed injection interval is 1660 psig. The requested maximum pressure is 1660 psig. The anticipated average injection pressure is 1500 psig. Injection at this pressure should not initiate any new fractures or propagate existing fractures in the adjacent confining intervals. Any ground water present should be adequately protected.

**Castle Draw 16-2-9-17**  
**page 2**

**Oil/Gas& Other Mineral Resources Protection:** The Castle Draw Unit was approved on October 25, 1995. Correlative rights issues were addressed at that time. Previous reviews in this area indicate that other mineral resources in the area have been protected or are not at issue.

**Bonding:** Bonded with SITLA

**Actions Taken and Further Approvals Needed:** A notice of agency action has been sent to the Salt Lake Tribune and the Uinta Basin Standard. A casing/tubing pressure test will be required prior to injection. It is recommended that Administrative approval of this application be granted.

Note: Applicable technical publications concerning water resources in the general vicinity of this project have been reviewed and taken into consideration during the permit review process.

Reviewer(s): Brad Hill

Date: 07/19/2000



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
Phone 800-227-8917  
<http://www.epa.gov/region08>

JUL 21 2004

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. David Gerbig  
Operations Engineer  
Inland Production Co.  
1401 Seventeenth Street - Suite 1000  
Denver, CO 80202

RECEIVED  
JUL 26 2004  
DIV. OF OIL, GAS & MINING

RE: ADDITIONAL WELL TO CASTLE DRAW  
AREA PERMIT UT20776-00000  
CASTLE DRAW NO. 16-2-9-17  
Well ID: 20776-04544  
SE SE Sec. 2 - T9S - R17E 43-047-33246  
Uintah County, Utah

Dear Mr. Gerbig:

The Inland Production Co.(Inland) request **to convert** a former Green River Formation oil well, the Castle Draw No. 16-2-9-17, to an enhanced recovery injection well in the Castle Draw Area Permit is hereby authorized. The proposed Castle Draw No. 16-2-9-17 Class II enhanced recovery injection well is within the exterior boundary of Castle Draw Area Permit UT20776-00000; is within the exterior boundary of the Uintah & Ouray Indian Reservation; and the addition is being made under the authority of 40 CFR § 144.33 (c) and the terms of the Area Permit. Unless specifically mentioned in the enclosed Authorization For An Additional Well, all terms and conditions of the original Area Permit will apply to the conversion, operation, monitoring, and plugging and abandonment of the Castle Draw No. 16-2-9-17.

Prior to beginning injection, the Environmental Protection Agency (EPA) requires that Inland submit for review and approval (1) the results of a **Part I (Internal) mechanical integrity test (MIT)**, (2) a **pore pressure** calculation of the injection interval, (3) an **EPA Form No. 7520-12 (Well Rework Record, enclosed)**.

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



Printed on Recycled Paper

Because the cement bond log submitted for this well did not show an adequate interval of annulus cement through the confining zone, the operator shall be required to demonstrate Part II (External) MIT within a 180-day Limited Authorization To Inject. This demonstration may be made by a Temperature Survey, Noise Log, or Oxygen Activation Log, and Region 8 may accept results from a Radioactive Tracer Survey under certain circumstances. A limited period of authorization to inject is for the purpose of stabilizing the injection zone prior to this demonstration.

Copies of Guidance 37 (Demonstrating Part II External Mechanical Integrity) and a Region 8 Guideline for Conducting a Temperature survey are enclosed.

Pursuant to Part II. Section C. Condition No. 5, (Injection Pressure Limitation), Castle Draw Area Permit UT20776-00000, the maximum initial surface injection pressure (MIP) shall not exceed 2137 psig. Using the minimum fracture gradient cited from two (2) sand/frac treatments (0.737 psi/ft) and the shallowest perforation, the EPA has calculated an MIP of 1336 psig, **rounded down to 1335 psig**. The Castle Draw Area Permit, Part II. C. 5., provides an opportunity for the permittee to request an increase, or decrease, in the initial maximum surface injection pressure.

Please be aware that Inland does not have authorization to begin injection into the Castle Draw No. 16-2-9-17 until the Prior to Commencing Injection requirements, listed above, have been submitted and evaluated by the EPA, and Inland has received written authorization to begin injection from the Assistant Regional Administrator, or the Assistant Regional Administrator's authorized representative.

If Inland Production Co. has any questions, please call Mr. Dan Jackson at (800) 227-8917 (Ext. 6155). Please submit the required pre-authorization to inject data to **ATTENTION: DAN JACKSON**, at the letterhead address, citing **MAIL CODE: 8P-W-GW** very prominently.

Sincerely,



Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and  
Regulatory Assistance

enclosures: EPA Form No. 7520-12 (Well Rework Record)  
Authorization For Conversion of An Additional Well  
Guidance No. 37: Mechanical Integrity (External)  
Temperature Survey Guidance

cc w/ enclosures: Maxine Natchees  
Chairperson  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Elaine Willie  
Environmental Coordinator  
Ute Indian Tribe

Chester Mills  
Superintendent  
Bureau of Indian Affairs  
Uintah & Ouray Indian Agency

Mike Guinn  
Vice President - Operations  
Inland Production Company

Gil Hunt  
Technical Services Manager  
State of Utah - Natural Resources

Jerry Kenczka  
Petroleum Engineer  
Bureau of Land Management  
Vernal District



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 8**

**999 18<sup>TH</sup> STREET - SUITE 300**

**DENVER, CO 80202-2466**

**Phone 800-227-8917**

**<http://www.epa.gov/region08>**

**AUTHORIZATION FOR AN ADDITIONAL WELL  
TO THE  
CASTLE DRAW AREA PERMIT: UT20776-00000**

The Environmental Protection Agency (EPA) authorizes the inclusion of an additional enhanced recovery injection well to the Castle Draw Area Permit No. UT20776-00000, as authorized by 40 CFR § 144.33 (c). The additional well is described as:

**WELL NAME: CASTLE DRAW NO. 16-2-9-17**

**WELL PERMIT NUMBER: UT20776-04544**

**SURFACE LOCATION: 660' FSL & 660' FEL (SE SE)  
Sec. 2 - T9S - R17E  
Uintah County, Utah.**

This well is subject to all provisions of the original Area Permit (UT20776-00000), and subsequent Modifications, unless specifically detailed below:

**UNDERGROUND SOURCE OF DRINKING WATER (USDW):** The base of the USDW in the Castle Draw No. 16-2-9-17 occurs within the Uinta Formation **approximately 60 feet** from ground level (GL). The source for the location of the base of the USDW is the STATE OF UTAH: PUBLICATION NO. 2. BASE OF MODERATELY SALINE GROUND WATER IN THE UINTA BASIN, UTAH. Surface casing was set at **304 feet** kelly bushing (KB) and cemented to the surface.

**CONFINING ZONE REVIEW: Castle Draw No. 16-2-9-17.**

The Garden Gulch Member of the Green River Formation was added as an injection zone, by Permit Modification on February 5, 1999. In the Castle Draw No. 16-2-9-17, the EPA identifies the confining zone directly overlying the top of the Garden Gulch as a 50-foot silty, black organic shale from 3622 feet to 3672 feet (CBL/GR). An EPA analysis of the Cement Bond Log/Gamma Ray (CBL/GR) indicates no annulus cement associated with the confining interval. In the Castle Draw No. 16-2-9-17, the top of the Garden Gulch Member is 3474 feet CBL/GR).



An EPA analysis of the Castle Draw No. 16-2-9-17 CBL/GR did not identify any 80% bond index cement bond within the Garden Gulch confining zone, pursuant to standards of Region 8 GROUND WATER SECTION GUIDANCE NO. 34: Cement Bond Logging Techniques and Interpretation. Therefore, it **has not been determined that the cement in this well provides an effective barrier** to significant upward movement of fluids through vertical channels adjacent to the wellbore, pursuant to 40 CFR 146.8 (a) (2). The permittee will be required to demonstrate Part II External Mechanical Integrity (MI) within a 180-day period of limited authorization to inject. Part II External MI may be demonstrated using a Temperature Log, Noise Log, or Oxygen Activation Log. Region 8 may accept the results of a Radioactive Tracer Survey (RATS) under certain circumstances ((See the enclosed GROUND WATER SECTION GUIDANCE NO. 37, Demonstrating Part II (External) Mechanical Integrity for a Class II Injection Well Permit)).

#### **INJECTION ZONE REVIEW: CASTLE DRAW NO. 16-2-9-17**

By Minor Permit Modification (February 5, 1999), the Castle Draw Area Permit identified the combined gross intervals of the Garden Gulch and Douglas Creek Members of the Green River Formation as the approved injection zone.

By a Major Permit Modification No. 2 (September 9, 2003), the gross Green River Formation enhanced recovery injection intervals are the Garden Gulch-Douglas Creek-Basal Carbonate Members. The Castle Draw No. 16-2-9-17 injection interval depth will be predicated on open/cased hole log correlations to the Federal No. 1-26, NE NW Sec. 26 - T8S - R17E, Uintah County, Utah. In the **Federal No. 1-26**, the top of the Garden Gulch is 4164 feet to the top of the Wasatch Formation at 6515 feet.

The gross correlative Green River Formation enhanced injection recovery interval for the Castle Draw No. 16-2-9-17 is from the Garden Gulch top of **3672 feet to the top of the Wasatch Formation (Estimated to be 6000 feet)**.

#### **WELL CONSTRUCTION REVIEW: CASTLE DRAW NO. 16-2-9-17**

**SURFACE CASING:** 8-5/8 inch casing is set at 304 feet in a 12-1/4 inch hole, using 141 sacks of Class "G" cement circulated to the surface. The base of the USDWs is approximately 60 feet from ground level.

**LONGSTRING CASING:** 5-1/2 inch casing is set at 5636 feet ground level (GL) in a 7-7/8 inch hole, and cemented with 250 sacks of Premium Lite and 400 sacks of 50/50 Pozmix cement with additives.

The operator does not identify the top of cement.

The EPA analysis of the CBL/GR shows the shallowest interval of 80% cement bond index is from 3785 feet to 3824 feet in the Garden Gulch Member.

## **PART II. A. CONSTRUCTION REQUIREMENTS FOR ADDITIONAL WELLS**

### Tubing and Packer:

(Condition 3)

For injection purposes, the **Castle Draw No. 16-2-9-17** will be equipped with 2-7/8 tubing with a packer to be set at a depth no higher than 100 feet above the top perforation.

### Formation Testing and Logging

(Condition 6)

- (a) Upon conversion of the **Castle Draw No. 16-2-9-17**, the permittee is required to determine the injection zone **fluid pore pressure** (static bottom hole pressure) prior to commencement of enhanced recovery injection operation. The results of this test shall be submitted to the EPA.
- (b) A **Step-Rate Test (SRT)** shall be performed on the **Castle Draw No. 16-2-9-17** within three (3) to six (6) months after injection operations are initiated. The results shall be submitted to the EPA. The permittee will contact the EPA prior to conducting the SRT to acquire the most current Guidance for conducting the SRT.

