



01147761

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION )  
OF GUNNISON ENERGY CORPORATION )  
FOR AN EXTENSION OF TIME FOR )  
PERMITS-TO-DRILL, DELTA )  
AND GUNNISON COUNTIES COLORADO )

CAUSE NO. 1

(.103

DOCKET NO. 0310-GA-05

**APPLICANT GUNNISON ENERGY CORPORATION'S EXHIBITS**

- A. Map of Gunnison Energy Corporation's Exploratory Drilling Project
- B. COGCC Approved APD for Thompson Creek Federal Well
- C. BLM Approved APD for Thompson Creek Federal Well
- D. COGCC Approved APD for Hawksnest Federal Well
- E. BLM Approved APD for Hawksnest Federal Well
- F. BLM Finding of No Significant Impact/Decision Record for Gunnison Energy Corporation's Proposed Exploratory Drilling Project
- G. Lease No. COC65529, Thompson Creek Federal Well
- H. Lease No. COC65117, Hawksnest Federal Well
- I. Lease Stipulations from Gunnison Energy Corporation's Proposed Exploratory Drilling Project Environmental Assessment

State of Colorado

Oil and Gas Conservation Commission

120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109

APPLICATION FOR PERMIT TO:

1. TYPE OF WORK **CONFIDENTIAL**  
 Drill  Deepen  Re-enter  Recomplete and Operate

2. TYPE OF WELL  
 OIL  GAS  COAL BED  OTHER  Refilling   
 SINGLE ZONE  MULTIPLE ZONE  COMINGLE ZONE  Side Track

3. OGCC Operator Number: 100122  
 4. Name of Operator: Gunnison Energy Corporation  
 5. Address: 1801 Broadway, Suite 1200  
 City: Denver State: CO Zip: 80202  
 6. Contact Name & Phone: Mark McCallister  
 No: 303.296.4222 Fax: 303.296.4555  
 7. Well Name: Thompson Creek Federal 12-90 Well Number: #1-35  
 8. Unit Name (if applicable): Unit Number:  
 9. Proposed Total Depth: 4,040' MD 3,700' TVD

10. Qtr Qtr: NW /4 NE /4 Sec: 2 Twp: 13S Rng: 90W Meridian: 6th  
 Footage From Exterior Section Lines:  
 At Surface: 185' FNL 1,440' FEL  
 11. Field Name: Wildcat Field Number: 99999  
 12. Ground Elevation: 8,270' GR 13. County: Gunnison #051  
 14. If well is:  Directional  Horizontal (Highly Deviated), submit drilling plan.  
 Footage From Exterior Section Lines: 185' FNL 1,440' FEL Sec. 2  
 At Top of Production Zone: 650' FSL 2,171' FEL Sec. 35  
 If directional, at Production Zone: 650' FSL 2,171' FEL Sec. 35 At Bottom Hole: 1,221' FSL 2,171' FEL Sec. 35 T12S R90W  
 location is in high density area (Rule 603b)?  Yes  No  
 16. Distance to nearest building, public road, above ground utility or railroad: 3.97 miles south to Highway 133  
 17. Distance to Nearest Property Line: 1,221' (BHL) 18. Distance to nearest well completed in same formation: 2,465'

19. LEASE, SPACING, AND POOLING INFORMATION

Objective Formation (s)	Formation Code	Spacing Order Number	Unit Acreage Assigned to Well	Unit Configuration
Cameo Coals - Mesaverde	CAMMV			
<i>Blm Statewide Bond # CO1428</i>				

20. Mineral Ownership:  Fee  State  Federal  Indian Lease #: COC65529  
 21. Surface Ownership:  Fee  State  Federal  Indian  
 Is the Surface Owner also the Mineral Owner?  Yes  No Surface Surety ID #:  
 If No:  Surface Owner's Agreement Attached or  \$25,000 Blanket Bond  \$2,000 Surface Bond  \$5,000 Surface Bond  
 23. Describe lease area associated with the proposed well by QtrQtr, Sec, Twp, Rng (attach sheet/map if required): See attached Map  
 T12S R90W Sec. 35: All; Sec. 36: All  
 24. Distance to nearest Lease Line: 1,221' 25. Total Acres in Lease: 1,920

DRILLING PLANS AND PROCEDURES

26. Approximate Spud Date: June 1, 2003 \* If Air/Gas Drilling, Notify Local Fire Officials  
 27. Drilling Contractor Number: Name: Phone #:  
 28. Is H<sub>2</sub>S Anticipated:  No  Yes If yes, attach contingency plan.  
 29. Will salt sections be encountered during drilling?  No  Yes  
 30. Will salt (>15,000 ppm TDS Cl) or oil-based muds, be use during drilling?  No  Yes  
 31. If questions 29 or 30 are yes, is the location in a sensitive area (Rule 903)?  No  Yes  
 32. Mud disposal:  Offsite  Onsite  
 Method  Land Farming  Land Spreading  Disposal Facility  Other: Cuttings buried in place

CASING AND CEMENTING PROGRAM

String	Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Sks Cement	Cement Bottom	Cement Top
Surface	12-1/4"	9-5/8"	H-40 32.3# ST&C New	600'	±304 sxs Type III + Additives	600'	Surface
Production	8-3/4"	5-1/2"	N-80 17# ST&C New	4,040' MD	To surface ( Stage 1: Lead: 265 sxs Premium Lite HS w/additives; Tail: 45 sxs Premium Lite HS w/additives; Stage 2: Lead: 265 sxs Premium Lite HS w/ additives; Tail: 45 sxs Premium Lite HS w/additives)	4,040' MD	Surface
Stage Tool							

34. BOP Equipment:  Annular Preventor  Double Ram  Rotating Head  None

35. Comments, if any:  
 I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.  
 Print Name: Mark A. McCallister 303.296.4222  
 Signed: *Mark McCallister* Title: Operations Manager Date: December 6, 2002

OGCC Approved: *RT Dreibling* Director of COGCC Date: 1/25/03

API NUMBER: 05-051-6049-00 Permit Number: 20022267 Expiration Date: 1/24/04

CONDITIONS OF APPROVAL: *none 1/27/03* EXHIBIT B

FOR OGCC USE ONLY

RECEIVED  
DEC-6 02  
COGCC

Plugging Bond Surety ID #:

	Op	OGCC
APD Original and 2 Copies	<input checked="" type="checkbox"/>	
Form 2A (Reclamation) & 1 Copy		
Permit Fee	NA	
Well Location Plat	<input checked="" type="checkbox"/>	
Copy of Topo Map	<input checked="" type="checkbox"/>	
Plugging Surety		
Mineral Lease map	<input checked="" type="checkbox"/>	
Surface Agreement/Surety		
Pit Permit (Form 15)		
Deviated Drilling Plan	<input checked="" type="checkbox"/>	
Request for Exception Location		
Exception Location Waivers		
H <sub>2</sub> S Contingency Plan		
Federal Drilling Permit (1 set)	<input checked="" type="checkbox"/>	
30-day Notice		
Sent Complete Permit Package to County	<input checked="" type="checkbox"/>	

*operator  
copy*

**Permit Conditions**

**Thompson Creek Federal 12-90 #1-35 Well**

NW ¼ NE ¼ Section 2, Township 13 South, Range 90 West, Gunnison County

1. **Spud Notice.** Twenty-four (24) hour spud notice required. Notify Jaime Adkins at 970-285-9000.
2. **Notification of the local COGCC office prior to casing cement operations.** The operator shall notify the Northwest Colorado COGCC staff at least twelve (12) hours prior to casing cement operations.
3. **Cement Bond Log Requirement.** The operator shall run a cement bond log in the existing 7" production casing to verify that the top of cement is at least 200 feet above the shallowest completed interval. If the well is completed in a coal seam, the 7" production casing is required to be cemented to surface and the operator shall run a cement bond log across the entire length of the 7" production casing.

*4. Any completed interval be at least 600' from lease line*

FOR OGCC USE ONLY

Form

4

v 5/99

State of Colorado

Oil and Gas Conservation Commission  
DEPARTMENT OF NATURAL RESOURCES

SUNDRY NOTICE

This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (back of this form).

ET	OE	PR	ES
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1. OGCC Operator Number: <u>100122</u>	4. Contact Name & Phone: Mark McCallister No: 303.296.4222 Fax: 303.296.4555	Complete the Attachment Checklist	
2. Name of Operator: <u>Gunnison Energy Corporation</u>			
3. Address: <u>1801 Broadway, Suite 1200, Denver, CO 80202</u> City: <u>Denver</u> State: <u>CO</u> Zip: <u>80202</u>		Op	OGCC
5. API Number: _____	6. OGCC Lease No: _____	Survey Plat	
7. Well Name: <u>Thompson Creek Federal 12-90 Number: #1-35</u>		Directional Survey	
8. Location (QtrQtr, Sec, Twp, Rng, Meridian): <u>NW 1/4 NE 1/4 Sec. 2 T 13S R 90W 6th P.M.</u>		Surface Equipment Diagram	
9. County: <u>Gunnison #051</u>	10. Field Name: <u>Wildcat 99999</u>	Technical Information Page	
11. Federal, Indian, or State lease number: <u>COC65529</u>		Other	

12. General Notice

Change well name and number from \_\_\_\_\_ to \_\_\_\_\_ Effective Date: \_\_\_\_\_

Change of location from (QtrQtr, Sec, Twp, Range, Meridian): 1/4 1/4 Sec. T R  
Footage from Ext. Sec. Lines: \_\_\_\_\_

Change of location to (QtrQtr, Sec, Twp, Range, Meridian): 1/4 1/4 Sec. T R  
Attach new survey plat. Footage from Ext. Sec. Lines: \_\_\_\_\_

Abandoned Location. Is site ready for inspection?  Yes  No  
Was location ever built?  Yes  No

Date well first shut in or temporarily abandoned \_\_\_\_\_  Notice of continued shut-in status.  
Has production equipment been removed from site?  Yes  No  
MIT required if shut in longer than two years. Date of last MIT: \_\_\_\_\_

Request for Confidential Status (6 months from date of well completion). \_\_\_\_\_

Final reclamation will commence approximately on \_\_\_\_\_

Final reclamation is completed and site is ready for inspection. Attach technical page describing final reclamation procedures per Rule 1000.

Change of Operator (prior to drilling). Effective Date: \_\_\_\_\_ Plugging bond:  Blanket  Individual

Spud Date: \_\_\_\_\_

13. Technical Engineering/Environmental Notice

Notice of Intent Approximate Start Date: \_\_\_\_\_  Report of Work Done Date Work Completed \_\_\_\_\_

Details of work must be described in full on Technical Information Page (Page 2 must be submitted).

<input type="checkbox"/> Comingle Zones	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Intent to Recomplete (Submit Form 2)	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Convert Well to Injection (in an Approved Secondary Project)	<input type="checkbox"/> New Pit
<input type="checkbox"/> Reservoir Stimulation	<input type="checkbox"/> Additional Source Leases for Water Disposal Well	<input type="checkbox"/> Landfarming
<input type="checkbox"/> Perforating/Perfs Added	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Status Update/Change of
Gross Interval Changed? <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Variance

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Kathy L. Schneebeck 303-820-4480

Signed: Kathy L. Schneebeck Title: Agent for Gunnison Energy Corporation Date: December 10, 2002

OGCC Approved: [Signature] Title: ET11 Date: 1/25/03

CONDITIONS OF APPROVAL, IF ANY:

W/c 1/27/03

January 10, 2003

John Devore  
Gunnison County  
200 E. Virginia  
Gunnison, CO 81230

Re: Gunnison Energy Corporation Applications for Permit-to-Drill ("APDs")

**Hawksnest Federal 13-90 #1-2 Well**

SE¼ NW¼ Section 2, Township 13 South, Range 90 West, Gunnison County

**Thompson Creek Federal 12-90 #1-35 Well**

NW¼ NE¼ Section 2, Township 13 South, Range 90 West, Gunnison County

Dear John:

Although Gunnison County has not submitted comments on the above captioned APDs through its Local Governmental Designee, the following information is provided as a courtesy to Gunnison County.

The Rules and Regulation of the COGCC are designed to address all stages of oil and gas operations as defined in the Oil and Gas Conservation Act (the "Act") that are conducted in Colorado. Compliance with these rules and with the statute adequately protect public health, safety and welfare. In addition, each wellbore constitutes a point of compliance as defined in the COGCC Rules from which ground water standards established under the Water Quality Control Commission can be determined to be in compliance. When applicable, certain conditions of permit approval not specifically addressed in the COGCC Rules may be imposed upon an APD by the Director.

Permit approval is an administrative function under the Act delegated to the Director by the Commission. I have carefully reviewed the APDs with members of our staff to ensure that public health, safety, and welfare is protected by the APDs as conditioned and by existing COGCC Rules and statutes. In addition, both the surface estate and the mineral estate where the wells are located are owned and managed by the federal government. The U. S. Forest Service manages the surface lands where the wells are located, and the COGCC shares a dual responsibility with the U.S. Bureau of Land Management in permitting the subsurface aspects of oil and gas development. As such, we have been in communication with staff at the U.S. Bureau of Land Management and the U.S. Forest Service to gain an understanding of their extensive review processes for APDs.