## **PART II. B.**

### Corrective Action

As of July 2004, there are three (3) Green River oil wells, and one (1) staked Green River Formation location (No. 1-11-9-17) within, or proximate to the one-quarter (1/4) mile radius around the Castle Draw No. 16-2-9-17. No wells need Corrective Action.

### Garden Gulch-Douglas Creek Members Oil Wells:

#### Federal No. 13-1-9-17:

SW SW Sec. 1 - T9S - R17E

Top Garden Gulch Member:	3658 feet
Garden Gulch Confining Zone:	3576 feet to 3658 feet
Top 80% EPA Cement Bond:	3753 feet to 3853 feet

The 82-foot confining shale (3576 feet to 3658 feet) overlying the top of the Garden Gulch Member (3658 feet) is not protected by 80% bond index cement bond. This lack of confining zone annulus cement may not prevent upward movement of injected fluids through vertical channels adjacent to the well bore. The permittee will be required to inspect the surface of this location for fluid leaks

on a weekly basis. **Any observation of surface leakage may be considered as noncompliance with the Castle Draw No. 16-2-9-17 Permit.** The Castle Draw No. 16-2-9-17 will suspend operations immediately, and will stay suspended until the noncompliance has been resolved, and renewed injection has been approved in writing by the Director.

**Castle Draw No. 15-2:**

**SW SE Sec. 2 - T9S - R17E**

Top Garden Gulch Member:	3672 feet
Garden Gulch Confining Zone:	3614 feet to 3672 feet
Top 80% EPA Cement Bond:	3893 feet to 40787feet

The 58-foot confining shale (3614 feet to 3672 feet) overlying the top of the Garden Gulch Member (3672 feet) is not protected by 80% bond index cement bond. The lack of confining zone annulus cement may not prevent upward movement of injected fluids through vertical channels adjacent to the wellbore. The permittee will be required to inspect the surface of this well for injectate leaks on a weekly schedule. **Any observation of injectate leakage may be considered as noncompliance with the Castle Draw No. 16-2-9-17 Permit.** The Castle Draw No. 16-2-9-17 will suspend operations immediately, and will stay suspended until the noncompliance has been resolved and renewed injection has been approved in writing by the Director.

**Douglas Creek member Oil Well:**

**Castle Draw No. 9-2-9-17:**

**NE SE Sec. 2 - T9S - R17E**

Top Garden Gulch Member:	3687 feet
Garden Gulch Confining Zone:	3638 feet to 3687 feet
Top 80% EPA Cement Bond:	2836 feet to 4180 feet

The 49-foot confining shale (3638 feet to 3687 feet) overlying the top of the Garden Gulch Member (3687 feet) is protected by 80% bond index cement bond, i.e., 2836 feet to 4180 feet. The permittee will not be required to inspect the surface of this well for injectate leaks in a proscribed schedule. **Any observation of injectate leakage may be considered as noncompliance with the castle Draw No. 16-2-9-17 Permit.** The Castle Draw No. 16-2-9-17 will suspend operations immediately, and will stay suspended until the noncompliance has been resolved and renewed injection has been approved in writing by the Director.

**Staked Location:**

**No. 1-11-9-17**

**NE NE Sec. 11 - T9S - R17E**

**PART II. C.**Prior to Commencing Injection (Additional Wells)

(Condition 2)

**Castle Draw No. 16-2-9-17: This document is being issued without authority to inject.** Prior to beginning injection, the operator is required to submit the following information for EPA review and written approval:

- A successful **mechanical integrity test (MIT)** demonstrating Part I (Internal) MI (Enclosed),
- a **pore pressure calculation** of the proposed injection zone; and an
- EPA Form No. 7520-12 (**Well Rework Record**, enclosed).

**Confirmation that the injectate will be confined to the authorized injection zone: It has not been determined that the annulus cement in this well provides an effective barrier to significant upward movement of fluids through vertical channels adjacent to the wellbore (Part II MI), pursuant to 40 CFR 146.8 (a) (2). Within a 180-day LIMITED AUTHORIZATION TO INJECT PERIOD, the permittee shall demonstrate Part II MI. Part II MI may be demonstrated by using methods as described in the enclosed GROUND WATER SECTION GUIDANCE NO. 37: Demonstrating Part II (External Mechanical Integrity for a Class II Injection Well Permit).**

Please be advised that all tests will be conducted following current EPA Guidelines. Deviations from those Guidelines, without written approval of the Director, may result in denial of the survey/test.

Injection Interval

(Condition 3)

Injection shall be limited to the **gross Garden Gulch, Douglas Creek and Basal Carbonate Members of the Green River Formation, 3672 feet (KB) to the top of the Wasatch Formation, estimated to be 6000 feet.**

Injection Pressure Limitation

(Condition 4)

Pursuant to Final Area Permit UT20776-00000, Part II. Section C. 5. (b). the maximum surface injection pressure (MIP) shall not exceed 2137psig. Until such time that a step-rate injectivity test (SRT) has been performed, reviewed, and approved by the EPA, the initial maximum surface injection pressure (MIP) for the **Castle Draw No. 16-2-9-17** shall not exceed **1335 psig.**

$$\text{MIP} = [\text{FG} - (0.433)(\text{SG}) \text{D}]$$

$$\text{FG} = 0.737 \text{ psi/ft. Minimum value of three (3) sand/frac treatments}$$

$$\text{SG} = 1.005$$

$$\text{D} = 4526 \text{ feet. Top perforation.}$$

$$\text{MIP} = [0.737 - (0.433)(1.005) 4526]$$

$$\text{MIP} = 1336 \text{ psig but reduced to } \underline{1335 \text{ psig.}}$$

Final Area Permit (UT20776-00000), has a provision whereby the operator may request an increase, or decrease, in the maximum surface injection pressure.

#### **PART II. F.**

##### Demonstration of Financial Responsibility:

(Condition 1)

The applicant has chosen to demonstrate financial responsibility via a Financial Statement that has been reviewed and approved by the EPA.

#### **PART III. E.**

##### Reporting of Noncompliance:

(Condition 10)

- (a) Anticipated Noncompliance. The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) Compliance Schedules. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted **no later than thirty (30) days following each schedule date.**
- (c) Written Notice of any noncompliance which may endanger health or the environment **shall be reported to the Director within five (5) days** of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.

Twenty-Four Hour Noncompliance Reporting:

(Condition 11)

The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1.800.227-8917 and asking for the **EPA Region VIII UIC Program Compliance and Enforcement Director**, or by contacting the **Region VIII Emergency Operations Center at 303.293.1788** if calling from outside EPA Region VIII. The following information shall be included in the verbal report:

- (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.
- (b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

Oil Spill and Chemical Release Reporting:

(Condition 12)

The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the **National Response Center (NRC) 1.800.424.8802 or 202.267.2675**, or through the NRC website at <http://www.nrc.uscg.mil/index.htm>.

Other Noncompliance:

(Condition 13)

The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part III. 10. c. ii. of this Permit.

Other Information: Where the operator becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application, or in any report to the Director, the operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

**APPENDIX C**

PLUGGING AND ABANDONMENT: The Plugging and Abandonment (P&A) Plan (Application Attachment Q-2) submitted by the applicant has been reviewed and modified (Plug No. 7) by the EPA. The P&A Plan is now consistent with EPA requirements to protect all USDWs. The permittee will place 9.2 ppg plugging gel or bentonite mud between all cement plugs.

PLUG NO. 1: Set a cement plug inside of the 5-1/2 inch casing from 5391 feet to 5576 feet.

PLUG NO. 2: Set a cement plug inside of the 5-1/2 inch casing from 4978 feet to 5239 feet.

PLUG NO. 3: Set a cement plug inside of the 5-1/2 inch casing from 4426 feet to 4705 feet.

PLUG NO. 4: Set a cement plug inside of the 5-1/2 inch casing from 2000 feet to 2200 feet.

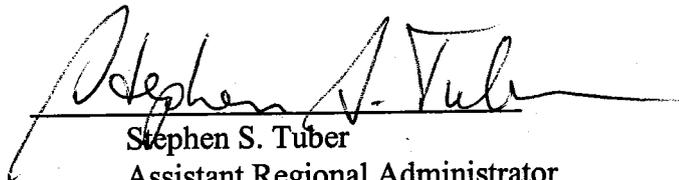
PLUG NO. 5: Set a cement plug, on the inside of the 5-1/2 inch casing, from 254 feet to 354 feet.

PLUG NO. 6: Set a cement plug, on the backside of the 5-1/2 inch casing, from surface to a depth of 354 feet.

PLUG NO. 7: Set a cement plug, on the inside of the 5-1/2 inch casing, from the surface to a depth of 50 feet.

This authorization for well conversion of the Castle Draw No. 16-2-9-17 to an enhanced recovery injection well becomes effective upon signature.

Date: JUL 21 2004



Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

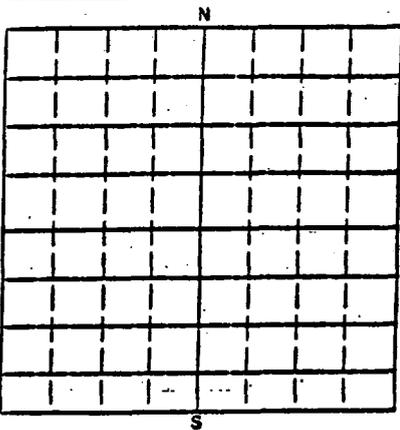


**WELL REWORK RECORD**

NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CONTRACTOR

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES



STATE

COUNTY

PERMIT NUMBER

SURFACE LOCATION DESCRIPTION

1/4 of 1/4 of 1/4 of 1/4 of Section Township Range

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location \_\_\_\_ ft. from (N/S) \_\_\_\_ Line of quarter section  
and \_\_\_\_ ft. from (E/W) \_\_\_\_ Line of quarter section

**WELL ACTIVITY**

- Brine Disposal
- Enhanced Recovery
- Hydrocarbon Storage

Lease Name

Total Depth Before Rework

Total Depth After Rework

Date Rework Commenced

Date Rework Completed

**TYPE OF PERMIT**

- Individual
- Area
- Number of Wells \_\_\_\_
- Well Number

**WELL CASING RECORD — BEFORE REWORK**

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

**WELL CASING RECORD — AFTER REWORK (Indicate Additions and Changes Only)**

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

**WIRE LINE LOGS, LIST EACH TYPE**

Log Types

Logged Intervals

**CERTIFICATION**

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 300  
DENVER, COLORADO 80202-2466

SUBJECT: GROUND WATER SECTION GUIDANCE NO. 37  
Demonstrating Part II (external) Mechanical Integrity  
for a Class II injection well permit.

FROM: Tom Pike, Chief  
UIC Direct Implementation Section

TO: All Section Staff  
Montana Operations Office

During the review for a Class II injection well permit, consideration must be given to the mechanical integrity (MI) of the well. MI demonstrates that the well is in sound condition and that the well is constructed in a manner that prevents injected fluids from entering any formation other than the authorized injection formation.

A demonstration of MI is a two part process:

PART I - INTERNAL MECHANICAL INTEGRITY is an assurance that there are no significant leaks in the casing/tubing/packer system.

PART II - EXTERNAL MECHANICAL INTEGRITY demonstrates that after fluid is injected into the formation, the injected fluids will not migrate out of the authorized injection interval through vertical channels adjacent to the wellbore.

A Class II injection well may demonstrate Part II MI by showing that injected fluids remain within the authorized injection interval. This may be accomplished as follows:

- 1) Cement bond log showing 80% bond through the an appropriate interval (Section Guidance 34),
- 2) Radioactive tracer survey conducted according to a EPA-approved procedure, or
- 3) Temperature survey conducted according to a EPA-approved procedure (Section Guidance 38).

For each test option above, the operator of the injection well should submit a plan for conducting the test. The plan will then be approved (or modified and approved) by EPA. EPA's pre-approval of the testing method will assure the operator that the

test is conducted consistent with current EPA guidance, and that the test will provide meaningful results.

Part II MI may be demonstrated either before or after issuing the Final Permit. However, if Part II is to be demonstrated after the Final Permit is issued, a provision in the permit will require the demonstration of Part II MI. The well will also be required to pass Part II MI prior to granting authorization to inject.

Radioactive tracer surveys and temperature surveys require that the well be allowed to inject fluids as part of the procedure. In these cases, a well that has shown no other demonstration of Part II MI will be allowed to inject only that volume of fluid that is necessary to conduct the appropriate test.

After the results of the test proves that the well has passed Part II MI, the well will be given authorization to begin full injection operations.

If any of the tests show a lack of Part II MI, the well will be repaired and retested, or plugged (See Headquarters Guidance #76).

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Test conducted by: \_\_\_\_\_  
 Others present: \_\_\_\_\_

Well Name: _____	Type: ER SWD	Status: AC TA UC
Field: _____		
Location: _____	Sec: _____ T _____ N/S R _____ E/W	County: _____ State: _____
Operator: _____		
Last MIT: ____/____/____	Maximum Allowable Pressure: _____	PSIG

Is this a regularly scheduled test?  Yes  No

Initial test for permit?  Yes  No

Test after well rework?  Yes  No

Well injecting during test?  Yes  No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: \_\_\_\_\_ psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	psig	psig	psig
End of test pressure	psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	psig	psig	psig
5 minutes	psig	psig	psig
10 minutes	psig	psig	psig
15 minutes	psig	psig	psig
20 minutes	psig	psig	psig
25 minutes	psig	psig	psig
30 minutes	psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?  Yes  No



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

TEMPERATURE LOGGING FOR MECHANICAL INTEGRITY

January 12, 1999

PURPOSE:

The purpose of this document is to provide a guideline for the acquisition of temperature surveys, a procedure that may be used to determine the internal mechanical integrity of tubing and casing in an injection well. A temperature survey may be used to verify confinement of injected fluids within the injection formation.

LOGGING PROCEDURE

Run the temperature survey while going into the hole, with the temperature sensor located as close to the bottom of the tool as possible. The tool need not be centralized.

Record temperatures a 1-5 °F per inch, on a 5 inches per 100 feet log scale.

Logging speed should be within 20 - 30 feet per minute.

Run the log from ground level to total depth (or plug-back depth) of the well.

When using digital logging equipment, use the highest digital sampling rate as possible. Filtering should be kept to a minimum so that small scale results are obtained and preserved.

Record the first log trace while injecting at up to the maximum allowed injection pressure. Subsequent to the temperature survey, the maximum injection pressure will be limited to the pressure used during the survey.

LOG TRACES

Log the first log trace while the well is actively injecting, and record traces for gamma ray, temperature, and differential temperature.

Shut-in (not injecting) temperature curves should be recorded at intervals depending on the length of time that the injection well has been active. Preferred time intervals are shown in the following table:

Table with 6 columns: Active Injection, and Record Curves at These Times (In Hours) with sub-columns for 1, 3, 6, 12, 10-12, 22-24, 45-48, 90-96, 186-192 hours.

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

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number See Attached List		API Number
Location of Well		Field or Unit Name See Attached List
Footage :	County :	Lease Designation and Number
QC, Section, Township, Range:	State : UTAH	

EFFECTIVE DATE OF TRANSFER: 9/1/2004

CURRENT OPERATOR

Company: <u>Inland Production Company</u>	Name: <u>Brian Harris</u>
Address: <u>1401 17th Street Suite 1000</u>	Signature: <u><i>Brian Harris</i></u>
city <u>Denver</u> state <u>Co</u> zip <u>80202</u>	Title: <u>Engineering Tech.</u>
Phone: <u>(303) 893-0102</u>	Date: <u>9/15/2004</u>
Comments:	

NEW OPERATOR

Company: <u>Newfield Production Company</u>	Name: <u>Brian Harris</u>
Address: <u>1401 17th Street Suite 1000</u>	Signature: <u><i>Brian Harris</i></u>
city <u>Denver</u> state <u>Co</u> zip <u>80202</u>	Title: <u>Engineering Tech.</u>
Phone:	Date: <u>9/15/2004</u>
Comments:	

(This space for State use only)

Transfer approved by: *A. Hunt* Approval Date: 9-20-04  
Title: Perk. Services Manager

Comments: Note: Indian Country wells will require EPA approval.

RECEIVED  
SEP 20 2004  
DIV. OF OIL, GAS & MINING



## Office of the Secretary of State

The undersigned, as Secretary of State of Texas, does hereby certify that the attached is a true and correct copy of each document on file in this office as described below:

Newfield Production Company  
Filing Number: 41530400

Articles of Amendment

September 02, 2004

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on September 10, 2004.



A handwritten signature in black ink, appearing to read "G. Connor".

Secretary of State

ARTICLES OF AMENDMENT  
TO THE  
ARTICLES OF INCORPORATION  
OF  
INLAND PRODUCTION COMPANY

FILED  
In the Office of the  
Secretary of State of Texas

SEP 02 2004  
Corporations Section

Pursuant to the provisions of Article 4.04 of the Texas Business Corporation Act (the "TBCA"), the undersigned corporation adopts the following articles of amendment to the articles of incorporation:

ARTICLE 1 – Name

The name of the corporation is Inland Production Company.

ARTICLE 2 – Amended Name

The following amendment to the Articles of Incorporation was approved by the Board of Directors and adopted by the shareholders of the corporation on August 27, 2004.

The amendment alters or changes Article One of the Articles of Incorporation to change the name of the corporation so that, as amended, Article One shall read in its entirety as follows:

“ARTICLE ONE – The name of the corporation is Newfield Production Company.”

ARTICLE 3 – Effective Date of Filing

This document will become effective upon filing.

The holder of all of the shares outstanding and entitled to vote on said amendment has signed a consent in writing pursuant to Article 9.10 of the TBCA, adopting said amendment, and any written notice required has been given.

IN WITNESS WHEREOF, the undersigned corporation has executed these Articles of Amendment as of the 1<sup>st</sup> day of September, 2004.

INLAND RESOURCES INC.

By: Susan G. Riggs  
Susan G. Riggs, Treasurer

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
ML45555

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
CASTLE DRAW UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
CASTLE DRAW 16-2-9-17

2. NAME OF OPERATOR:  
Newfield Production Company

9. API NUMBER:  
4304733240

3. ADDRESS OF OPERATOR:  
Route 3 Box 3630 CITY Myton STATE UT ZIP 84052

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
Monument Butte

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 660 FSL 660 FEL

COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SE/SE, 2, T9S, R17E

STATE: Utah

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

TYPE OF ACTION

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion:  11/16/2004	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Injection Conversion
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The subject well was converted from a producing to an injection well on 11/11/04. The rods and tubing anchor were removed and a packer was inserted in the bottom hole assembly at 4469'. On 11/10/04 Mr. Dan Jackson w/EPA was notified of the intent to conduct a MIT on the casing. On 11/12/04 the casing was pressured to 1500 psi w/ no pressure loss charted in the 1/2 hour test. No governmental agencies were able to witness the test.

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

NAME (PLEASE PRINT) Krishna Russell

TITLE Production Clerk

SIGNATURE *Krishna Russell*

DATE November 16, 2004

(This space for State use only)

**RECEIVED**

**NOV 17 2004**

DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 11 / 12 / 04

Test conducted by: REST HENRIE

Others present: \_\_\_\_\_

Well Name: <u>CASTLE DRAW 116-2-9-17</u>	Type: <u>(ER) SWD</u>	Status: AC TA UC
Field: <u>CASTLE DRAW UNIT</u>		
Location: <u>SEISE</u> Sec: <u>2</u> T <u>9</u> N/S R <u>17 E/W</u> County: <u>MONTA</u> State: <u>UT</u>		
Operator: <u>NEWFIELD</u>		
Last MIT: <u>- / NA / -</u>		Maximum Allowable Pressure: _____ PSIG

Is this a regularly scheduled test?     Yes     No  
 Initial test for permit?                 Yes     No  
 Test after well rework?                  Yes     No  
 Well injecting during test?               Yes     No      If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	0 psig	psig	psig
End of test pressure	0 psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	1500 psig	psig	psig
5 minutes	1500 psig	psig	psig
10 minutes	1500 psig	psig	psig
15 minutes	1500 psig	psig	psig
20 minutes	1500 psig	psig	psig
25 minutes	1500 psig	psig	psig
30 minutes	1500 psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?     Yes     No

### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_



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

RECEIVED

JAN 07 2005

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Injection well		5. LEASE DESIGNATION AND SERIAL NUMBER: ML45555
2. NAME OF OPERATOR: Newfield Production Company		7. UNIT or CA AGREEMENT NAME: CASTLE DRAW UNIT
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052		8. WELL NAME and NUMBER: CASTLE DRAW 16-2-9-17
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 660 FSL 660 FEL		9. API NUMBER: 4304733240
O/R/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SE/SE, 2, T9S, R17E		10. FIELD AND POOL, OR WILDCAT: Monument Butte
		COUNTY: Uintah
		STATE: Utah

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

TYPE OF ACTION

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion: 01/04/2005	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input checked="" type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Put Well on Injection
	<input checked="" type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

The above referenced well was put on injection at 9:30 a.m. on 1/4/05.