The APDs filed by Gunnison Energy Corporation are complete application packages submitted using standard petroleum industry practices and complying with COGCC rules. The Permits have been issued with conditions of permit approval. Those documents are attached herein and include a description of how pertinent COGCC Rules and the proposed wellbore construction protect public health, safety and welfare.

You can find a copy of the brochure titled "Typical Questions From The Public About Oil and Gas Development in Colorado" at the COGCC website to further assist you in understanding

July 3, 2002

Page 2 of 2

the COGCC's role.

Sincerely,

Rich Griebling

cc: Well file

# NOTICE TO OPERATORS

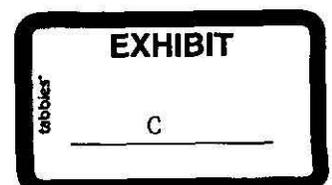
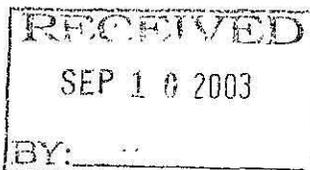
All Spud notifications must be given to BLM personnel directly. Do not leave messages on answering machines. Spud notices are to be phoned into the BLM office during regular working hours; (Monday-Friday, 8:00-4:30).

If any operations are to start over the weekend or holiday, notify this office by noon Friday or the day prior to the holiday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed below. Do not leave messages on answering machines.

Terry Galloway	Technician	work: 970-385-1347	home: 970-884-4067
Gary Retherford	Technician	work: 970-385-1364	home: 970-884-6138
Marie Gray	Technician	work: 970-385-1349	home: 505-632-9346
Dan Rabinowitz	Engineer	work: 970-385-1363	home: 970-247-9585

PLEASE NOTE: 1) SITE SPECIFIC CONDITIONS OF APPROVAL

APDnoticeOp.wpd



BANKO  
PETROLEUM  
MANAGEMENT INC.

Ruth  
Richardson

FEDERAL EXPRESS - PRIORITY OVERNIGHT

Ms. Helen Mary Johnson  
Bureau of Land Management  
Durango Field Office  
15 Burnett Court  
Durango, CO 81301



December 5, 2002

RE: Application for Permit to Drill  
**Electronic Submission #15984**  
Gunnison Energy Corporation  
**Thompson Creek Federal 12-90#1-35**  
Surface Location: 185' FNL 1,440' FEL (NE/4 NE/4) Sec. 2 T13S R90W  
Bottom Hole Location: 650' FSL 1,800' FEL (SW/4 SE/4) Sec. 35 T12S R90W  
Gunnison County, Colorado  
Federal Lease: COC 65529

Dear Ms. Johnson:

Please find attached the Application for Permit to Drill (APD) for the above captioned well, filed on behalf of Gunnison Energy Corporation (GEC). The application was filed electronically.

Your early attention to this application is greatly appreciated, thank you for your concern.

Very truly yours,

/s/ David F. Banko

David F. Banko  
Agent for Gunnison Energy Corporation

DFB:mgd

Enclosures

cc: Gunnison County Planning Department, Certified Mail  
BLM - Montrose District Office  
Colorado Oil and Gas Conservation Commission  
Gunnison Energy Corporation  
Oxbow Power Corporation - West Palm Beach, FL  
Bjork, Lindley, Dannielson, & Baker, P.C.  
Keith Dana

**RECEIVED**

DEC 11 2002

**Bureau of Land Management  
Durango, Colorado**

CONFIDENTIAL

RECEIVED

Form 3160-3 (August 1999)

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SEP 09 2002

5. Lease Serial No. COC65529

6. If Indian, Allottee or Tribe Name

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work [X] DRILL [ ] REENTER CONFIDENTIAL

1b. Type of Well [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

2. Name of Operator Gunnison Energy Corporation Contact: Mark McCallister E-Mail: mark\_mccallister@opsi.oxbow.com

3a. Address 1801 Broadway, Suite 1200, Denver, CO 80202 3b. Phone No. (include area code) 303.296.4222

4. Location of Well (Report location clearly and in accordance with any State Requirements.) At surface 185' FNL 1,440' FEL 38.954084 Lat. 107.412753 Long. NW 1/4 NE 1/4 At proposed production zone 1,221' FSL 2,171' FEL Lot 15 (SW/4 SE/4) Sec. 35 T12S R90W

14. Distance in miles and direction from nearest town or post office. ± 3 miles northeast of Somerset, Colorado 12. County or parish Gunnison 13. State CO

15. Distance from proposed location to nearest property of lease line, ft. (Also nearest Dng, unit line, if any) Unit= N/A Lease= 1,221' 16. No. of acres in lease 1,920.0 17. Spacing Unit dedicated to this well 160

18. Distance from proposed location to nearest well, drilling, completed or applied for, on this lease, ft. 2,465' 19. Proposed depth 4,040' 20. BLM/BIA Bond No. on file CO1428

Elevations (Show whether DF, KDB, RT, GL, etc.) 8,270' GR 22. Approximate date work will start June 1, 2003 23. Estimated duration 45-60 days drlg + completion

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form: 1. Well plat certified by a registered surveyor 2. A Drilling Plan. 3. A Surface Use Plan (if the lease is on National Forest Lands, the SUPO shall be filed with the appropriate Forest Service Office). 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature Mark A. McCallister Name (Printed/Typed) Mark A. McCallister Date December 5, 2002 Title Operations Manager

Approved by (Signature) [Signature] Name (Printed/Typed) /s/ Brian W. Davis Date SEP 8 2003 Title Acting Field Office Manager

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

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

Additional Operator Remarks (see next page)

SEE ATTACHED CONDITIONS OF APPROVAL

Electronic Submission #15984 verified by the BLM Well Information System For GUNNISON ENERGY CORPORATION, sent to the Durango Field Office

\*\* Original \*\* Original \*\* Original \*\* Original \*\* Original \*\* Original

OPERATOR'S COPY

**Additional Operator Remarks:**

This document serves as a *right of way (ROW) application for the wellsite and the BLM portion of the access road as indicated on Exhibit "L".*

The Corcoran, Cozzette, Rollins, Cameo Coals and the Barren Member of the Mesa Verde Formation will be tested.

**Casing and Cement program:**

Conductor: 40' of 16" .375 wall, 17-1/2" hole, 23.6 cu. ft. of cement

Surface: 600' of 9-5/8", 32.3#, H-40, 12-1/4" hole, 423 cu. ft. of cement

Production: 3,750' of 5-1/2", 17# N-80, 7-7/8" hole, 1,418 cu. ft. of cement

**List of Attachments:**

- Exhibit "A" - Drilling Program
- Exhibit "B" - Surface Use Plan
- Exhibit "C1" - Survey Plat - Surface hole Location
- Exhibit "C2" - Survey Plat - Bottom hole Location
- Exhibit "D" - Cut & Fill Diagram
- Exhibit "E" - Drill Pad Layout
- Exhibit "F" - Production Pad Layout
- Exhibit "G" - Area Map
- Exhibit "H" - Water Haul Route
- Exhibit "I" - Wellbore Diagram
- Exhibit "J" - BOP Diagram
- Exhibit "K" - Choke Manifold Diagram
- Exhibit "L" - Access Road Map
- Exhibit "M" - Threatened & Endangered Species Survey
- Exhibit "N" - Flora & Fauna
- Exhibit "O" - Casing Designs
- Exhibit "P" - Directional 3D Plan
- Exhibit "Q" - Projected Directional Survey
- Exhibit "R" - Grading and Surface Hydrology Plans

The Cultural Resources Survey has been sent under a Metcalf Resources Cover.

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DEC 11 2002

Form 2 Rev 6/99 601

State of Colorado

Oil and Gas Conservation Commission

Bureau of Land Management Durango, Colorado

20 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109

APPLICATION FOR PERMIT TO:

TYPE OF WORK

Drill  Deepen  Re-enter  Recomplete and Operate

CONFIDENTIAL

2. TYPE OF WELL

OIL  GAS  COAL BED  OTHER  Refilling   
SINGLE ZONE  MULTIPLE ZONE  COMINGLE ZONE  Side Track

Plugging Bond Surety ID #:

3. OGCC Operator Number: 100122

Name of Operator: Gunnison Energy Corporation

Address: 1801 Broadway, Suite 1200

City: Denver State: CO Zip: 80202

Well Name: Thompson Creek Federal 12-90

Unit Name (if applicable):

6. Contact Name & Phone

Mark McCallister

No: 303.296.4222

Fax: 303.296.4555

Well Number: #1-35

Unit Number:

9. Proposed Total Depth: 4,040' MD 3,700' TVD

WELL LOCATION INFORMATION

1. Qtr Qtr: NW 1/4 NE 1/4 Sec: 2 Twp: 13S Rng: 90W Meridian: 6th

Footage From Exterior Section Lines:

At Surface: 185' FNL 1,440' FEL

Field Name: Wildcat Field Number: 99999

12. Ground Elevation: 8,270' GR 13. County: Gunnison #051

14. If well is:  Directional  Horizontal (Highly Deviated), submit drilling plan.

Footage From Exterior Section Lines: 185' FNL 1,440' FEL Sec. 2

At Top of Production Zone: 650' FSL 2,171' FEL Sec. 35

If directional, at Production Zone: 650' FSL 2,171' FEL Sec. 35 At Bottom Hole: 1,221' FSL 2,171' FEL Sec. 35 T12S R90W

Location is in high density area (Rule 603b)?  Yes  No

16. Distance to nearest building, public road, above ground utility or railroad: 3.97 miles south to Highway 133

17. Distance to Nearest Property Line: 1,221' (BHL) 18. Distance to nearest well completed in same formation: 2,465'

LEASE, SPACING, AND POOLING INFORMATION

Table with columns: Objective Formation (s), Formation Code, Spacing Order Number, Unit Acreage Assigned to Well, Unit Configuration. Includes rows for Cameo Coals - Mesaverde and ownership details.

DRILLING PLANS AND PROCEDURES

Approximate Spud Date: June 1, 2003. Drilling Contractor Number: Name: Phone #: 28. Is H2S Anticipated:  No  Yes... 32. Mud disposal:  Offsite  Onsite...

CASING AND CEMENTING PROGRAM

Table with columns: String, Size of Hole, Size of Casing, Weight per Foot, Setting Depth, Sks Cement, Cement Bottom, Cement Top. Includes rows for Surface and Production casing.

34. BOP Equipment:  Annular Preventor  Double Ram  Rotating Head  None

35. Comments, if any: hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Mark A. McCallister 303.296.4222

Signed: [Signature] Title: Operations Manager Date: December 6, 2002

OGCC Approved: Director of COGCC Date:

API NUMBER 05- Permit Number: Expiration Date: CONDITIONS OF APPROVAL, IF ANY:

**EXHIBIT "A"**



**Gunnison Energy Corporation  
Drilling Program  
Thompson Creek Federal 12-90 #1-35**

SHL - 185' FNL 1,440' FEL (NWNE), Sec. 2, T13S R90W  
BHL - 1,221' FSL 2,171' FEL (SWSE), Sec. 35, T12S R90W  
Gunnison County, Colorado  
Federal Lease: SHL - BLM - Pending  
Federal Lease: BHL - COC-65529

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 and supporting Bureau of Land Management (BLM) documents. This NOS process included on-site meetings on November 6, 2002 prior to the submittal of the application, at which time the specific concerns of Gunnison Energy Corporation (Gunnison Energy) and the BLM were discussed. All specific concerns of the BLM representatives are addressed herein, as are specific stipulations from the BLM and USFS.

Please contact Mr. Mark McCallister at Gunnison Energy, (303) 296-4222 if there are any questions or concerns regarding this Drilling Program.

Gunnison Energy respectfully requests that all information regarding this well be kept confidential.

<b><u>ANTICIPATED START DATE</u></b>	June 1, 2003	
<b><u>SURFACE ELEVATION</u></b>	8,270'	
<b><u>SURFACE FORMATION</u></b>	Green River (Stony Loam) - Fresh water possible	
<b><u>ESTIMATED FORMATION TOPS (TVD)</u></b> (Water, oil, gas and/or other mineral-bearing formations)		
Wasatch	N/A	Shales, siltstones and lenticular sandstones, some water or gas bearing
Ohio Creek	645'	Sandstones, shales and siltstones
Upper Mesa Verde	850'	Sandstone, shales & siltstones, some water, oil or gas bearing
Cameo Coals	2,760'	Coal zones w/interbedded sandstone, shales & siltstones, some water, oil or gas bearing
Rollins	3,030'	Sandstone, shales & siltstones, some water, oil or gas bearing
Cozzette	3,400'	Sandstone, shales & siltstones, some water, oil or gas bearing
Corcoran	3,680'	Sandstone, shales & siltstones, some water, oil or gas bearing
Mancos	3,690'	Shales, siltstones and lenticular sandstones, some water or gas bearing
<b><u>TOTAL DEPTH</u></b>		<b>4040' MD (3,700' TVD)</b>

**DIRECTIONAL PROGRAM**

1. Run gyro survey from 600' to the surface and tie in directional plan. PU directional BHA TIH. Build angle at 2.7°/100' to an angle of 30° at 2896' MD (2710' TVD). Hold 30° to a total depth of 4040' MD (3700' TVD). See attached directional plan.