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

NAME (PLEASE PRINT) Mandie Crozier TITLE Regulatory Specialist  
SIGNATURE *Mandie Crozier* DATE January 06, 2005

**OPERATOR CHANGE WORKSHEET**

<b>ROUTING</b>
1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold)

Designation of Agent/Operator

**X Operator Name Change**

**Merger**

The operator of the well(s) listed below has changed, effective:		<b>9/1/2004</b>
<b>FROM: (Old Operator):</b> N5160-Inland Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721	<b>TO: ( New Operator):</b> N2695-Newfield Production Company Route 3 Box 3630 Myton, UT 84052 Phone: 1-(435) 646-3721	

**CA No. Unit: CASTLE DRAW**

<b>WELL(S)</b>								
NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
MON ST 14-2	02	090S	170E	4301331425	12275	State	WI	A
MONUMENT ST 12-2	02	090S	170E	4301331481	12275	State	OW	P
MONUMENT ST 13-2	02	090S	170E	4301331482	12275	State	WI	A
MONUMENT ST 11-2-9-17CD	02	090S	170E	4301331685	12275	State	WI	A
CASTLE DRAW 10-2R-9-17	02	090S	170E	4304731195	12275	State	WI	A
MON ST 31-2-9-17CD	02	090S	170E	4304732563	12275	State	WI	A
MONUMENT ST 22-2	02	090S	170E	4304732610	12275	State	WI	A
MONUMENT ST 24-2	02	090S	170E	4304732612	12275	State	OW	P
BALCRON MON ST 23-2	02	090S	170E	4304732613	12275	State	WS	I
MONUMENT ST 21-2-9-17	02	090S	170E	4304732703	12275	State	OW	P
MONUMENT ST 32-2	02	090S	170E	4304732737	12275	State	OW	P
CASTLE DRAW 8-2	02	090S	170E	4304732842	12275	State	D	PA
CASTLE DRAW 1-2-9-17	02	090S	170E	4304732843	12275	State	OW	S
CASTLE DRAW 9-2-9-17	02	090S	170E	4304733238	12275	State	OW	P
CASTLE DRAW 15-2-9-17	02	090S	170E	4304733239	12275	State	OW	P
CASTLE DRAW 16-2-9-17	02	090S	170E	4304733240	12275	State	WI	A

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 9/15/2004
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 9/15/2004
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 2/23/2005
- Is the new operator registered in the State of Utah: YES Business Number: 755627-0143
- If **NO**, the operator was contacted on:

6a. (R649-9-2)Waste Management Plan has been received on: IN PLACE  
6b. Inspections of LA PA state/fee well sites complete on: waived

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM BIA

8. **Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: na/

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 2/23/2005

**DATA ENTRY:**

- 1. Changes entered in the **Oil and Gas Database** on: 2/28/2005
- 2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/28/2005
- 3. Bond information entered in RBDMS on: 2/28/2005
- 4. Fee/State wells attached to bond in RBDMS on: 2/28/2005
- 5. Injection Projects to new operator in RBDMS on: 2/28/2005
- 6. Receipt of Acceptance of Drilling Procedures for APD/New on: waived

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UT 0056

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: 61BSBDH2912

**FEE & STATE WELL(S) BOND VERIFICATION:**

- 1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 61BSBDH2919
- 2. The **FORMER** operator has requested a release of liability from their bond on: n/a\*  
The Division sent response by letter on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

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

**COMMENTS:**

\*Bond rider changed operator name from Inland Production Company to Newfield Production Company - received 2/23/05

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

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**MAY 23 2005**

**SUNDRY NOTICES AND REPORTS ON WELLS**

DIV. OF OIL, GAS & MINING

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

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Injection well			5. LEASE DESIGNATION AND SERIAL NUMBER: ML45555
2. NAME OF OPERATOR: Newfield Production Company			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052			7. UNIT or CA AGREEMENT NAME: CASTLE DRAW UNIT
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 660 FSL 660 FEL			8. WELL NAME and NUMBER: CASTLE DRAW 16-2-9-17
OTR/OTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SE/SE, 2, T9S, R17E			9. API NUMBER: 4304733240
			10. FIELD AND POOL, OR WILDCAT: Monument Butte
			COUNTY: Uintah
			STATE: Utah

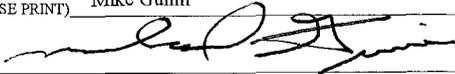
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
	SubDate	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will  _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 05/18/2005	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Step Rate Test
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

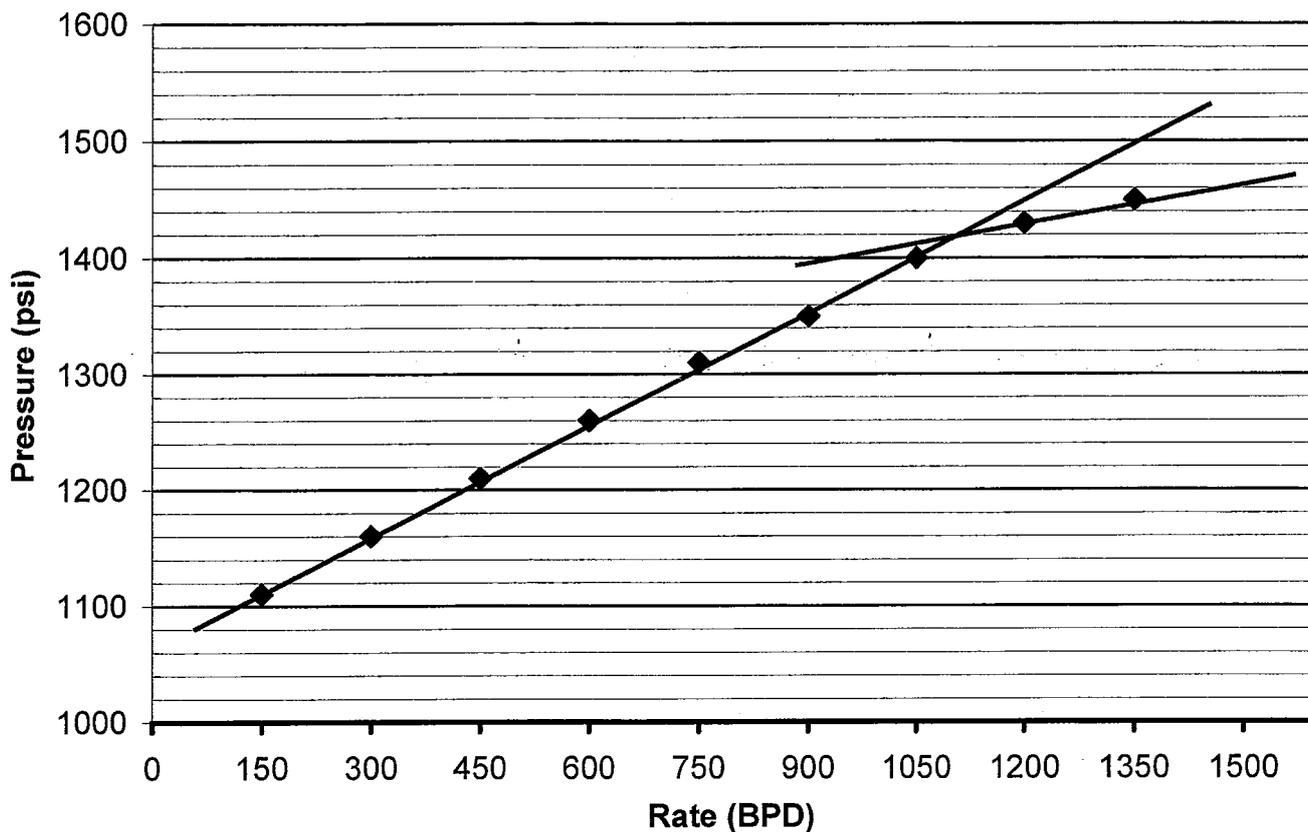
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

A step rate test was conducted on the subject well on May 4, 2005. Results from the test indicate that the fracture gradient is .749 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed to 1400 psi.

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

NAME (PLEASE PRINT) Mike Guinn	TITLE Engineer
SIGNATURE 	DATE 05/18/2005

Castle Draw 16-2-9-17  
 Castle Draw Unit  
 Step Rate Test  
 May 4, 2005



Start Pressure: 1060 psi  
 Instantaneous Shut In Pressure (ISIP): 1400 psi  
 Top Perforation: 4526 feet  
 Fracture pressure (Pfp): 1420 psi  
 FG: 0.749 psi/ft

Step	Rate(bpd)	Pressure(psi)
1	150	1110
2	300	1160
3	450	1210
4	600	1260
5	750	1310
6	900	1350
7	1050	1400
8	1200	1430
9	1350	1450



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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTAH STATE ML-45555

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

7. UNIT or CA AGREEMENT NAME:  
CASTLE DRAW UNIT

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
CASTLE DRAW 16-2-9-17

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4304733240

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
MONUMENT BUTTE

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 660 FSL 660 FEL  
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SESE, 2, T9S, R17E

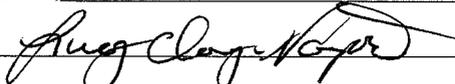
COUNTY: UINTAH  
STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion: 09/22/2009	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Five Year MIT
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
On 8-25-09 Nathan Wiser with the EPA was contacted concerning the 5 year MIT on the above listed well. Permission was given at that time to perform the test on 8-26-09. On 9-22-09 the casing was pressured up to 1150 psig and charted for 30 minutes with no pressure loss. The well was injecting during the test. The tubing pressure was 920 psig during the test. There was not an EPA representative available to witness the test. EPA# UT 20776-04544 API# 43-047-33240

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

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Production Tech  
SIGNATURE  DATE 09/30/2009

(This space for State use only)

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**OCT 05 2009**  
DIV. OF OIL, GAS & MINING

# Mechanical Integrity Test

## Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 09/22/09  
 Test conducted by: Dale Giles  
 Others present: \_\_\_\_\_

Well Name: <u>Castle Draw 16-2-9-17</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Castle Draw Unit</u>		
Location: _____	Sec: <u>2</u> T <u>9</u> N <u>(S)</u> R <u>17</u> <u>(E)</u> W	County: <u>Uintah</u> State: <u>UT</u>
Operator: <u>Newfield Production Co.</u>		
Last MIT: <u>1</u> / <u>1</u>	Maximum Allowable Pressure: <u>1400</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>920</u> psig	psig	psig
End of test pressure	<u>920</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1150</u> psig	psig	psig
5 minutes	<u>1150</u> psig	psig	psig
10 minutes	<u>1150</u> psig	psig	psig
15 minutes	<u>1150</u> psig	psig	psig
20 minutes	<u>1150</u> psig	psig	psig
25 minutes	<u>1150</u> psig	psig	psig
30 minutes	<u>1150</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?  Yes  No

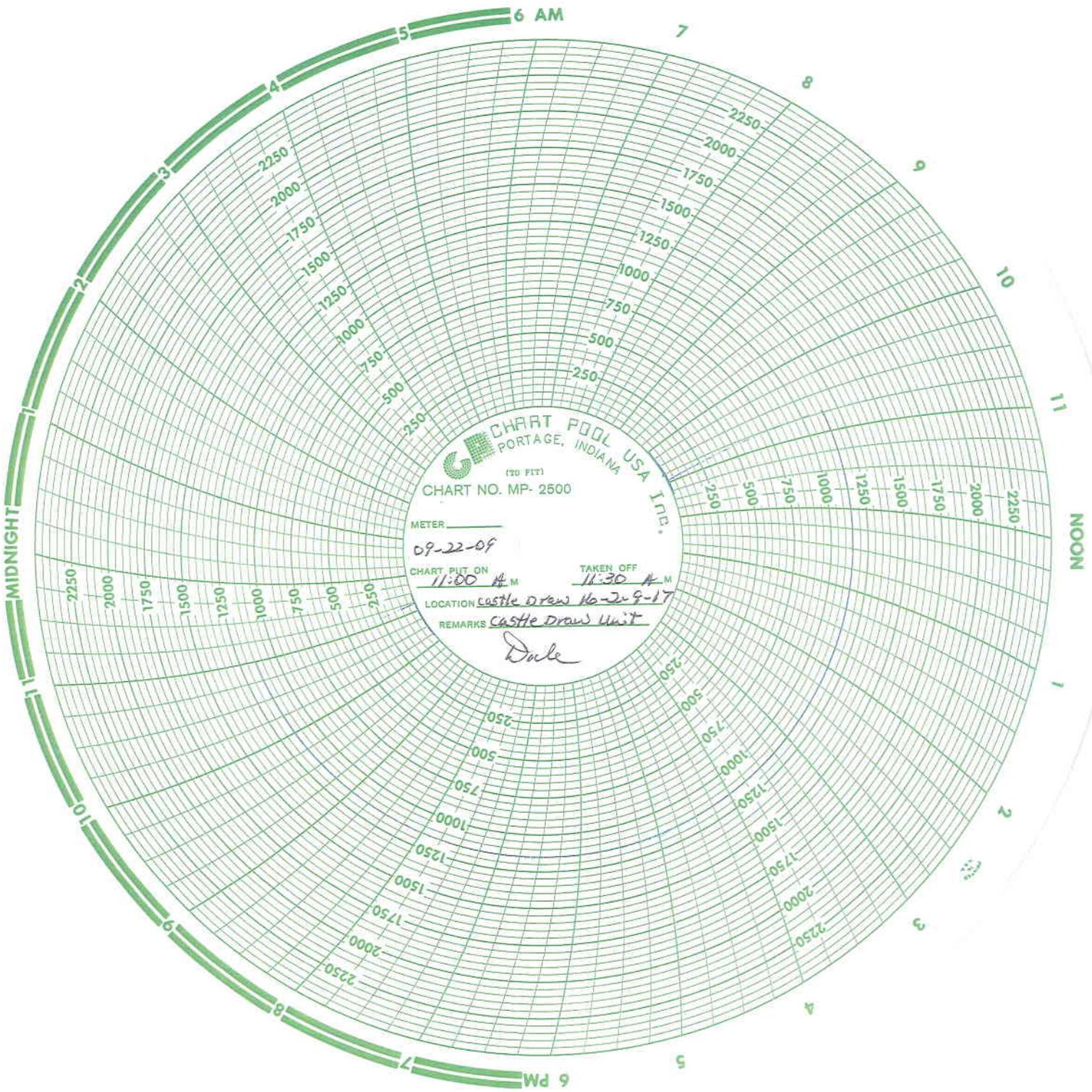
### MECHANICAL INTEGRITY PRESSURE TEST

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**OCT 05 2009**

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

DIV. OF OIL, GAS & MINING

Signature of Witness: \_\_\_\_\_



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OCT 05 2009

DIV. OF OIL, GAS & MINING

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTAH STATE ML-45555

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
GMBU

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL:      OIL WELL       GAS WELL       OTHER

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR:      PHONE NUMBER  
Route 3 Box 3630      CITY Myton      STATE UT      ZIP 84052      435.646.3721

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 660 FSL 660 FEL      COUNTY: UINTAH

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SESE, 2, T9S, R17E      STATE: UT

8. WELL NAME and NUMBER:  
CASTLE DRAW 16-2-9-17

9. API NUMBER:  
4304733240

10. FIELD AND POOL, OR WILDCAT:  
GREATER MB UNIT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 04/28/2010	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Step Rate Test
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

A step rate test was conducted on the subject well on April 28,2010. Results from the test indicate that the fracture gradient is .802 psi/ft. Therefore, Newfield is requesting that the maximum allowable injection pressure (MAIP) be changed from 1340 psi to 1640 psi.

EPA #UT20776-04544    API #43-047-33240

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

NAME (PLEASE PRINT) Lucy Chavez-Naupoto      TITLE Administrative Assistant

SIGNATURE       DATE 05/10/2010

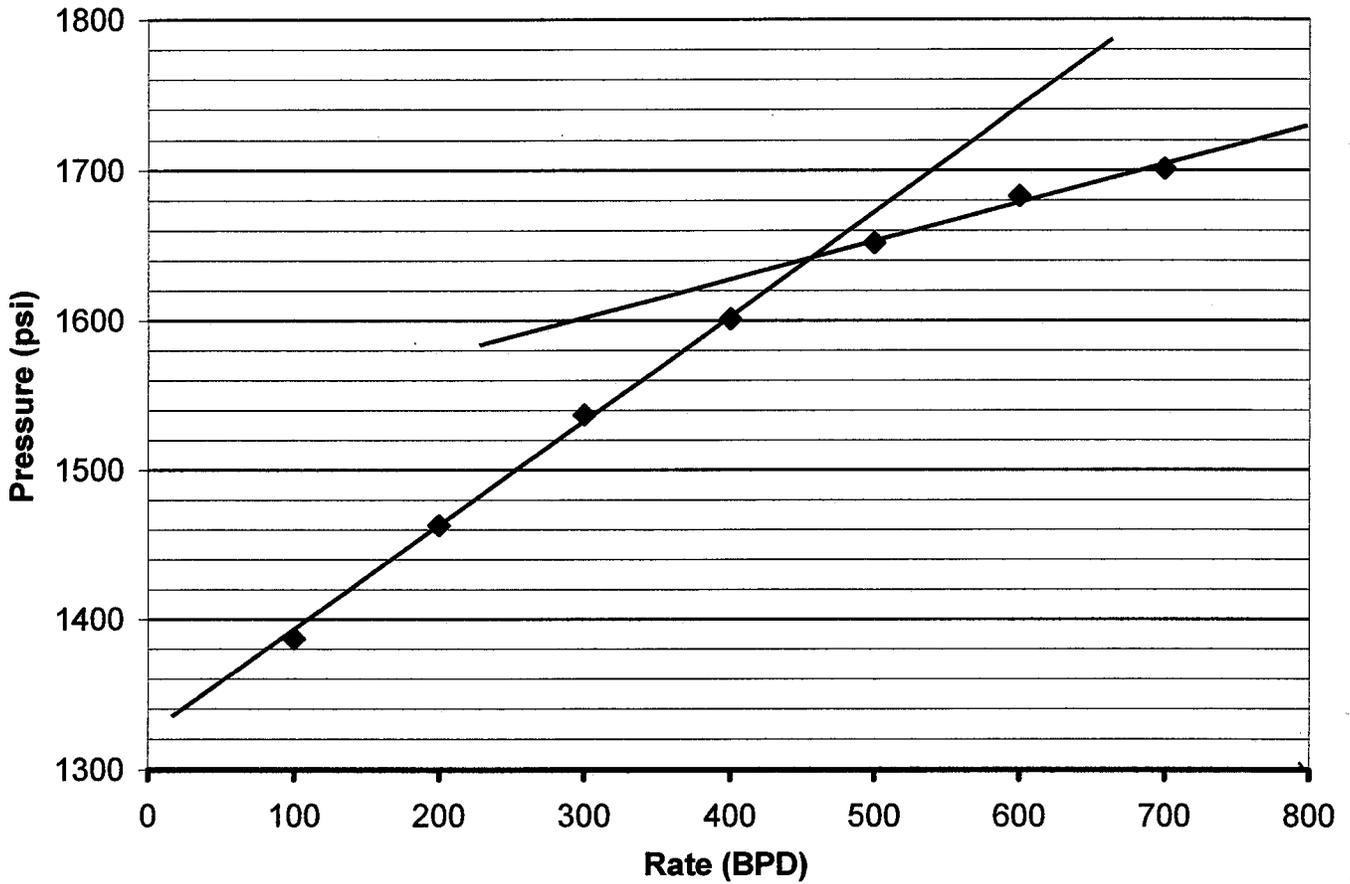
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**MAY 13 2010**