**LOGGING, CORING TESTING PROGRAM**

1. Logging: Intermediate: GR/DIL, CDL/SNL & DPS. CBL after setting casing  
Total Depth: GR/DIL, CDL/SNL & DPS. Possible FMI & RFT. CBL after setting casing.
2. Coring: Sidewall cores as determined by open hole logs.
3. Testing: Possible DST -- Cameo/Rollins/Cozzette/Corcoran. Drill stem tests may be run on shows of interest.

**MUD PROGRAM**

1. Conductor: 0' to 40', 17-1/2" hole no fluid.
2. Surface: 40' to 600', 12-1/4" hole drilled with an air hammer and mist if necessary.
3. Production: 600' to 4,040', 7-7/8" hole drilled with an air motor and mist.

*(If unable to continue drilling with air due to hole stabilization, the hole will be mudded up with a fresh water LSND system (M.W. 8.6 - 9.2 ppg, Vis - 35-50 sec, W.L. 15 cc or less). The hole will be treated for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite)*

Blooiie lines and pits will be operated and treated to control dust levels and off-site impacts.

**CASING PROGRAM**

Casing	Hole Size	Casing Size	Weight	Grade	Depth Set (MD)	Cement Top
Conductor	17-1/2"	16"	.375" wall	LP	40'	Surface
Surface	12-1/4"	9-5/8"	32.3#	H-40	600'	Surface
Production	8-3/4"	5-1/2"	17#	N-80	4,040'	Surface

**FLOAT EQUIPMENT**

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
2. PRODUCTION CASING: 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' shoe joint. Place a 5-1/2" stage tool at 2,020'. Place a cement basket just below stage tool and centralizers on the first collar above and below stage tool. Place positive standoff turbulent centralizers as recommended for directional hole

**CEMENTING PROGRAM** (Note: Volumes may be adjusted onsite based on actual conditions)

1. **SURFACE:** Slurry: 304 sx (423 cu.ft.) of "Type III" + 2% CaCl<sub>2</sub> + ¼ # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 125% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500 psi.
2. **PRODUCTION:** **Stage #1:** Scavenger - 30 sx (157 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 (Weight = 11#/gal). Lead: 235 sx (461 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32. (Yield = 1.96 cu.ft./sk, Weight = 12.5 #/gal.). Tail: 77 sx (152 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 + .25 #/sk Celloflake + 4% Phenoseal. (Yield = 1.98 cu.ft./sk, Weight = 12.5 #/gal.). Displace cement at a minimum of 8 BPM until pressure is caught then reduce displacement to 4 BPM. Use 50% excess in lead and tail to circulate stage tool. Open stage tool, displace water in casing with air and circulate for 5 hrs before cementing the second stage. **Stage #2:** Scavenger - 30 sx (157 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 (Weight = 11#/gal). Lead: 235 sx (461 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32. (Yield = 1.96 cu.ft./sk, Weight = 12.5 #/gal.). Tail: 77 sx (152 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 + .25 #/sk Celloflake + 4% Phenoseal. (Yield = 1.98 cu.ft./sk, Weight = 12.5 #/gal.). Displace cement at a minimum of 8 BPM until pressure is caught then reduce displacement to 4 BPM. Use 50% excess in lead and tail to circulate cement to the surface. **Total volume = 1,539 cu.ft.** WOC 12 hours.

**ABNORMAL CONDITIONS**

1. Pressures: No abnormal conditions are anticipated.  
Cameo/Rollins, pressure gradient - 0.40 psi/ft  
Cozzette/Corcoran pressure gradient - 0.40 psi./ft
2. Temperatures: No abnormal conditions are anticipated.
3. H<sub>2</sub>S: None anticipated.
4. Estimated bottom hole pressure: 1,480 psi. Corcoran

**PRESSURE CONTROL** (See attached schematic diagram)

BOP's and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever pressure seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventors and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. Annular type preventors will be pressure tested to 50% of their rated working pressure. All casing strings will be pressure tested to 0.22 psi/ft. or 1,500 psi, whichever is greater, not to exceed 70% of internal yield. A manual locking device (i.e. hand wheels) or automatic locking devices shall be installed on the BOP stack.

The choke manifold and accumulator will meet or exceed Onshore Order No. 2 standards. The BOP equipment will be tested after any repairs to the equipment. Pipe rams, blind rams and the annular preventor will be activated on each trip, and weekly BOP drills will be held with each crew. All tests, maintenance, and BOP drill information will be entered on rig "tower" sheet.

A 3M BOP system is proposed for this well; however, the rig may have a 5M BOP system, but will only be required to meet the 3M specifications.

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with Onshore Order No. 2 for 3,000 psi systems.

A remote accumulator will be used. Pressures, capacities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

AUXILIARY EQUIPMENT

1. Upper kelly cock & lower kelly cock in drill string
2. Inside BOP. or stab-in valve (available on rig floor).
3. Mud monitoring will be with a flowing sensor, pit level indicator, and visually observed.

COMPLETION

CBL

1. Run Cement Bond Log from TD to the surface. Find top of cement and squeeze as necessary if cement was not circulated to the surface.

PRESSURE TEST

1. Install wellhead saver.
2. Pressure test 5-1/2" casing to 6500# for 15 minutes.

STIMULATION

1. Stimulate with approximately 120,000# of 20/40 sand in a 20# to 30# CMHPG gel in a 70 quality N<sub>2</sub> foam.

*(Note: The number of stages will be adjusted based upon actual conditions)*

RUNNING TUBING

1. Run 2-3/8", 4.7#, J-55, EUE tubing with a notched collar on bottom and a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom perforation.

*Mark McCallister*

Mark McCallister  
Operations Manager

**EXHIBIT B**



**GUNNISON ENERGY CORPORATION**

Thompson Creek Federal 12-90 #1-35

Surface: 185' FNL 1,440' FEL (NW/4 NE/4)

Sec. 2 T13S R90W

Bottomhole: 1,221' FSL 2,171' FEL (Lot 15 SE/4) within 100' radius

Sec. 35 T12S R90W

Gunnison County, Colorado

Federal Lease: COC65529

**SURFACE USE PLAN**

WELL LOCATION AND INTRODUCTION:

The proposed surface location is 185' FNL 1,440' FEL (NW/4 NE/4) of Section 2 T13S R90W, a distance of 185' south of the United States Forest Service (USFS) boundary. In order to avoid USFS lands, the USFS surface boundary in the area will be surveyed and staked, as required by the USFS. The proposed bottomhole location for this well is 650' FSL 1,800' FEL (Lot 15 SE/4) Sec. 35 T12S R90W. The wellsite was surveyed and staked on November 7, 2002 by North Star Survey and Mapping, Inc. on a site that was geologically, topographically, and legally acceptable.

An on-site meeting to address compliance issues was held on November 6, 2002. Attending were:

Bureau of Land Management (BLM) (Montrose)	Lynn Lewis Teresa Pfifer Jim Ferguson Danna Knox	Geologist Realty Specialist Wildlife Biologist Surface Compliance Specialist
Gunnison Energy Corporation	Mark McCallister	Operations Manager
Banko Petroleum Management	David Banko	Petroleum Engineer
North Star Mapping	Dominic Chavez	Surveyor
Cordilleran Compliance Services, Inc.	Diane Kocis	Sr. Environmental Scientist

Specific stipulations resulting from the November 6, 2002, meeting are noted below (\*).

The BLM Montrose (Uncompahgre) Field Office Manager or Authorized Officer (AO) will be notified 48 hours by phone prior to commencing construction or any surface disturbance of the drillsite, 48 hours prior to backfilling the reserve pit or commencing reclamation work, and 48 hours before moving equipment from the site (see item 11-H of this submittal).

Contacts: BLM Montrose - Danna Knox - 970.240.5404

Lynn Lewis - 970.240.5305

Gunnison County Local Government Designee (LGD) - John Devore 970.641.0248 x0

The operator's designated representatives, drilling contractor, and dirt contractor will keep a copy of the approved APD Surface Use Plan, containing stipulations at the work site at all times.

Drilling operations are considered to be all phases of drilling a well, from road and drill pad construction through drilling, completion, testing, production hook-up, reclamation, and production. Minor road use may be allowed during any possible shutdown period for well checks under conditions specified by the AO on a day-by-day or case-by-case basis.

Prior to beginning construction of the location, a pre-work conference will be held with the BLM representative, operator's representative, dirt contractor, and GEC compliance inspector to review plans, specifications, requirements, and chain of command.

Timber of merchantable size, if any, shall be stockpiled for future reclamation use. Sub-merchantable timber may be scattered outside the right-of-way (ROW) so that it lies within 2 feet of the ground.

Certain Surface Use requirements are as follows:

General: The operator shall conduct operations on leasehold on Federal Lands in a manner that minimizes effects on surface resources, prevents unnecessary or unreasonable surface resource disturbance, and that is in compliance with the other requirements of this section. The operator shall comply with the Clean Water Act, National Pollution Discharge Elimination System (NPDES), Stormwater Management Plans, Colorado Department of Public Health and Environment (CDPHE) standards for gas emissions and all other applicable laws pertaining to oil and gas operations.

Notice of operations: The operator must notify the authorized officer 48 hours prior to commencing operations or resuming operations following their temporary cessation. See previous page.

Fire prevention and control: To the extent practicable, the operator shall take measures to prevent uncontrolled fires on the area of operation and to suppress uncontrolled fires resulting from the operations. Fire restrictions/guidelines during periods of high wildfire danger will be followed as required by the AO.

Safety measures:

- (1) The operator must maintain structures, facilities, improvements, and equipment located on the area of operation in a safe and neat manner and in accordance with an approved surface use plan of operations.
- (2) The operator must take appropriate measures in accordance with applicable Federal and State laws and regulations to protect the public from hazardous sites or conditions resulting from the operations. Such measures may include, but not limited to, posting signs, building fences, or otherwise identifying the hazardous site or condition.

DIRECTIONS TO LOCATION:

Beginning at the intersection of Highway 133 and Highway 187 near Paonia, Colorado, in Delta County, Colorado, travel easterly for approximately 8.8 miles on Highway 133 to the town of Somerset, in Gunnison County, Colorado. Continue travel on Highway 133 easterly for approximately 1.5 miles to an existing gravel resource road (Coal Gulch Road). Turn left and travel northerly on the existing gravel resource road

for approximately 3.4 miles to the proposed Hawksnest Federal 13-90 #1-2 staked access road. Continue travel on the existing gravel resource road (Coal Gulch Road) for approximately 3,025 feet (0.57 miles) the proposed staked access road. Turn right and travel for approximately 35 feet to the proposed location.

DIRECTIONS FROM WATER HAUL:

From the Oxbow mine in the town of Somerset, in Gunnison County, Colorado, travel east for 1.75 miles on Highway 133 to an existing gravel resource road (Coal Gulch Road). Turn left and travel northerly on the existing gravel resource road for approximately 3.4 miles to the proposed Hawksnest Federal 13-90 #1-2 staked access road. Continue travel on the existing gravel resource road (Coal Gulch Road) for approximately 3,025 feet (0.57 miles) the proposed staked access road. Turn right and travel for approximately 35 feet to the proposed location.

1) EXISTING ROADS

**Coal Gulch Jeep Trail:**

Existing Jeep Trail: T13S R90W	Sec. 2	±5,042'	BLM, off lease
	Sec. 3	±1,245'	BLM, off lease
	Sec. 3	<u>±1,425'</u>	<u>BLM, off lease</u>
		±7,712'	(1.46 miles) Total

**Improved Access Road:**

	Sec. 3	±5,550'	BLM, on lease
	Sec. 3	±225'	BLM, off lease
	Sec. 10	<u>7,440'</u>	<u>Oxbow Mining, off lease</u>
		±13,215'	(2.50 miles) Total
		<b>20,927'</b>	<b>(3.97 miles) Total Existing Roads</b>

- A) The well is an exploratory well.
- B) Existing roads within 2.0 miles consist of a dirt-surfaced road to within 35 feet of the proposed location.
- \* C) Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions than at present. The roads shall be maintained reasonably smooth, free of ruts, soft spots, chuckholes, rocks, slides and washboards. Specific improvements to be completed during 2003 under the operator's road plan are as agreed to between GEC and the BLM. Final Road Plan will be contained in the BLM Conditions of Approval (COA). Coordination and consultation with the parent company to GEC Oxbow Mining, Inc. (Oxbow) will occur prior to all road maintenance. A regular maintenance program shall include blading, ditching, sign replacement, surfacing, and culvert maintenance as agreed to with Oxbow and consistent with mining or any other applicable regulatory requirements. The operator is required to correct maintenance deficiencies when documented and directed by the AO.
- \* D) The ROW width of existing roads will be maintained as they presently exist unless authority to widen is granted to the operator by the AO.
- \* E) Operations will cease during periods when mud and silt cannot be contained within the road prism, or when construction specification cannot be achieved because of wet or frozen ground.
- \* F) There shall be no mud blading on the access road. Vehicles may be towed through the mud provided they stay on the roadway.
- \* G) The operator will secure necessary road permits from the appropriate County Road Department before doing any work on roads under County jurisdiction.

- \* H) A ROW from the BLM will be required and has been initiated in this APD. Road use requirements within the APD will apply to on-lease as well as off-lease roads.
- \* I) The operator will schedule heavy traffic periods, such as moving the rig in or out, to take place during the week and not on weekends or holidays.
- \* J) The operator will avoid damaging roadside vegetation with snow accumulation created by snow removal.
- \* K) The operator will use dust control materials of a non-toxic and non-polluting nature.
- \* L) Drilling equipment will not be moved to or from location during spring breakup.
- \* M) Construction signing must be in place when construction commences and be in compliance with the Manual of Uniform Traffic Control Devices.
- N) The well location will not be accessible by light truck except during the summer months. All well maintenance requiring heavy equipment will be completed during the summer months. The well and surface facilities will be maintained via snow machine in the winter. The roads are used year round; snow mobiles, snow shoeing and cross country skiing in the winter, horseback riding, hiking, and camping in the non-snow months.
- \* O) The existing ATV trail will be re-routed around the west side of the drill pad until such time that it can be returned to its original location. The existing jeep trail on the east side of the drillpad will not be blocked.

2) PLANNED ACCESS ROADS

±35 feet (0.01 miles) Total new construction (See Exhibits G, H, L, and P)

*This Application for Permit to Drill will serve as a request for BLM to initiate a Right-of-Way application for well site, access road, and water haul routes, if necessary. This right-of-way can continue up to the well head.*

- A) The new access road will be upgraded, crowned and ditched. Subgrade (running surface) width to be approximately 14'-16', total disturbed width not to exceed 30'. If conditions are favorable, a "minimum disturbance" road may be built by clearing the brush, width ±20'. No flat blading will be allowed. **For inslope roads on side hills, the road will be sloped inward toward the high side of the hill and a borrow ditch placed at the upslope side of the road. No borrow ditch will be constructed on the downhill side of the road.**
- B) Borrow ditches to be backsloped 2:1 or shallower.
- C) Maximum grades - 1% for 35'.
- \* D) One (1) low water crossing will be installed near the intersection of the existing road and the access to the pad prior to commencement of drilling operations. Drainage to consist of borrow ditches on both sides and will be installed prior to commencement of drilling operations. Wing ditches and water dips will be installed, if necessary. Appropriate water bars may be constructed as follows to assure drainage off location to conform to natural drainage patterns (if directed by the AO):

Grade	Spacing
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

If the well is completed as commercial, all weak and/or wet soils in this area will have to be hardened with geotextile fabric underlying inch and a half (1-1/2) to three (3) inch minus

crushed rock aggregate. Access road portions, which begin to show surface rutting deeper than two (2) inches, will be applied to harden the road. If road conditions are such that vehicles create ruts deeper than 4", travel activities will be temporarily suspended.

- \* E) Surfacing material to consist of native material from the road crown. Topsoil to be windrowed during construction and placed in the borrow ditch backslope. During reclamation, backslope of borrow ditch will be re-seeded per Section 10-E of this Surface Use Plan. Surfacing material is as agreed to between GEC and BLM.
- F) No major road cuts are necessary.
- \* G) Fence cuts and cattleguards will be installed at the road intersections (at new construction access) to the well. There will be a cattle guard at the entrance to location, as well. (A 14' security gate with a sign will be installed at the start of the new access road and kept locked during operations, to prevent general use of the road).
- \* H) Round the upper edges of all cut banks on the access road and well pad.
- \* I) The operator will use dust control materials on the access road, staging area, and drillsite location of a non-toxic and non-polluting nature, including water, magnesium chloride, emulsified asphalt, or other dust palliatives to decrease the application frequency.
- \* J) A portion of the access road includes a crossing of a small water break dam and stock pond 0.30 miles southwest of the wellpad. The top of the stock pond dam is an existing jeep trail. The top of the stock pond dam will be widened to safely accommodate the well operations traffic. Total travel surface width to be 18'.

3) LOCATION OF EXISTING WELLS

Within a 3-mile radius per COGCC's requirements:

Proposed	Thompson Creek Fed.	T13S R90W	Sec. 12	SW/4 NW/4
	(12-90 #1-35)			
Drilling	None			
Abandoned	Fansler #7-1	T13S R89W	Sec. 7	NW/4 NE/4
Disposal injection	None			
Shut-In	None			
Producing	None			

Within a 2-mile radius per BLM's requirements:

Proposed	Thompson Creek Fed.	T13S R90W	Sec. 12	SW/4 NW/4
	(12-90 #1-35)			
Drilling	None			
Abandoned	Fansler #7-1	T13S R89W	Sec. 7	NW/4 NE/4
Disposal injection	None			
Shut-In	None			
Producing	None			

LOCATION OF EXISTING PRODUCING FACILITIES OPERATED BY GUNNISON ENERGY CORPORATION

Within two miles      None

4) NEW PRODUCTION FACILITIES PROPOSED

Well will be tested with well test equipment for a period of 7 days – 120 days. The test period will depend on test results from the first several days testing. Water produced during the test period will be stored in a temporary tank, and then hauled to an approved disposal site. Permanent production

equipment will be installed when the pipeline is installed. Installation of Production equipment will take from 2 days to 7 days.

If the well is commercial, each location will have a separator and meter run mounted on a single skid. Due to extreme winter conditions the surface production equipment will be enclosed in a metal building. The metal buildings will be painted to BLM specifications.

- \* A) Facilities to be constructed on location will be specified after well has been tested. Production equipment will be placed away from edge of "fill." (See Exhibit F for a typical Production Pad Layout.)
- \* B) Dimension of Proposed Facility is approximately 225' x 150'. Pad size will be reduced to minimum size necessary to conduct safe operations cuts and fills will be reduced to 2:1 or shallower.
- C) Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from commercial sources or an approved borrow area.
- \* D) All above ground permanent structures including production equipment will be painted to blend with the surrounding landscape. Permanent facilities such as production separators will be painted the following the Munsell Color Reference Numbers, color(s) Juniper Green (Munsell Formula: 5G or 7.5G - Hue; 2/, 3/, 4/, 5/ - Value range; /1, /2 - Chroma range), unless safety considerations dictate otherwise. (Colors taken from the standard environmental colors - Rocky Mountain 5-State Interagency Committee.)
- \* E) Production facilities may vary according to actual reservoir conditions and will be engineered upon completion of well tests.
- \* If well is a producer, all production facilities will be authorized by Sundry Notice.
- F) No permanent production pits are anticipated.
- G) No facilities will be constructed off location under this permit. The pipeline will be applied for as part of a special use permit application.
- H) It is probable that this well will produce some water during its productive life. Since no water has yet been produced, the exact composition of this water can't be known. All produced water will be piped via a water line laid in conjunction with the gas pipeline to a holding facility located at the bottom of the hill, or as an alternative the water line will be surface laid to the Oxbow mine. The water will then be trucked to an approved disposal site, injected into an approved disposal well, or discharged to a stream using an NPDES serialized outfall.
- I) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut and fill slopes. These areas will be re-seeded. Refer to section 10 for additional details on the restoration of the surface.
- J) No fluid is anticipated in the reserve pit. Production pit to be netted "bird-tight" as soon as drilling is completed, if there is any fluid in the reserve pit. Pursuant to On-Shore Order No. 7, this is a request for authorization for disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by BLM and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method will be submitted along with any necessary water analyses, in compliance with On-Shore Order No. 7 as soon as possible, but no later than 45 days after the date of first production. Any method of disposal, which has not been approved prior to the end of the authorized 90-day period, will

be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by BLM.

- K) A dike shall be constructed around the production separator, of sufficient capacity to contain at least 120 percent (per BLM requirements) of the storage capacity of the production separator, within the dike.
- L) All well flow lines will be buried and will be on the well site.
- M) The location will be fenced (stock tight) on all sides outside of the disturbed area. A cattle guard will be installed at the entrance to location. The reserve pit will be fenced on three sides during drilling operations and the fourth side will be fenced when the drilling rig moves off location. - All pits containing liquids will be allowed to evaporate the liquid portion before the pits are closed. The reserve pit backfill will provide a minimum cover of 4' to 5'.

5) LOCATION OF WATER SUPPLY

- A) Water will be obtained from the Oxbow Mine, east of the well location, near the town of Somerset, under existing permits. Water will be transported by truck. If another source is used, the appropriate agencies will be notified and appropriate state permits will be secured. See Exhibit H.
- B) Anticipated water use is as follows:
  - 1) Air drilling water requirements are anticipated to be 3,427 Bbls (143,934 gallons or 0.44 acre-feet);
  - 2) Mud drilling water requirements are anticipated to be 5,407 Bbls (227,094 gallons or 0.70 acre-feet)

6) SOURCE OF CONSTRUCTION MATERIALS

- A) Construction of the pad will consist of native cut and fill materials from the well-site construction areas.
- B) Surfacing materials will be obtained from available permitted sources, if needed, and consist of pit gravel.

7) WASTE DISPOSAL

- A) Drilling fluid will be evaporated, and then buried in the reserve pit when dry. Drill cuttings will be buried on location in a lined reserve pit when dry, or in a flare pit for air drilling. The reserve pit backfill will provide a minimum cover of 4' to 5'. The reserve pit will be utilized while the drilling rig is on location. The reserve pit will be constructed with a minimum of half the total depth below the original ground surface, with a minimum of not less than a 2-foot freeboard maintained at all times. All oil or floating debris will be kept out of the reserve pit. See also item 10-B.
- B) Upon completion of drilling operations, remaining drilling fluids, excess water produced during drilling must be contained on the site or be removed to a certified disposal area. Trip tickets must be kept and be made available to the AO upon request.
- \* C) No condensate is anticipated. Produced fluid including dehydrator bent/condensate line affluent, if any, will be contained in test tanks during completion and testing. Any unavoidable spills of oil, gas, salt water, or other noxious fluids will be cleaned up and disposed of in accordance with applicable regulations.
- \* D) Sewage disposal facilities will be in accordance with State and Local Regulations. Sewage disposal facilities will be chemical holding tanks and portable chemical toilets. Contents

will be hauled to a CDPHE approved disposal site in accordance with State and Local Regulations. Sewage may not be buried on location or put in a borehole.

- \* E) Garbage and other waste - All trash will be placed in trash receptacles. Trash receptacles are required on location through the production hook-up phase or through the time when the site is rehabilitated. Well rework or other significant activity on the location will require trash receptacles. These receptacles shall prevent wind scattering any trash. Cage and contents will be transported to a CDPHE approved Sanitary Landfill upon completion of operations.
- F) Fencing: refer to items 4-M and 9-M.
- G) Upon release of the drilling rig, ratholes and mouseholes will be filled. Debris and excess equipment will be removed.
- \* H) Blooie lines and pits will be operated and treated to control dust levels and off-site impacts.
- \* I) The operator will prevent drilling mud, gas, diesel fuel, oil, grease, any other petroleum products or hazardous materials from entering any live stream or riparian area, or from migrating off the location.
- \* J) If sufficient potable water is discovered, the operator and the AO will work together to determine feasibility of usage and upon positive determination, implement methods of making this water available to cattle and wildlife.

8) ANCILLARY FACILITIES

No ancillary facilities will be necessary. Full time supervision personnel, as well as geologist/mud logger will live on location in 2 to 3 trailers on location during drilling. Vehicle traffic will be kept to a minimum. Anticipated full time personnel are as follows:

<u>Drilling</u>	<u>Completion</u>
1 - GEC supervisor	1 - GEC supervisor
1 - Drilling rig supervisor	4 - Completion rig crew
4 - Drilling rig crew	
1 - Geologist/Mud logger	

Part-time technical support persons will be on-site from time to time as necessary. No intermediate staging area will be used.

9) WELLSITE LAYOUT

- A) See attached drillsite plat (Exhibit C) and cut/fill diagram (Exhibit D).
- \* B) A lined pit will be constructed to hold drill cuttings. Prior to pit closure, all non-exempt materials and liquids, which have been placed in the pit, must be hauled to an approved disposal site unless another method of disposal is approved in writing by the AO. Initial pit closure must be completed within 12 months from the date the well is spudded or as determined by the BLM according to ground conditions and year drilled. Trip tickets showing, at a minimum, the date, driver's name and address, company, location hauling from, location hauling to and amount of material being hauled, will be kept and made available to the AO upon request.
- C) The reserve pit liner shall be made of any man-made synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than  $1 \times 10^{-7}$  cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances, which shall put into the pit. The pit liner shall be placed on a smooth

surface, free of any sharp rocks. When placed on rocky bottom pit, it shall be bedded with a material such as soil, sand, straw, or hay to avoid the possibility of puncturing the liner.