**DIV. OF OIL, GAS & MINING**

**Castle Draw 16-2-9-17  
Greater Monument Butte Unit  
Step Rate Test  
April 28, 2010**

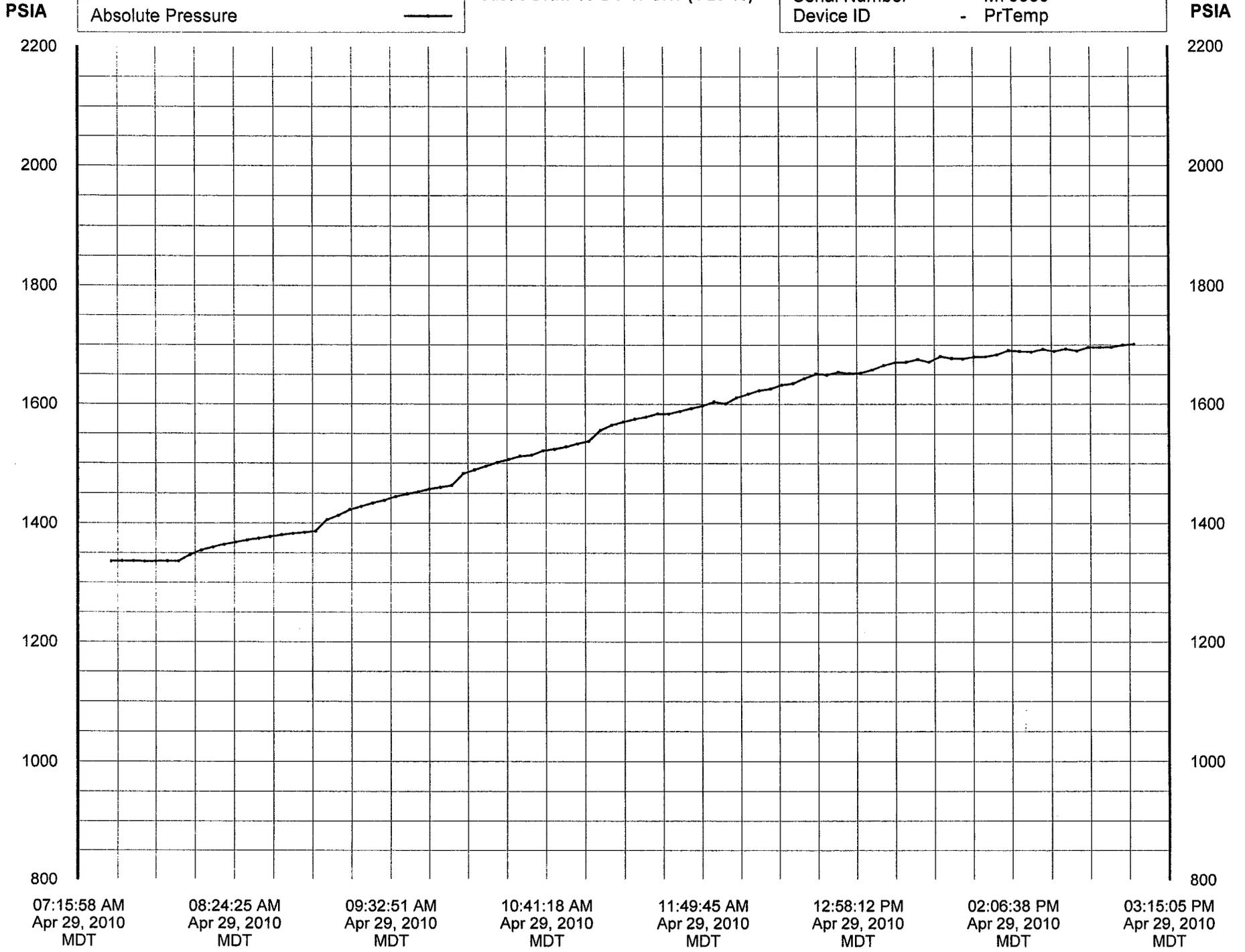


**Start Pressure:** 1336 psi  
**Instantaneous Shut In Pressure (ISIP):** 1681 psi  
**Top Perforation:** 4526 feet  
**Fracture pressure (Pfp):** 1640 psi  
**FG:** 0.802 psi/ft

<b>Step</b>	<b>Rate(bpd)</b>	<b>Pressure(psi)</b>
1	100	1387
2	200	1463
3	300	1537
4	400	1601
5	500	1652
6	600	1683
7	700	1701

Castle Draw 16-2-9-17 SRT (4-29-10)

Device	- PrTemp1000
Serial Number	- M75866
Device ID	- PrTemp



Report Name:  
Report Date:  
File Name:

PrTemp1000 Data Table  
Apr 30, 2010 03:13:28 PM MDT  
C:\Program Files\PTC@ Instruments 2.00\Castle Draw 16-2-9-17 SRT  
(4-29-10).csv  
Castle Draw 16-2-9-17 SRT (4-29-10)  
PrTemp1000 - Temperature and Pressure Recorder  
REV2C (64K)  
M75866  
PrTemp  
Apr 29, 2010 07:30:01 AM MDT  
Apr 29, 2010 03:00:00 PM MDT  
2 Seconds  
1 to 91 of 91  
May 22, 2009  
May 22, 2010

Title:  
Device:  
Hardware Revision:  
Serial Number:  
Device ID:  
Data Start Date:  
Data End Date:  
Reading Rate:  
Readings:  
Last Calibration Date:  
Next Calibration Date:

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Apr 29, 2010 07:30:01 AM	1335.800	PSIA
2	Apr 29, 2010 07:35:00 AM	1336.400	PSIA
3	Apr 29, 2010 07:40:01 AM	1336.600	PSIA
4	Apr 29, 2010 07:45:00 AM	1335.400	PSIA
5	Apr 29, 2010 07:50:00 AM	1335.800	PSIA
6	Apr 29, 2010 07:54:59 AM	1336.000	PSIA
7	Apr 29, 2010 08:00:01 AM	1336.200	PSIA
8	Apr 29, 2010 08:05:00 AM	1346.600	PSIA
9	Apr 29, 2010 08:10:01 AM	1354.400	PSIA
10	Apr 29, 2010 08:15:01 AM	1359.400	PSIA
11	Apr 29, 2010 08:19:59 AM	1364.000	PSIA
12	Apr 29, 2010 08:25:01 AM	1367.800	PSIA
13	Apr 29, 2010 08:30:01 AM	1371.600	PSIA
14	Apr 29, 2010 08:35:01 AM	1374.400	PSIA
15	Apr 29, 2010 08:40:00 AM	1377.200	PSIA
16	Apr 29, 2010 08:45:00 AM	1380.400	PSIA
17	Apr 29, 2010 08:50:00 AM	1382.600	PSIA
18	Apr 29, 2010 08:55:00 AM	1384.600	PSIA
19	Apr 29, 2010 09:00:00 AM	1386.600	PSIA
20	Apr 29, 2010 09:04:59 AM	1405.600	PSIA
21	Apr 29, 2010 09:10:00 AM	1413.000	PSIA
22	Apr 29, 2010 09:14:59 AM	1422.800	PSIA
23	Apr 29, 2010 09:20:00 AM	1428.000	PSIA
24	Apr 29, 2010 09:25:00 AM	1433.600	PSIA
25	Apr 29, 2010 09:30:01 AM	1438.400	PSIA
26	Apr 29, 2010 09:35:00 AM	1444.400	PSIA
27	Apr 29, 2010 09:40:00 AM	1449.000	PSIA
28	Apr 29, 2010 09:45:01 AM	1452.400	PSIA
29	Apr 29, 2010 09:50:00 AM	1456.800	PSIA
30	Apr 29, 2010 09:55:01 AM	1459.800	PSIA
31	Apr 29, 2010 09:59:59 AM	1463.000	PSIA
32	Apr 29, 2010 10:05:00 AM	1482.400	PSIA
33	Apr 29, 2010 10:09:59 AM	1488.800	PSIA
34	Apr 29, 2010 10:15:00 AM	1495.200	PSIA
35	Apr 29, 2010 10:20:00 AM	1501.200	PSIA
36	Apr 29, 2010 10:25:00 AM	1506.400	PSIA
37	Apr 29, 2010 10:30:00 AM	1511.800	PSIA
38	Apr 29, 2010 10:35:00 AM	1513.600	PSIA
39	Apr 29, 2010 10:40:00 AM	1521.200	PSIA
40	Apr 29, 2010 10:44:59 AM	1523.600	PSIA
41	Apr 29, 2010 10:50:00 AM	1527.800	PSIA
42	Apr 29, 2010 10:55:00 AM	1533.000	PSIA
43	Apr 29, 2010 11:00:00 AM	1537.200	PSIA
44	Apr 29, 2010 11:05:00 AM	1555.400	PSIA
45	Apr 29, 2010 11:10:00 AM	1564.000	PSIA
46	Apr 29, 2010 11:15:00 AM	1569.600	PSIA
47	Apr 29, 2010 11:19:59 AM	1574.600	PSIA
48	Apr 29, 2010 11:25:00 AM	1578.200	PSIA
49	Apr 29, 2010 11:29:59 AM	1583.800	PSIA
50	Apr 29, 2010 11:35:00 AM	1583.400	PSIA
51	Apr 29, 2010 11:39:59 AM	1588.000	PSIA
52	Apr 29, 2010 11:45:00 AM	1592.600	PSIA
53	Apr 29, 2010 11:50:01 AM	1597.200	PSIA
54	Apr 29, 2010 11:55:00 AM	1603.600	PSIA
55	Apr 29, 2010 12:00:01 PM	1600.800	PSIA
56	Apr 29, 2010 12:04:59 PM	1610.800	PSIA
57	Apr 29, 2010 12:10:01 PM	1616.800	PSIA
58	Apr 29, 2010 12:15:00 PM	1623.000	PSIA
59	Apr 29, 2010 12:20:01 PM	1625.800	PSIA

60	Apr 29, 2010 12:25:00 PM	1632.400	PSIA
61	Apr 29, 2010 12:30:01 PM	1635.000	PSIA
62	Apr 29, 2010 12:35:01 PM	1643.400	PSIA
63	Apr 29, 2010 12:40:00 PM	1650.800	PSIA
64	Apr 29, 2010 12:45:01 PM	1649.400	PSIA
65	Apr 29, 2010 12:49:59 PM	1653.600	PSIA
66	Apr 29, 2010 12:55:01 PM	1651.800	PSIA
67	Apr 29, 2010 12:59:59 PM	1652.200	PSIA
68	Apr 29, 2010 01:05:00 PM	1657.800	PSIA
69	Apr 29, 2010 01:10:00 PM	1665.400	PSIA
70	Apr 29, 2010 01:15:01 PM	1670.200	PSIA
71	Apr 29, 2010 01:20:00 PM	1671.000	PSIA
72	Apr 29, 2010 01:25:00 PM	1675.800	PSIA
73	Apr 29, 2010 01:30:00 PM	1671.000	PSIA
74	Apr 29, 2010 01:34:59 PM	1680.600	PSIA
75	Apr 29, 2010 01:40:00 PM	1677.600	PSIA
76	Apr 29, 2010 01:44:59 PM	1676.600	PSIA
77	Apr 29, 2010 01:50:00 PM	1679.800	PSIA
78	Apr 29, 2010 01:55:00 PM	1680.200	PSIA
79	Apr 29, 2010 02:00:00 PM	1683.400	PSIA
80	Apr 29, 2010 02:05:00 PM	1690.600	PSIA
81	Apr 29, 2010 02:10:00 PM	1689.400	PSIA
82	Apr 29, 2010 02:15:00 PM	1688.400	PSIA
83	Apr 29, 2010 02:19:59 PM	1692.400	PSIA
84	Apr 29, 2010 02:25:00 PM	1689.200	PSIA
85	Apr 29, 2010 02:29:59 PM	1693.000	PSIA
86	Apr 29, 2010 02:35:00 PM	1689.800	PSIA
87	Apr 29, 2010 02:40:00 PM	1695.800	PSIA
88	Apr 29, 2010 02:45:00 PM	1695.800	PSIA
89	Apr 29, 2010 02:50:01 PM	1696.200	PSIA
90	Apr 29, 2010 02:55:00 PM	1699.600	PSIA
91	Apr 29, 2010 03:00:00 PM	1701.200	PSIA