- D) Small cuttings will be buried on location in the reserve pit.
  - \* E) Backslopes to be 1:1 or shallower during drilling operations.
  - \* F) A contour trench or trenches and sediment traps will be constructed prior to beginning of pad construction to divert overland flow away from the pad. Prior to rigging up, a one-foot berm will be constructed around the perimeter of the wellpad to protect the surrounding surface from all storm events/spills from going downstream of the wellpad. A lined sump pump may be utilized to contain such fluids. The need for the berm will be re-assessed upon the completion of the well and production is established. Sediment traps are required along the bottom edge of all fill slopes to prevent water from migrating to drainages. Applying these precautions permits waiver of stipulation (c)(4) of the "SUPPLEMENTAL STIPULATION TO STIPULATION FOR LANDS UNDER JURISDICTION OF DEPARTMENT OF AGRICULTURE" in the original lease.
  - \* G) Excess rock and boulders, which are turned up, are to be set aside and utilized for reclamation. Large boulders, if any, will be partially buried to provide a landscaped surface and the remainder will be buried as directed by the AO. Stockpiling of topsoil is approved for the location as shown in Location Layout Plat (Exhibit E) submitted as part of the Application for Permit to Drill. Quantities must be shown on the subject diagram and verified by the operator as being sufficient to allow a minimum four-inch layer over all disturbed areas of the location during reclamation.
  - \* H) The drill pad will be graded and ditched to drain into a shallow holding basin on the location.
  - \* I) Any brush or "slash" will be distributed at slope toes for water run-off dispersion (See 10-F for brush and slash use at reclamation).
  - \* J) Flare pit for air drilling will (if used) be located minimum 100' from wellbore.
  - \* K) All brush and trees in the area will be cut and piled, if necessary, per BLM requirements, and utilized for reclamation. See Grading And Surface Hydrology Plan as prepared by Buckhorn Geotech, Inc. (Exhibit "R").
  - \* L) A diversion ditch will be constructed. See Grading And Surface Hydrology Plan as prepared by Buckhorn Geotech, Inc. (Exhibit R).
  - M) The location will be fenced (stock tight) on all sides outside of the disturbed area. A cattle guard will be installed at the entrance to location. The reserve pit will be fenced on three sides during drilling operations and the fourth side will be fenced when the drilling rig moves off location. Fencing to be woven wire with 2 strands of barbed wire. Corner braces will be wooden "H" brace type construction. The fence shall be maintained in good repair while the pit is drying and must remain until the pit is dry and site restoration begins.
  - N) If the well is a producer and noise becomes a nuisance with any production operations, adequate muffling techniques such as hospital type mufflers will be applied.
- 10) SUREFACE RESTORATION
- \* A) Topsoil as available, will be removed prior to location construction from all disturbed areas. Topsoil depth to be removed as stipulated by BLM. Proposed topsoil depth will be 6"-12" or as available. The topsoil is to be piled as shown on the Location Layout Plat (Exhibit E).
  - \* B) Backfilling, leveling and contouring are planned as soon as all pits have dried, leaving no depressions that will trap water or form ponds. If production is obtained, the unused area will be restored as soon as possible. The reserve pit solids will not be squeezed out of reserve pit. The liner shall be cut off at the mud level and removed to an approved disposal

site. There will be a minimum of 2 feet of overburden on the pit prior to replacing the topsoil and seeding. See also item 7-A.

- C) The soil-banked material will be spread evenly over the disturbed area. Revegetation will be accomplished by planting mixed grasses as per formula by the BLM. Revegetation is recommended for road area as well as around drill pad.
- D) The rehabilitation will begin as soon as feasible after the drilling rig is removed. Any hydrocarbon liquid or debris, which inadvertently enters the cuttings pit, will be removed immediately. Other cleanup will be done as needed. Planting and revegetation is considered best in fall, unless requested otherwise.
- \* E) The operator will apply seed to all disturbed areas in and out of the work area as below. Seed mix to be used for aspen and oak vegetative zones, 8,000 to 9,600 feet. Seeding will be done during fall planting season, September 15 through first frost. Seeding must be completed immediately after seedbed preparation.

A proposed seed mix for the oak vegetative zone is:

	Lbs/Acre
	<u>90% P.L.S.</u>
Western Wheatgrass var Arriba	0.96#/acre PLS
Slender Wheatgrass var San Luis	0.66#/acre PLS
Mountain Brome (Bromus marginatus) var Bromar	1.50#/acre PLS
Big Bluegrass var Sherman	0.18#/acre PLS
Bottlebrush Squirreltail	0.96#/acre PLS
Canada Wildrye	0.94#/acre PLS
American Vetch	0.60#/acre PLS
Rocky Mountain Penstemon	0.09#/acre PLS
Western Yarrow	<u>0.06#/acre PLS</u>
	<u>*5.95#/acre PLS</u>

\*These rates apply when the seed is to be drilled. When broadcasting, increase amount by 50%.

Seed should be covered with 1/2 to 1 inch of soil.

Seed application will be within 60 days after completion and re-seeded, if necessary, until satisfactorily revegetated as determined by the AO. See Items 10-G and 10-J of this submittal.

All seeding rates are pure live seed (P.L.S.) amounts.

To verify P.L.S., a bag label from each seed lot with the following information will be submitted to the AO. The seed label will be submitted not less than 10 days before seed application.

Label of Test Information Required:

1. Kind and variety of seed.
2. Purity.
3. Germination.
4. Calculation of P.L.S.
5. Source of origin of seed.
6. Lot Number.
7. Names and amounts of weed seeds.

Further Requirements:

All seed must meet all requirements of the Federal Seed Act (7 U.S.C., Sec. 1551-1610, inclusive); Federal Specifications JJJ-S-181; the seed laws and the noxious weed laws of the State of Colorado.

- \* F) Prepare seedbed by disking or ripping to a depth of 4"-6" following the natural contour. A rough surface will be left. Drill seed on contour with a "rangeland" type seed drill. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into soil before the stockpiled brush and trees are scattered back over the reclaimed area. Certified seed is required.
- \* G) If the well is commercial, reclamation of the drill pad will be required of all areas, which are not needed for production facilities. Generally, the area used for these facilities will lie between the rig anchors, which are established during drilling of the well. Areas which house production facilities will have sufficient surface rock (gravel) placed to prevent deformation of the surface during routine production operations. The remainder of the location must be revegetated. This work will be completed within 60 days of determining whether or not the well is a producer unless an extension of time is granted in writing by the authorized officer.

If the well is commercial, compaction and construction of the berms surrounding the tank or tank batteries will be designed to prevent lateral movement of fluids through the utilized materials, prior to storage of fluids. The berms must be constructed to contain at a minimum 120% of the storage capacity of the largest tank within the berm. All load lines and valves shall be placed inside the berm.

- \* H) If the well is not commercial or is abandoned at some future date, the access road and drillsite will be reclaimed to near-natural contours, blocked to prevent vehicular travel, and seeding according to the specifications in items 10-E and 10-F of this submittal. If the well is not a commercial BLM may request that the access road be left in usable condition. Following receipt of Notice of Intent to Abandon, final BLM recommendations for surface reclamation will be specified.
- \* I) The operator will fence the reclaimed well pad according to the specifications in items 4-M and 9-M of this submittal and will maintain the fencing in good condition until notified in writing by the AO that the site is satisfactorily reclaimed and the fencing may be removed. All rehabilitation work shall be completed, including a satisfactory stand of grass within two growing seasons after the reserve pit is dry.
- \* J) All dirt work and seeding related to reclamation will be completed within 60 days after completion of the well unless an extension is granted in writing by the AO.

11) GENERAL INFORMATION

- A) Project area is situated in the uplands of the southern portion of Grand Mesa.
- B) Topographic and geologic features - moderate relief area, well-drained, clay deposition with rocks and small boulders.
- C) Soil characteristics - Stony loam.
- D) Flora - See exhibit "N".
- E) Fauna - See exhibit "N".
- F) Concurrent surface use - grazing and hunting.
- G) Mineral Lessor - Bureau of Land Management.

- H) Surface Owner  
Drillsite --Bureau of Land Management  
Access -- Bureau of Land Management  
Oxbow Mining, Inc.  
1601 Forum Pl, Suite 1400  
West Palm Beach, FL 33401 Phone: 561.640.8711
- I) Proximity of water, occupied dwellings or other features; see Grading And Surface Hydrology Plan as prepared by Buckhorn Geotech, Inc. (Exhibit "R").
- \* J) Annual or noxious weeds shall be monitored and controlled on all disturbed areas for the life of the well in accordance with Gunnison County regulations. As directed by the BLM Uncompahgre Field Office Manager and/or the AO Method of control shall be by an approved mechanical method or an Environmental Protection Agency (EPA) registered herbicide. All herbicide application proposals must be approved by the BLM. Application of herbicides must be under direct field supervision of an EPA certified pesticide applicator. If, during the construction process, vehicles and equipment are take over areas infested with noxious weeds to areas not infested, vehicles and equipment will be cleaned with high pressure spray equipment before moving to ensure that weeds are not spread from existing infested areas.
- \* K) Archaeological, cultural and historical information will be submitted separately by Metcalf Archaeological Consultants, Inc.
- \* L) Biological Assessment and Biological Evaluation information is contained in the attached Summary Sheet, along with the Threatened and Endangered Species Assessment and TABLE 1 Evaluation by ENSR dated November 18, 2002.
- \* M) If any fossils are discovered during construction, the operator shall cease construction immediately and notify the Uncompahgre Field Manager, BLM AO so as to determine the significance of the discovery.
- \* N) a. The BLM is responsible for assuring that the area to be disturbed on this permit is inventoried to determine the presence of cultural resources and to specify those cultural resources requiring protection and/or mitigation measures to be undertaken by the operator. Unless notified to the contrary by the BLM, the operator may, at his discretion and cost, conduct the inventory on the lands to be disturbed. This intensive inventory must be done by, or under the supervision of, a qualified archaeologist approved by the BLM. Upon review of the inventory report, the BLM will specify those cultural resources requiring protection and/or mitigation measures to be undertaken by the operator. All costs of protection and salvage of cultural resource values will be borne by the operator and all data and materials salvaged will remain under the jurisdiction of the U.S. Government as appropriate.
- b. The operator shall bring to the attention of the BLM and the authorized officer of the U.S. Geological Survey, significant paleontological values encountered in areas to be disturbed, for evaluation and for instructions as to the appropriate action to be followed by the operator.
- c. The operator shall immediately cease operations in areas in which any antiquities or other objects of historic or scientific interest are discovered and bring the discovery to the attention of the BLM and the authorized officer of the U.S. Geological Survey. Any such discoveries shall be left intact until the operator is permitted to proceed by the AO.

- \* O) Development plans of the location, access roads, and other improvements related to the exercise of the rights of this lease, must be approved in advance in writing by the BLM Uncompahgre Field Manager.
- \* P) The operator's off-lease activities will be authorized by and subject to the terms of a Special Use Permit, Road Use Permit, or other arrangement as appropriate.
- \* Q) The operator will appoint and maintain, at all times during the term of this permit, a local agent upon whom may be served written orders or notices respecting matters contained in this permit, and to inform the AO in writing, of the name and address of such agent. If a substitute agent is appointed, the operator shall immediately so inform the AO.
- \* R) Surface disturbance and vehicular travel will be limited to approved locations (roadway, parking, and wellpad). Construction equipment will be restricted at all times to the road ROW. Any additional area needed must be approved in advance by the AO. Any staging areas, turnout/pullouts must be approved by the AO.
- \* S) Violations to these stipulations is grounds for shutting down any or all portions of this project. Shut down notices will be given to the operator or his on-site representative by the AO or his representative.
- \* T) Additional stipulations can be required by the BLM as necessary for resource protection; such stipulations must fall within the scope of the original lease. They may become necessary as new operating details or unanticipated problems arise.
- \* U) The locations of water sources for activities associated with this well will be shown in the APD.
- \* V) No firearms will be discharged on the access road or on the location during any phase of the operation. GEC employees and contractors will not be allowed to carry firearms.
- \* W) Twin or multiple wells are not anticipated to be drilled at this site; however if in the future 2 or more wells are planned at this site, to allow for more efficient and safer operations while insuring that the pad design would accommodate all expected activities, twin-well rig layout and twin-well production facility layout diagrams will be submitted if twin-wells are a viable consideration for the operator.
- \* X) *In the event of any conflict between the clauses in the APD relating to surface use, and the clauses in the approval stipulations, the stipulation clauses will control.*
- \* Y) The operator will have sufficient fire equipment on hand during the fire season to equip the drilling crew.
- \* Z) The operator will install approved spark arrestors on all combustible engines used on the job.
- AA) Hazardous Materials:  
Gunnison Energy Corporation maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment. A Spill Prevention Control and Countermeasure (SPCC) will be prepared and submitted.

Signs will be posted on-site that identify potential hazards associated with its operation including noise, high pressure, and chemical hazards. MSDS for treatment chemicals will be maintained on site during the construction phase. Equipment operators will be required to wear appropriate personal protective equipment to minimize exposure to these hazards.

12) LESSEE'S OR OPERATOR'S REPRESENTATIVE:

Operator  
Corporate Office:  
Gunnison Energy Corporation  
1801 Broadway, Suite 1200  
Denver, CO 80202  
303.296.4222  
303.296.4555- Fax

Mark McCallister - Operations Manager  
Anthony Gale - Vice President  
Trish Diehl - V.P. Environmental  
Regulatory Matters

Permit Consultant  
Banko Petroleum Management, Inc.  
9285 Teddy Lane, Suite 100  
Lone Tree, CO 80124-5475  
303.820.4480 - office  
303.820.4124 - fax

+ David Banko - Consulting Petroleum Engineer  
*david@banko1.com*  
+ Kathy Schneebeck - Regulatory Analyst  
*Kathys@banko1.com*  
\* Keith Dana - Range Mgmt. Consultant  
307.389.8227 - Cell  
307.362.5822 - Home  
*krlcdana@fascination.com*

- \* Contact to arrange on-site meeting
- + Contact for any questions or comments regarding this permit.

13) CERTIFICATION:

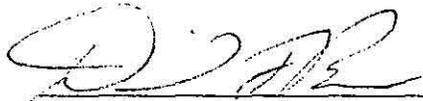
I hereby certify that a Surface Use Agreement with the Private Surface Owner, Oxbow Mining, Inc., has been completed.

I hereby certify that Gunnison Energy Corporation is responsible under the terms and conditions of the lease to conduct lease operations in conjunction with the application. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Gunnison Energy Corporation under their BLM Bond CO1428.

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road; that I am familiar with the conditions which presently exist; that the statements made in this plan area, to the best of my knowledge, are true and correct; and that the work associated with the operations proposed herein will be performed by Gunnison Energy Corporation and its contractors and sub-contractors in conformity with this plan 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.

December 4, 2002

Electronic Submission # 15984

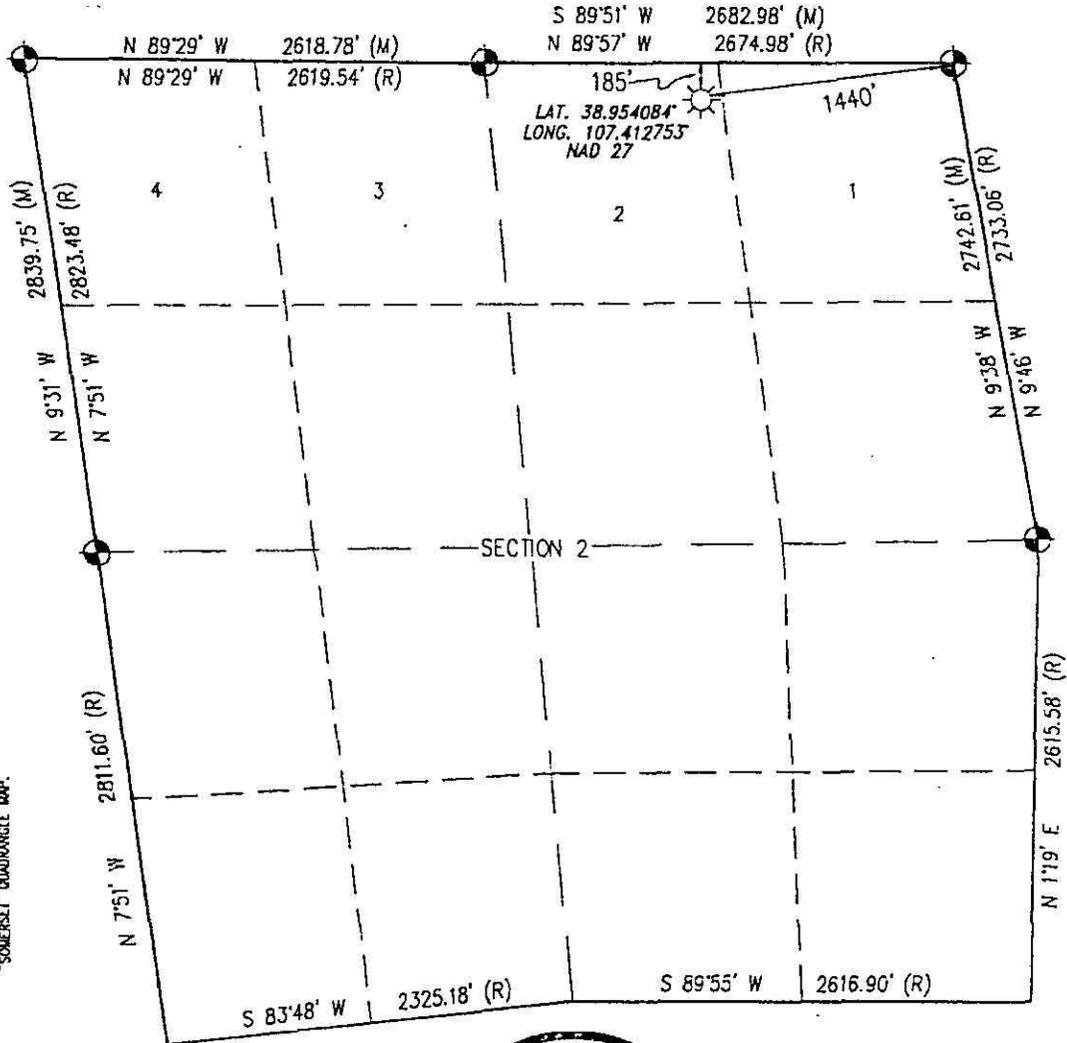


David F. Banko  
Permit Agent for Gunnison Energy Corporation



Mark McCallister  
Operations Manager

**GUNNISON ENERGY CORPORATION**  
**THOMPSON CREEK FEDERAL 12-90 #1-35**  
 185' FNL, 1440' FEL (SURFACE HOLE LOCATION)  
 NE/4 SEC. 2, T-13-S, R-90-W, 6th P.M.,  
 GUNNISON COUNTY, COLORADO  
 GROUND LEVEL ELEVATION: 8270'



BASIS OF BEARING  
 1916 G.L.O. SURVEY BEARING: NORTH LINE OF 1/4 OF SECTION 2, T.13S. R.90W. 6TH P.M.  
 GUNNISON COUNTY, CO. MONUMENTED AS SHOWN HEREON. REFERENCE BEARING: N 89° 28' W

BASIS OF ELEVATION  
 TOPO ELEVATION INTERPOLATED FROM U.S.G.S. 7.5 MINUTE  
 "SOMERSET QUADRANGLE MAP."

⊙ DENOTES FOUND 1921 G.L.O. BRASS CAP  
 (M) = MEASURED DIMENSION  
 (R) = RECORD DIMENSION AS SHOWN ON  
 G.L.O. SURVEY PLAT APPROVED JAN. 12, 1916



- NOTES:
1. THERE PRESENTLY EXISTS NO VISIBLE IMPROVEMENTS WITHIN 200' OF THIS LOCATION OTHER THAN THOSE SHOWN HEREON OR ON THE ATTACHED PAD DIAGRAM.
  2. SURFACE USE FOR THE LAND SURROUNDING THIS LOCATION IS B.L.M. LAND.

I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Kenneth E. Rea*  
 KENNETH E. REA  
 COLORADO P.L.S. #31941

11-27-02  
 DATE

PAGE 1 OF 8 EXHIBIT C1

DRAWN BY: C.R. CHECKED BY: K.R. FILE NO.: GEC441HP	SURVEYED: 11/7/02 DRAWN: 11/11/02 JOB NO. GEC44	PREPARED FOR: GUNNISON ENERGY CORPORATION
		<b>NORTHSTAR</b> SURVEYING & MAPPING, INC.
		75 County Rd. 231 DURANGO, CO. 81303 (970) 385-0851

WEST 5283.96' (R)

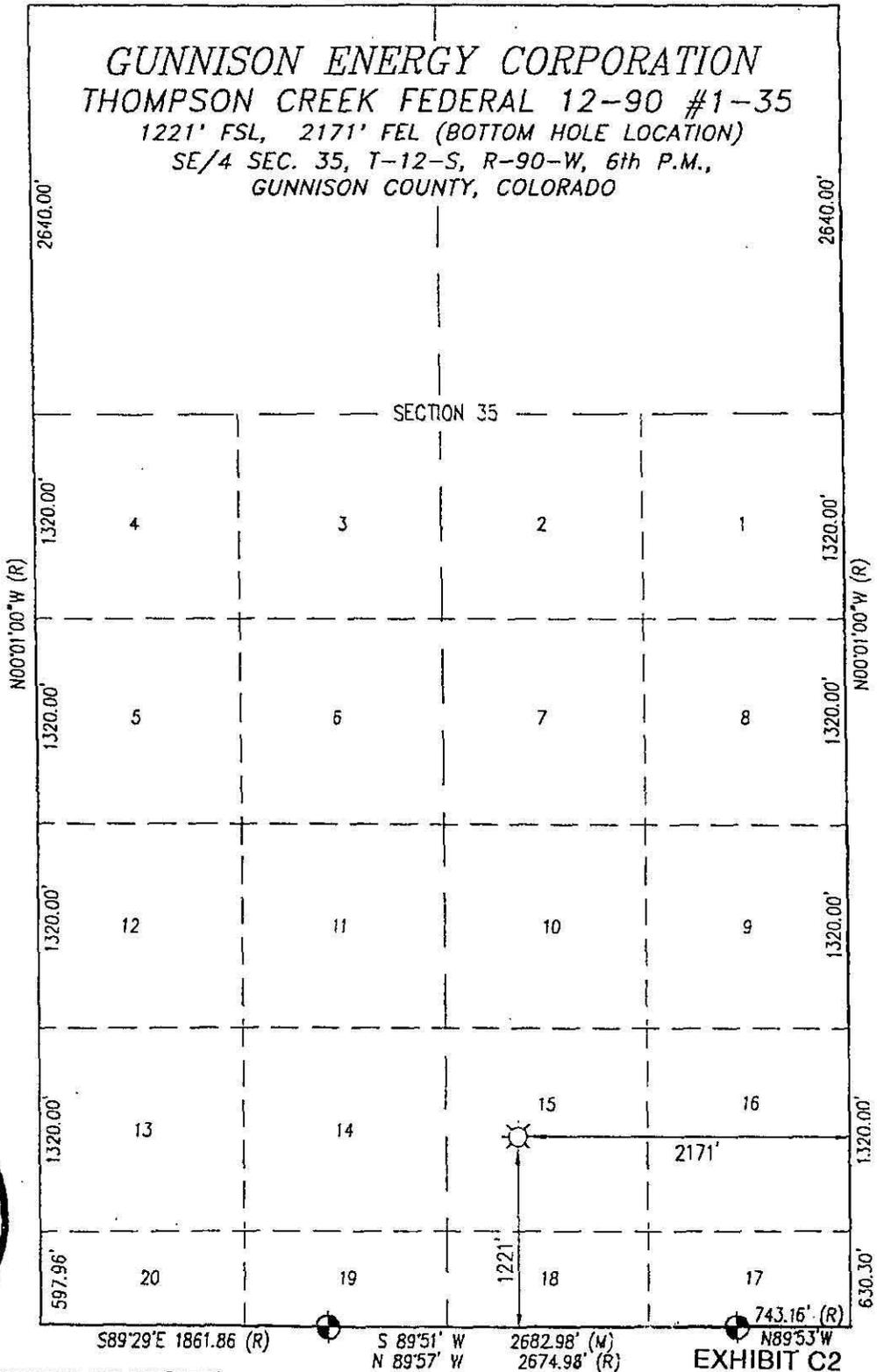
**GUNNISON ENERGY CORPORATION**  
**THOMPSON CREEK FEDERAL 12-90 #1-35**  
1221' FSL, 2171' FEL (BOTTOM HOLE LOCATION)  
SE/4 SEC. 35, T-12-S, R-90-W, 6th P.M.,  
GUNNISON COUNTY, COLORADO

BASIS OF BEARING:  
1918 G.L.O. SURVEY BEARING: NORTH LINE OF NW/4 OF SECTION 2,  
11.35' 89°09' 00" W., GUNNISON COUNTY, CO. REFERENCE QUARING: N 89° 29' W

⊙ DENOTES FOUND 1921 G.L.O. BRASS CAP  
(M) = MEASURED DIMENSION  
(R) = RECORD DIMENSION AS SHOWN ON  
G.L.O. SURVEY PLAT APPROVED DEC. 5, 1923



0 500 1000  
SCALE: 1" = 1000'



I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Kenneth E. Rea  
KENNETH E. REA  
COLORADO P.L.S. #31941

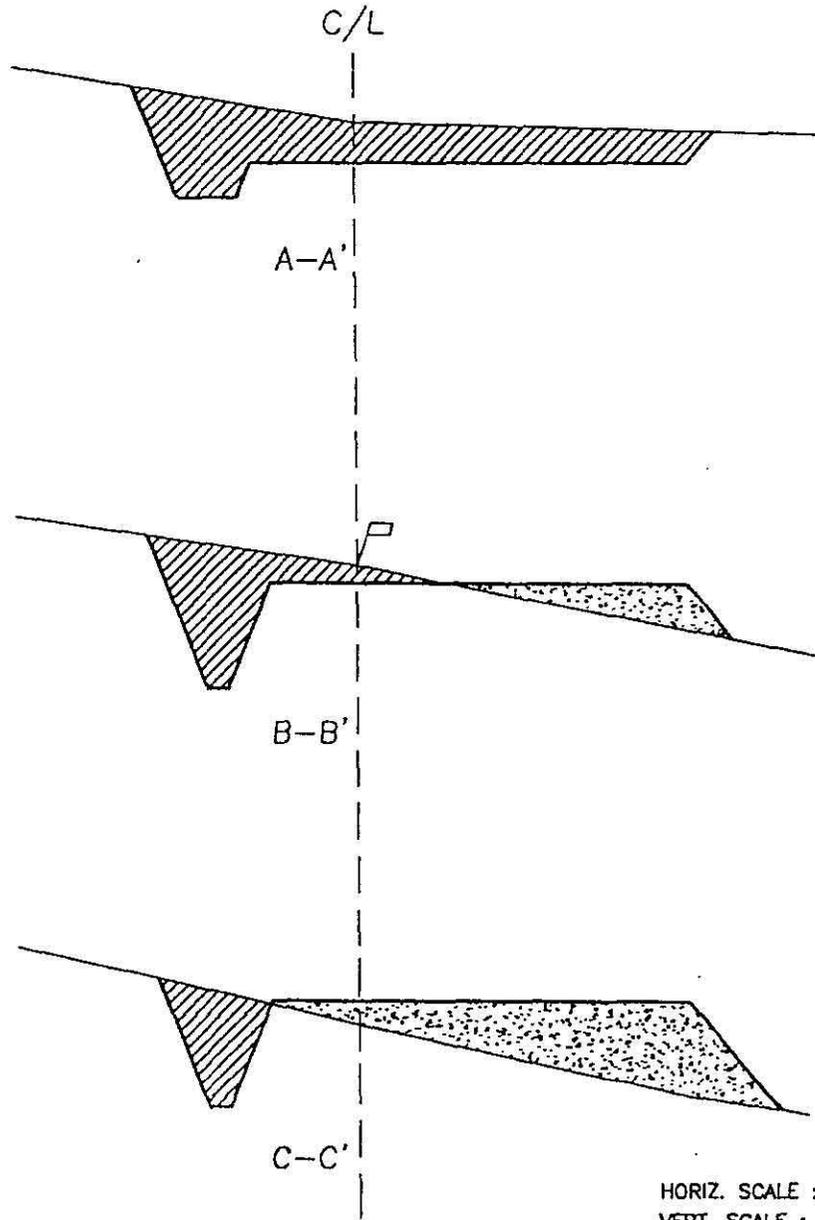
11-27-02  
DATE

**NORTHSTAR**  
SURVEYING & MAPPING, INC.  
75 County Rd. 231  
DURANGO, CO. 81303  
(970) 385-0851

EXHIBIT C2  
PAGE 2 OF 8

PREPARED FOR: GUNNISON ENERGY CORPORATION	
DRAWN BY: C.R.	SURVEYED: 10/1/02
CHECKED BY: K.R.	DRAWN: 11/11/02
FILE NO.: GEC44BH	JOB NO.: GEC44