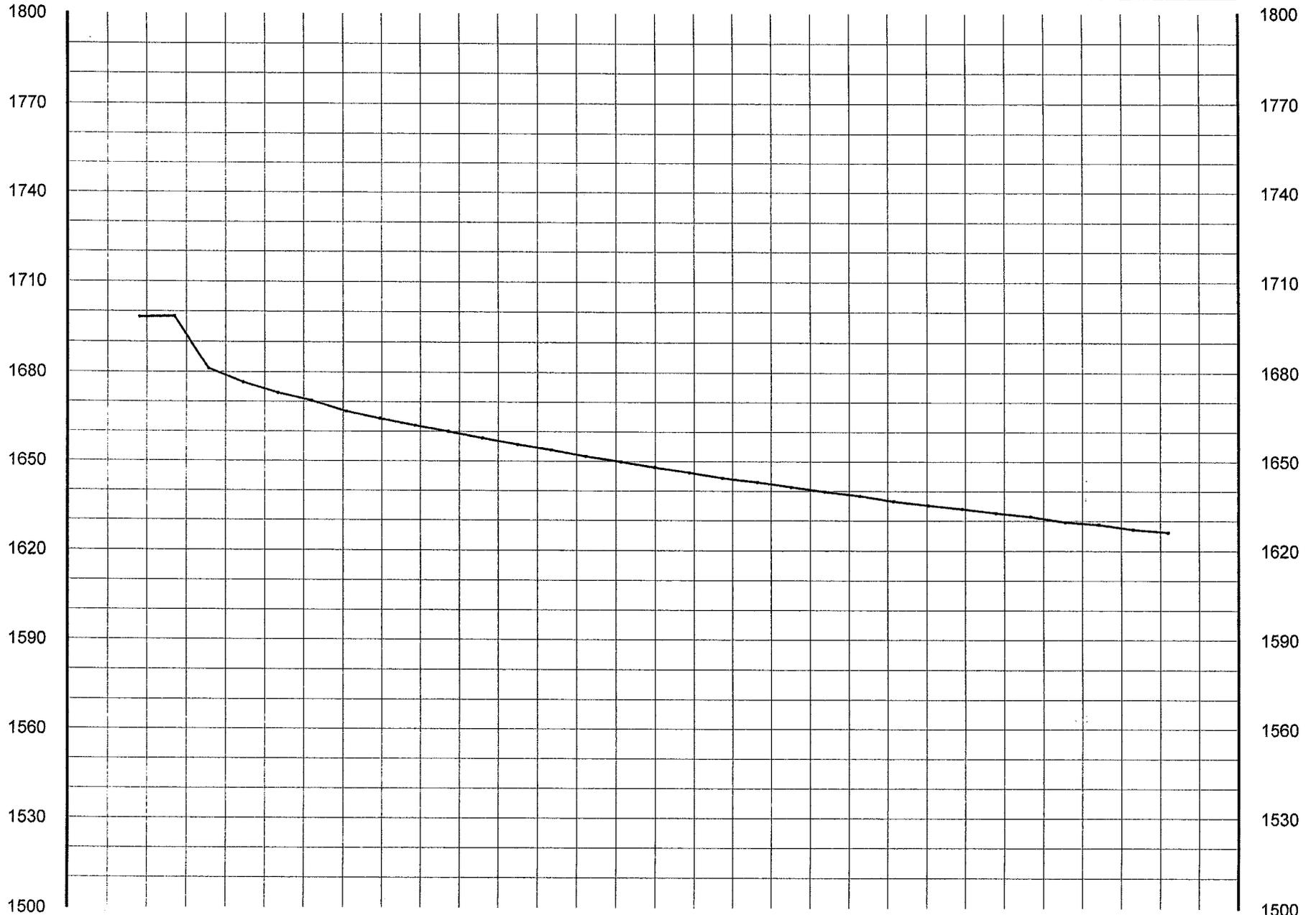
PSIA

Absolute Pressure

Castle Draw 16-2-9-17 ISIP (4-29-10)

Device - PrTemp1000  
Serial Number - M75866  
Device ID - PrTemp

PSIA



02:58:11 PM Apr 29, 2010 MDT  
03:01:36 PM Apr 29, 2010 MDT  
03:05:00 PM Apr 29, 2010 MDT  
03:08:25 PM Apr 29, 2010 MDT  
03:11:50 PM Apr 29, 2010 MDT  
03:15:15 PM Apr 29, 2010 MDT  
03:18:39 PM Apr 29, 2010 MDT  
03:22:04 PM Apr 29, 2010 MDT  
03:25:29 PM Apr 29, 2010 MDT  
03:28:53 PM Apr 29, 2010 MDT  
03:32:18 PM Apr 29, 2010 MDT

Report Name: PrTemp1000 Data Table  
 Report Date: Apr 30, 2010 03:13:20 PM MDT  
 File Name: C:\Program Files\PTC\Instruments 2.00\Castle Draw 16-2-9-17 ISIP (4-29-10).csv  
 Title: Castle Draw 16-2-9-17 ISIP (4-29-10)  
 Device: PrTemp1000 - Temperature and Pressure Recorder  
 Hardware Revision: REV2C (64K)  
 Serial Number: M75866  
 Device ID: PrTemp  
 Data Start Date: Apr 29, 2010 03:00:14 PM MDT  
 Data End Date: Apr 29, 2010 03:30:15 PM MDT  
 Reading Rate: 2 Seconds  
 Readings: 1 to 31 of 31  
 Last Calibration Date: May 22, 2009  
 Next Calibration Date: May 22, 2010

<u>Reading</u>	<u>Date and Time (MDT)</u>	<u>Absolute Pressure</u>	<u>Annotation</u>
1	Apr 29, 2010 03:00:14 PM	1698.200	PSIA
2	Apr 29, 2010 03:01:15 PM	1698.400	PSIA
3	Apr 29, 2010 03:02:14 PM	1681.200	PSIA
4	Apr 29, 2010 03:03:14 PM	1676.600	PSIA
5	Apr 29, 2010 03:04:15 PM	1673.000	PSIA
6	Apr 29, 2010 03:05:14 PM	1670.400	PSIA
7	Apr 29, 2010 03:06:14 PM	1666.800	PSIA
8	Apr 29, 2010 03:07:14 PM	1664.400	PSIA
9	Apr 29, 2010 03:08:16 PM	1662.000	PSIA
10	Apr 29, 2010 03:09:14 PM	1660.000	PSIA
11	Apr 29, 2010 03:10:14 PM	1657.800	PSIA
12	Apr 29, 2010 03:11:15 PM	1655.600	PSIA
13	Apr 29, 2010 03:12:14 PM	1653.800	PSIA
14	Apr 29, 2010 03:13:14 PM	1651.600	PSIA
15	Apr 29, 2010 03:14:15 PM	1649.800	PSIA
16	Apr 29, 2010 03:15:14 PM	1648.000	PSIA
17	Apr 29, 2010 03:16:14 PM	1646.200	PSIA
18	Apr 29, 2010 03:17:14 PM	1644.400	PSIA
19	Apr 29, 2010 03:18:15 PM	1643.000	PSIA
20	Apr 29, 2010 03:19:14 PM	1641.400	PSIA
21	Apr 29, 2010 03:20:14 PM	1639.800	PSIA
22	Apr 29, 2010 03:21:14 PM	1638.400	PSIA
23	Apr 29, 2010 03:22:14 PM	1636.600	PSIA
24	Apr 29, 2010 03:23:15 PM	1635.200	PSIA
25	Apr 29, 2010 03:24:15 PM	1634.000	PSIA
26	Apr 29, 2010 03:25:14 PM	1632.600	PSIA
27	Apr 29, 2010 03:26:14 PM	1631.400	PSIA
28	Apr 29, 2010 03:27:15 PM	1629.600	PSIA
29	Apr 29, 2010 03:28:14 PM	1628.800	PSIA
30	Apr 29, 2010 03:29:14 PM	1627.200	PSIA
31	Apr 29, 2010 03:30:15 PM	1626.200	PSIA

## Castle Draw 16-2-9-17 (4-29-10)

<i>Step # 1</i>	Time:	8:05	8:10	8:15	8:20	8:25	8:30
	Rate:	100.4	100.4	100.4	100.4	100.4	100.4
	Time:	8:35	8:40	8:45	8:50	8:55	9:00
	Rate:	100.3	100.3	100.2	100.2	100.2	100.2
<i>Step # 2</i>	Time:	9:05	9:10	9:15	9:20	9:25	9:30
	Rate:	200.4	200.4	200.4	200.4	200.3	200.3
	Time:	9:35	9:40	9:45	9:50	9:55	10:00
	Rate:	200.3	200.3	200.3	200.2	200.2	200.2
<i>Step # 3</i>	Time:	10:05	10:10	10:15	10:20	10:25	10:30
	Rate:	300.6	300.6	300.5	300.5	300.5	300.5
	Time:	10:35	10:40	10:45	10:50	10:55	11:00
	Rate:	300.5	300.4	300.4	300.4	300.3	300.3
<i>Step # 4</i>	Time:	11:05	11:10	11:15	11:20	11:25	11:30
	Rate:	400.5	400.5	400.5	400.5	400.5	400.4
	Time:	11:35	11:40	11:45	11:50	11:55	12:00
	Rate:	400.3	400.3	400.2	400.2	400.2	400.2
<i>Step # 5</i>	Time:	12:05	12:10	12:15	12:20	12:25	12:30
	Rate:	500.5	500.5	500.4	500.4	500.4	500.3
	Time:	12:35	12:40	12:45	12:50	12:55	1:00
	Rate:	500.3	500.3	500.3	500.2	500.2	500.1
<i>Step # 6</i>	Time:	1:05	1:10	1:15	1:20	1:25	1:30
	Rate:	600.4	600.4	600.4	600.4	600.4	600.4
	Time:	1:35	1:40	1:45	1:50	1:55	2:00
	Rate:	600.2	600.2	600.1	600.1	600	600
<i>Step # 7</i>	Time:	2:05	2:10	2:15	2:20	2:25	2:30
	Rate:	700.6	700.6	700.6	700.5	700.5	700.4
	Time:	2:35	2:40	2:45	2:50	2:55	3:00
	Rate:	700.4	700.4	700.4	700.3	700.3	700.3
<i>Step # 8</i>	Time:						
	Rate:						
	Time:						
	Rate:						

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<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>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-45555
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Water Injection Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> CASTLE DRAW 16-2-9-17
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 4304733240000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0660 FSL 0660 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 02 Township: 09.0S Range: 17.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 8/20/2014	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT 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 type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="5 YR MIT"/>

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

5 YR MIT performed on the above listed well. On 08/20/2014 the casing was pressured up to 1667 psig and charted for 30 minutes with no pressure loss. The well was not injecting during the test. The tbg pressure was 1263 psig during the test. There was not an EPA representative available to witness the test. EPA #UT22197-04544

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
August 21, 2014**

<b>NAME (PLEASE PRINT)</b> Lucy Chavez-Naupoto	<b>PHONE NUMBER</b> 435 646-4874	<b>TITLE</b> Water Services Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/21/2014	

## Mechanical Integrity Test Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency  
Underground Injection Control Program  
999 18<sup>th</sup> Street, Suite 500 Denver, CO 80202-2466

EPA Witness: \_\_\_\_\_ Date: 8 / 20 / 14  
 Test conducted by: Kane Stevenson  
 Others present: \_\_\_\_\_