PIT & PAD CROSS SECTION DIAGRAM



HORIZ. SCALE : 1" = 50'  
 VERT. SCALE : 1" = 20'

EXHIBIT D

COMPANY: GUNNISON ENERGY CORP.  
 WELL NAME: THOMPSON CREEK FEDERAL 12-90 #1-35  
 FOOTAGE: 185' FNL      1440' FEL  
 SEC. 2    TWN. 13 S    RNG. 90 W      6th P.M.  
 COUNTY: GUNNISON      STATE: COLO.  
 ELEVATION: 8270'

DRAWN BY: <u>D.C.H.</u> DATE: <u>11/17/02</u> CHECKED BY: <u>K.R.</u> DATE: <u>11/17/02</u> FILE NO.: <u>020044</u> JOB NO.: <u>020044</u>	PREPARED FOR: <b>GUNNISON ENERGY CORPORATION</b> SHEET 4 OF 8
	<b>NORTHSTAR</b> <b>SURVEYING &amp; MAPPING, INC.</b> 75 County Rd. 231 DURANGO, CO. 81303 (970) 385-0851

# RIG LAYOUT

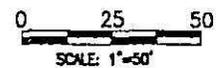
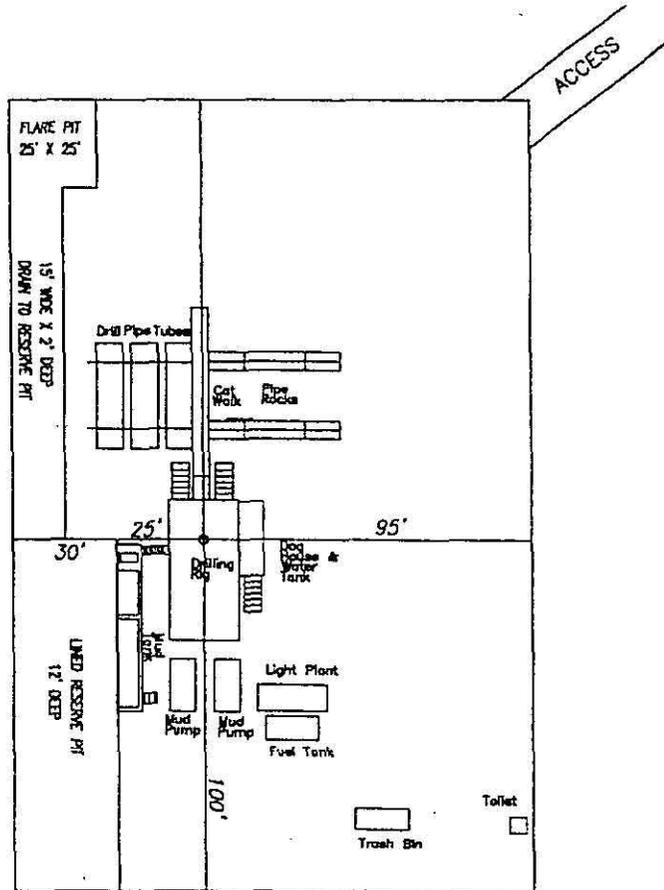


EXHIBIT E

COMPANY: GUNNISON ENERGY CORP.  
 WELL NAME: THOMPSON CREEK FEDERAL 12-90 #1-35  
 FOOTAGE: 185' FNL 1440' FEL  
 SEC. 2 TWN. 13 S RNG. 90 W 6th P.M.  
 COUNTY: GUNNISON STATE: COLO.  
 ELEVATION: 8270

DRAWN BY: D.C.H. SURVEYED: 11/7/02  
 CHECKED BY: K.R. DRAWN: 11/11/02  
 FILE NO.: GECOM4: LRB NO. GECOM4

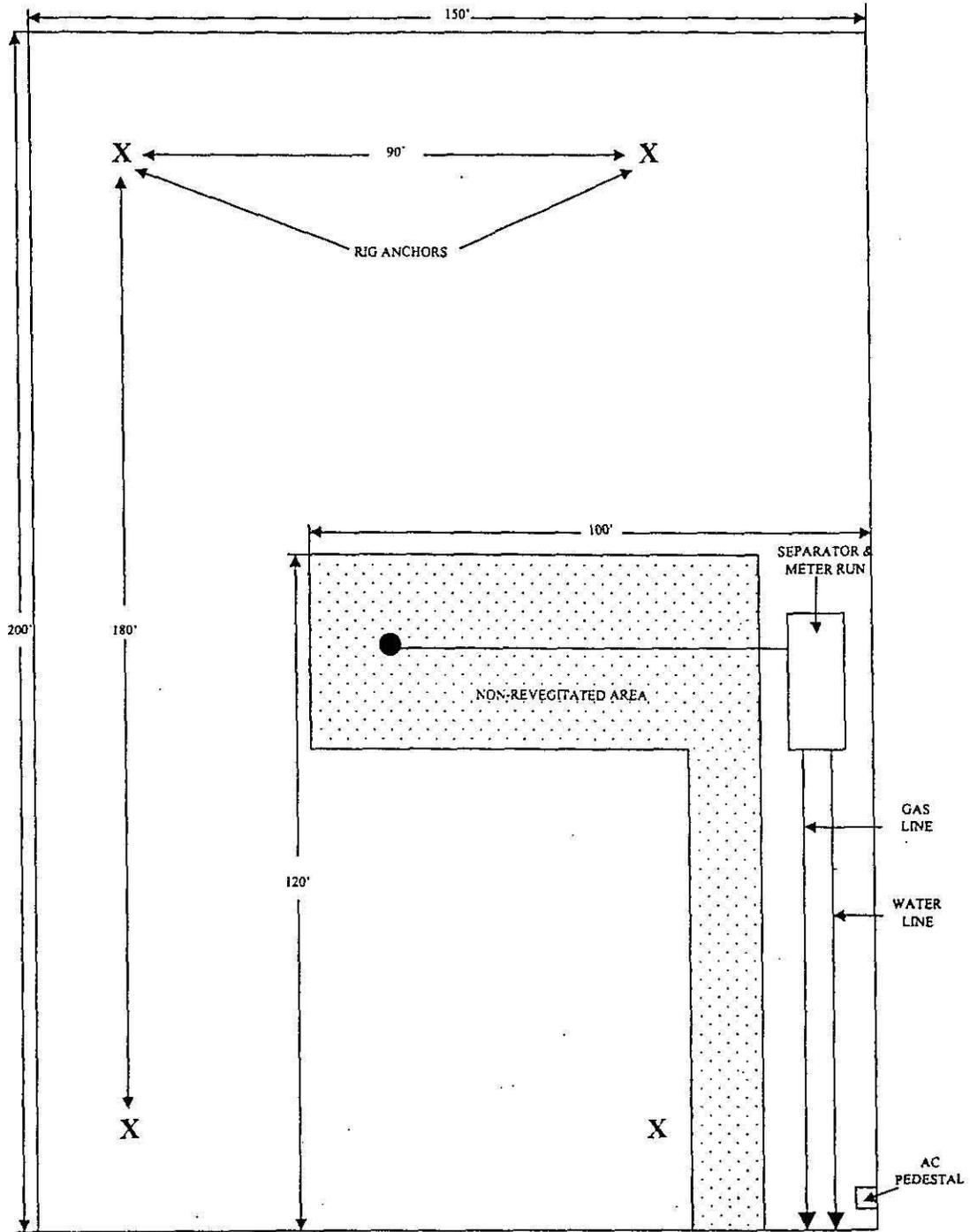
PREPARED FOR:  
GUNNISON ENERGY CORPORATION  
 SHEET 5 OF 8

**NORTHSTAR**  
**SURVEYING & MAPPING, INC.**

75 County Rd. 231  
 DURANGO, CO. 81303  
 (970) 385-0851

Gunnison Energy Corporation  
Production Pad Layout

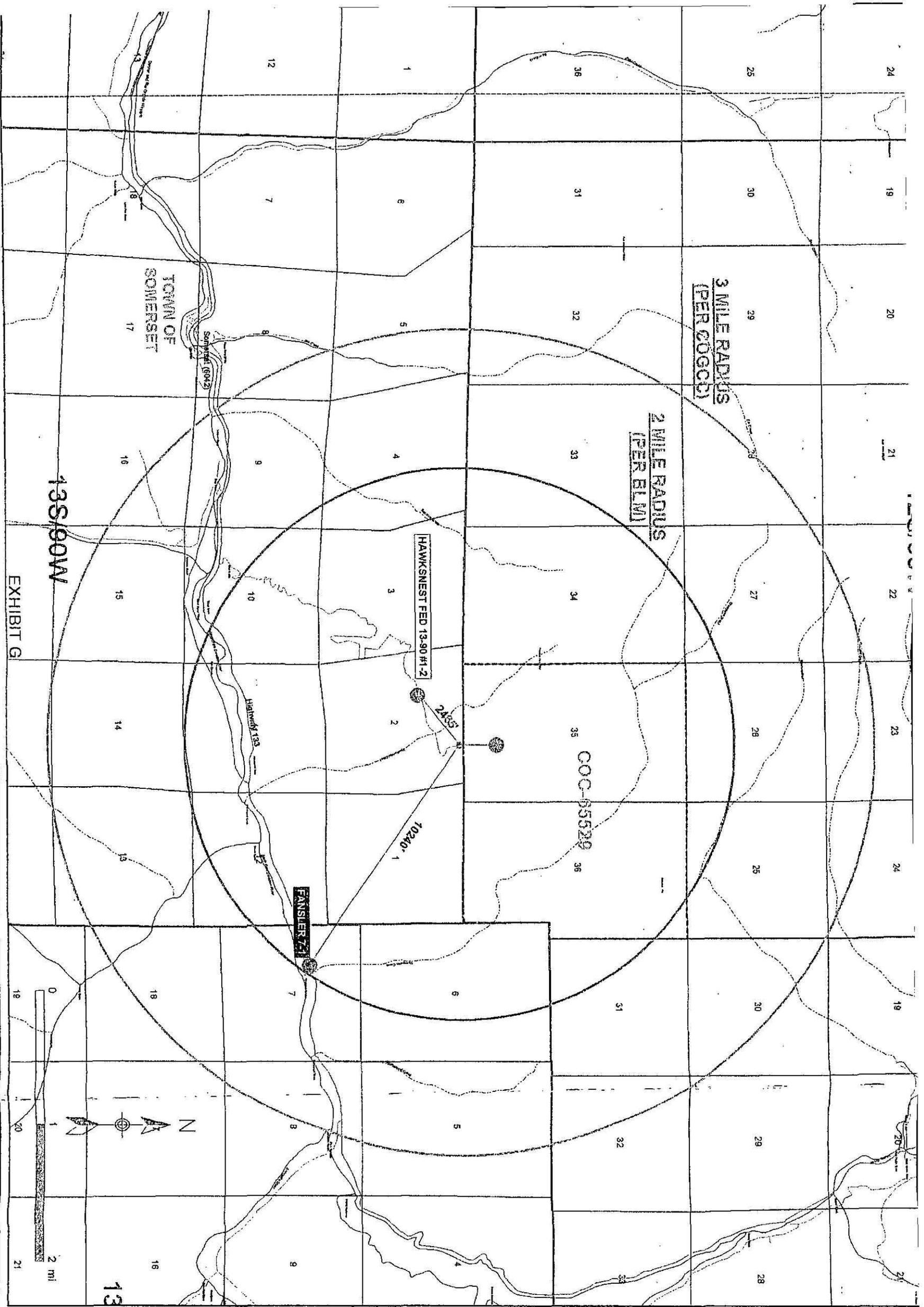
EXHIBIT F



Total Acres

Workover = .67

Production = .28



- LEGEND:**
- New Access Road
  - Existing Road
  - Water Well
  - Proposed Well Spot
  - County Road
  - State Highway
  - Railroad
  - Canal
  - Federal Lease