Well Name: <u>Castle Draw</u>	Type: ER SWD	Status: AC TA UC
Field: <u>Monument Butte</u>		
Location: <u>16</u> Sec: <u>2</u> T <u>9</u> N/S R <u>17</u> E/W County: <u>Uintah</u> State: <u>UT</u>		
Operator: <u>Newfield Exploration</u>		
Last MIT: <u>  </u> / <u>  </u> / <u>  </u>	Maximum Allowable Pressure: <u>1330</u>	PSIG

Is this a regularly scheduled test?  Yes  No  
 Initial test for permit?  Yes  No  
 Test after well rework?  Yes  No  
 Well injecting during test?  Yes  No If Yes, rate: \_\_\_\_\_ bpd

Pre-test casing/tubing annulus pressure: 0 TBS-1267 psig

MIT DATA TABLE	Test #1	Test #2	Test #3
<b>TUBING PRESSURE</b>			
Initial Pressure	<u>1267</u> psig	psig	psig
End of test pressure	<u>1263</u> psig	psig	psig
<b>CASING / TUBING ANNULUS PRESSURE</b>			
0 minutes	<u>1165</u> psig	psig	psig
5 minutes	<u>1165</u> psig	psig	psig
10 minutes	<u>1165</u> psig	psig	psig
15 minutes	<u>1166</u> psig	psig	psig
20 minutes	<u>1166</u> psig	psig	psig
25 minutes	<u>1167</u> psig	psig	psig
30 minutes	<u>1167</u> psig	psig	psig
_____ minutes	psig	psig	psig
_____ minutes	psig	psig	psig
<b>RESULT</b>	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Does the annulus pressure build back up after the test?  Yes  No

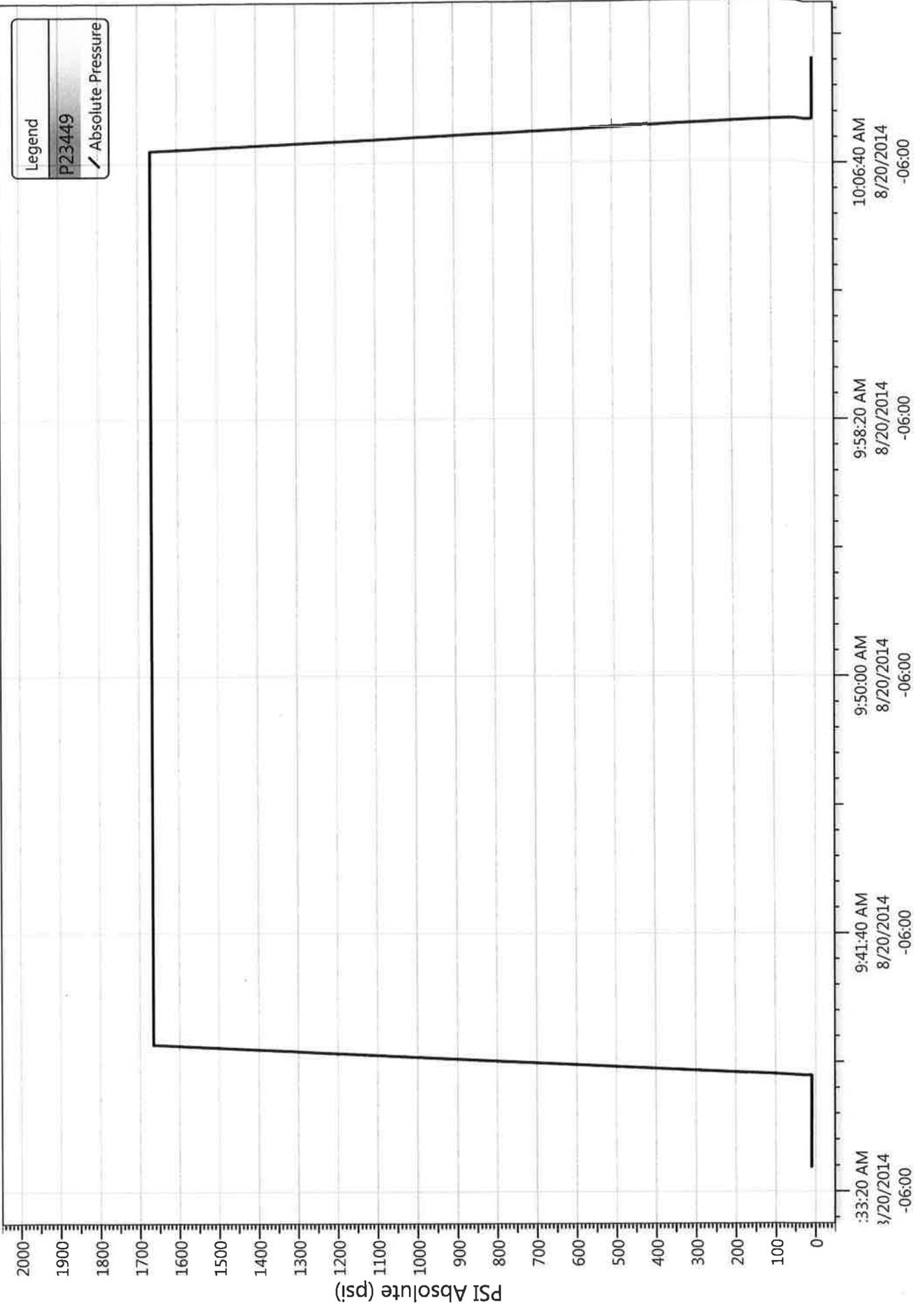
### MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc.:

Signature of Witness: \_\_\_\_\_

### Castle Draw 16-2-9-17 (5 Year MIT)

8/20/2014 9:33:30 AM



# Castle Draw #16-2-9-17

Spud Date: 3/06/00  
 Put on Production: 3/27/00  
 GL: 5058.7' KB: 5968.7'

## Injection Wellbore Diagram

### SURFACE CASING

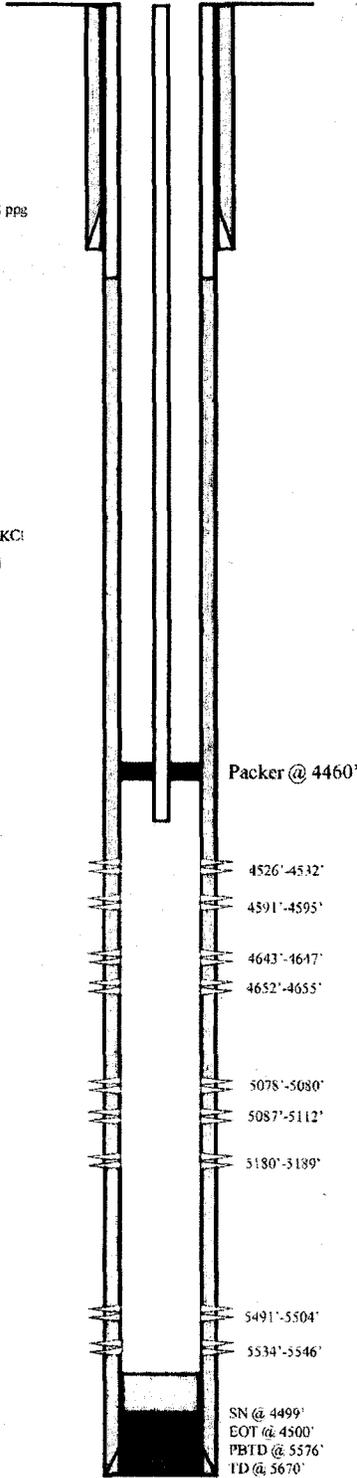
CSG SIZE: 8-5/8"  
 GRADE: J-55  
 WEIGHT: 24#  
 LENGTH: 7 jts. (306.41')  
 DEPTH LANDED: 304.41' GL  
 HOLE SIZE: 12-1/4"  
 CEMENT DATA: 141 sxs Class "G" cmt w/ 2% caCl<sub>2</sub> &  
 1/4#sk Cello-Flake @ 1.17 cf/sk & 15.8 ppg  
 3 bbl cement to surface

### PRODUCTION CASING

CSG SIZE: 5-1/2"  
 GRADE: J-55 & K-55  
 WEIGHT: 15.5#  
 LENGTH: 132 jts. (5625.3')  
 DEPTH LANDED: 5636.55' GL  
 HOLE SIZE: 7-7/8"  
 CEMENT DATA: 250 sxs Prem-Lite II w/ 10% Gel & 3% KCl  
 400 sxs 50/50 poz w/ 2% Gel & 3% KCl  
 6 bbl dye to sfc

### TUBING

SIZE/GRADE/WT.: 2-7/8" / J-55 / 6.5#  
 NO. OF JOINTS: 143 jts  
 PACKER: 4460'  
 SEATING NIPPLE: 2 - 7/8"  
 SN LANDED AT: 4499'  
 TOTAL STRING LENGTH: EOT @ 4500'



### FRAC JOB

3/21/00 5491'-5546' **Frac CP sands as follows:**  
 69,588# of 20/40 sand in 481 bbls of viking I-25. Breakdown @ 3182 psi. Treated @ avg rate of 28.6 bpm w/avg press of 1400 psi. ISIP-1680 psi, 5-min 1464 psi. Flowback on 12/64" ck for 5 hours and died.

3/23/00 5078'-5189' **Frac A/LDC sands as follows:**  
 96,787# of 20/40 sand in 584 bbls of Viking I-25. Breakdown @ 2137 psi. Treated @ avg rate of 31.5 bpm w/avg press of 1600 psi. ISIP-2100 psi, 5-min 1950 psi. Flowback on 12/64" ck for 3 hours and died.

3/24/00 4526'-4595' **Break Down DS/D sand as follows:**  
 Break down 4591'-4595' perms down (bg w/ hole fill at 2000 psi. IR 1.7 BPM at 1700 psi. Break Down 4526'-4532' perms down annulus at 2500 psi. IR 1.4 BPM at 1750 psi.

11/11/04 Converted to an Injection well  
 01/04/05 Put on Injection  
 05/18/05 Performed a Step Rate Test  
 09/22/09 5 Yr MIT

### PERFORATION RECORD

Date	Interval	Tool	Holes
3/20/00	5534'-5546'	4 JSPF	48 holes
3/20/00	5491'-5504'	4 JSPF	52 holes
3/22/00	5180'-5189'	4 JSPF	36 holes
3/22/00	5087'-5112'	2 JSPF	50 holes
3/22/00	5078'-5080'	4 JSPF	8 holes
3/24/00	4652'-4655'	4 JSPF	12 holes
3/24/00	4643'-4647'	4 JSPF	16 holes
3/24/00	4591'-4595'	4 JSPF	16 holes
3/24/00	4526'-4532'	4 JSPF	24 holes

**NEWFIELD**

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**Castle Draw #16-2-9-17**  
 660' FSL & 660' FEL  
 SESE Section 2-T9S-R17E  
 Uintah Co, Utah  
 API #43-047-33240; Lease #ML-45555