Thompson Creek Fed 12-90 #1-35  
 BHL: SW/4 SE/4 Sec. 35 T12S R90W  
 SHL: NE/4 NE/4 Sec. 2 T13S R90W  
 Gunnison County, CO  
 Federal Lease: COC-65529

EXHIBIT G

13S/90W

0 1 2 mi

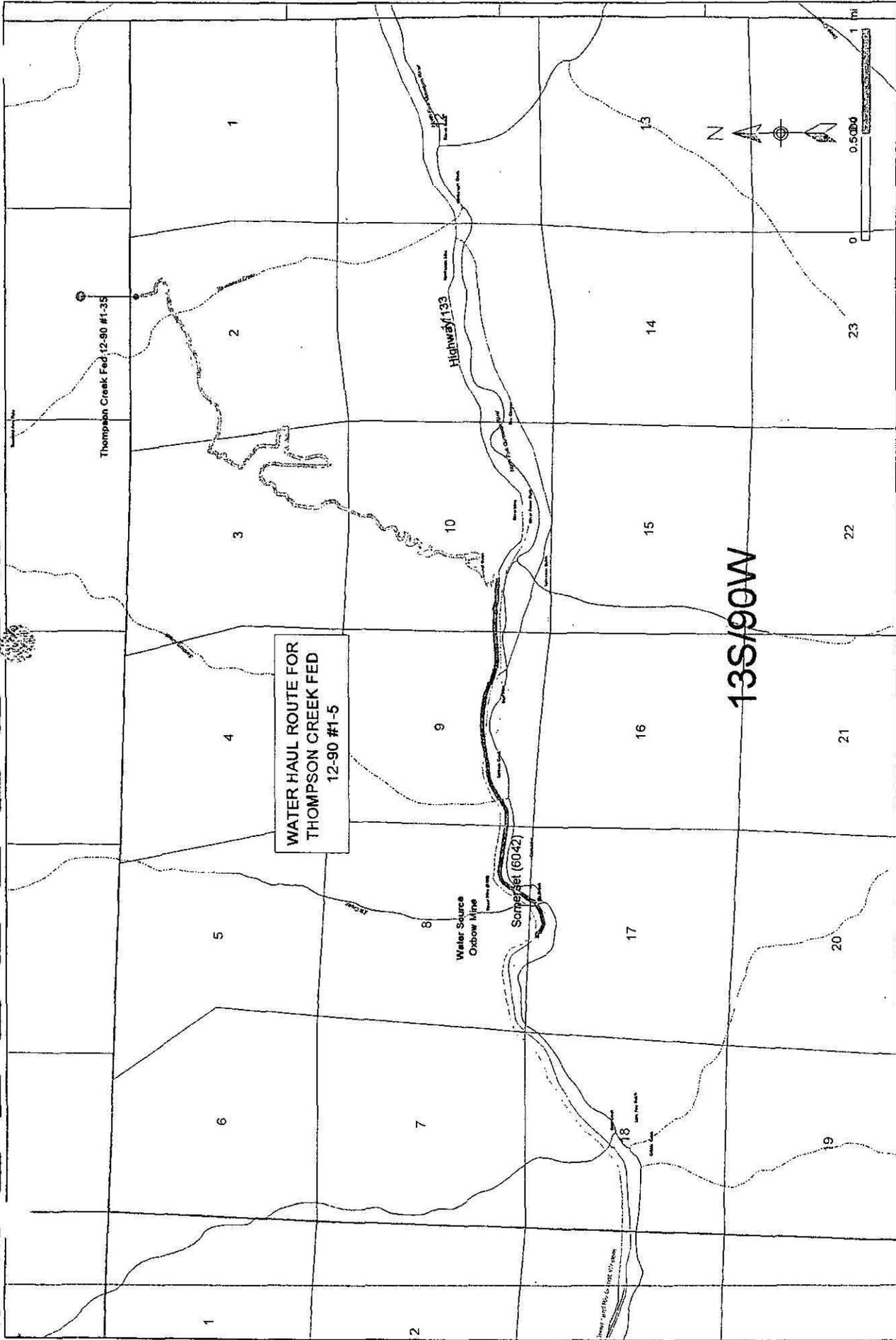
N

GUINNISSON ENERGY CORPORATION

1801 Broadway  
 Suite 1200  
 Denver, CO 80202  
 (303) 296-4222



01147752



**WATER HAUL ROUTE FOR  
THOMPSON CREEK FED  
12-90 #1-5**

**13S/R90W**

**EXHIBIT H**

Thompson Creek Fed 12-90 #1-35  
 BHL: SW/4 SE/4 Sec. 35 T12S R90W  
 SHL: NE/4 NE/4 Sec. 2 T13S R90W  
 Gunnison County, CO  
 Federal Lease: COC-65529

**LEGEND:**

- County Road
- New Access Road
- Existing Road
- Water Well
- Proposed Well Spot
- State Highway
- Railroad
- Canal
- Federal Lease



**GUNNISON ENERGY CORPORATION**

1801 Broadway  
 Suite 1200  
 Denver, CO 80202  
 (303)296-4222

# WELLBORE DIAGRAM

## Thompson Creek Federal 12-90 #1-35

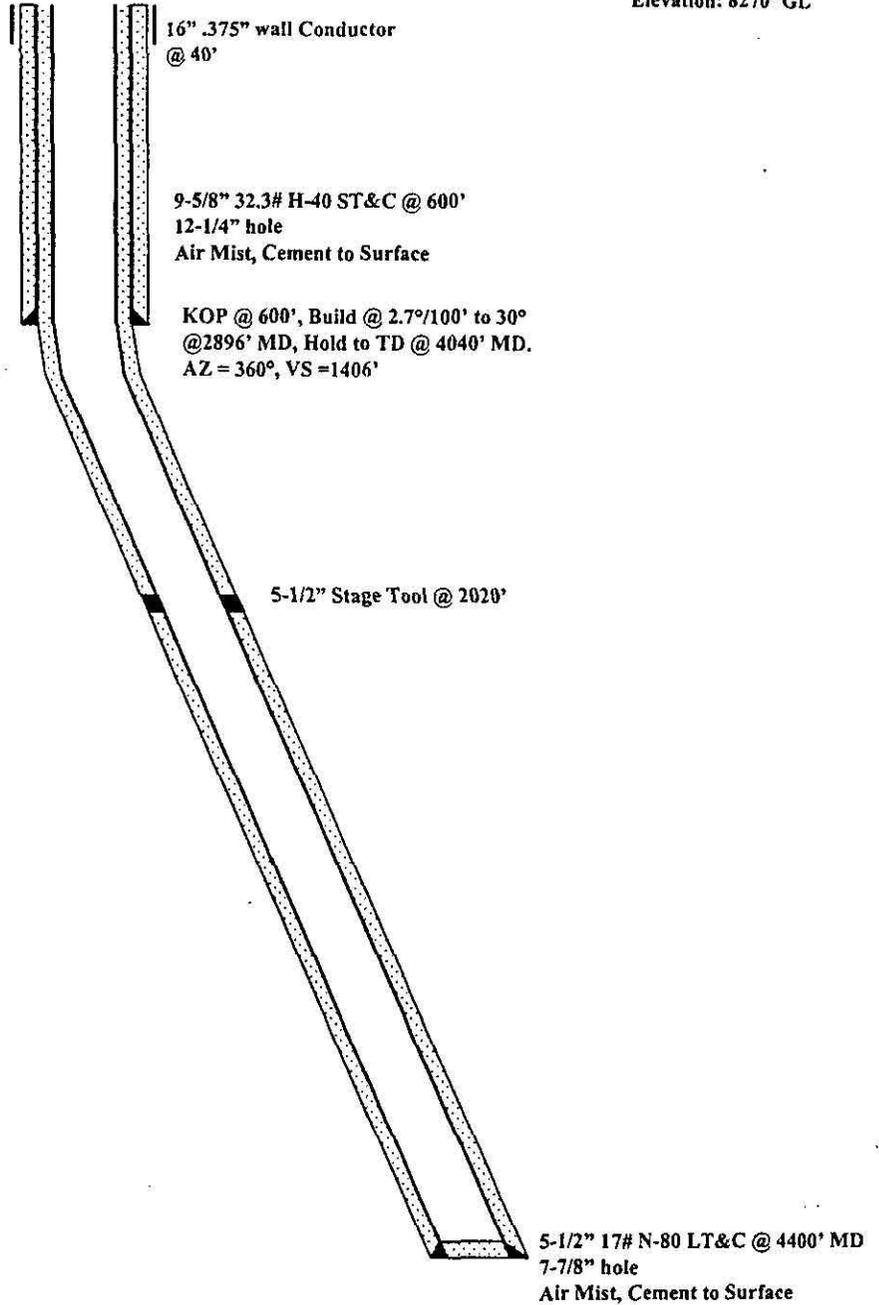
### EXHIBIT I

SHL: 185' FNL & 1440' FEL, NWNE  
 Sec. 2, T12S, R90W, Gunnison Co, CO  
 BHL: 1,221' FSL & 2,171' FWL, Lot 15,  
 Sec. 35, T13S, R90W, Gunnison Co, CO

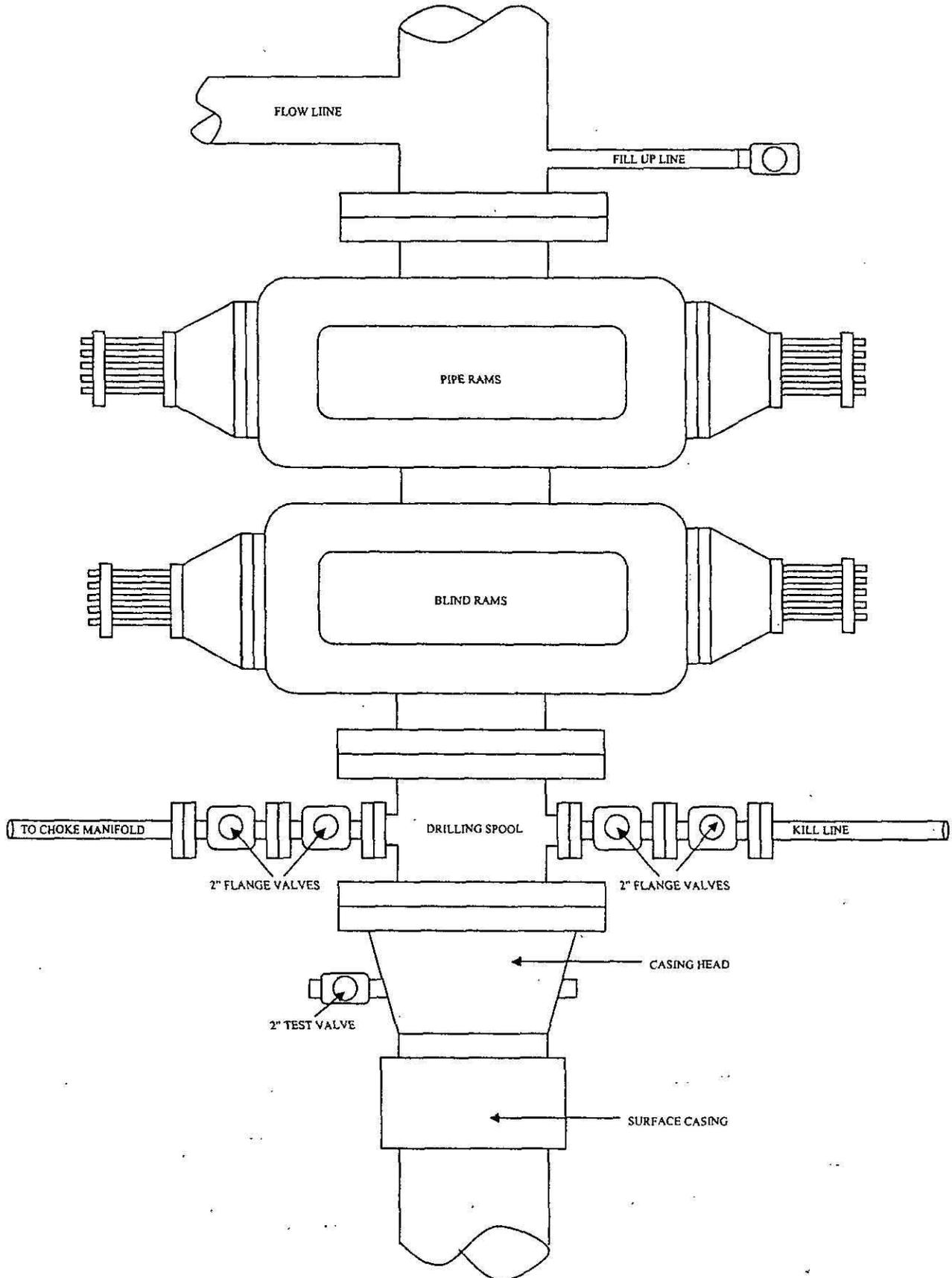
Elevation: 8270' GL

#### FORMATION TOPS (TVD)

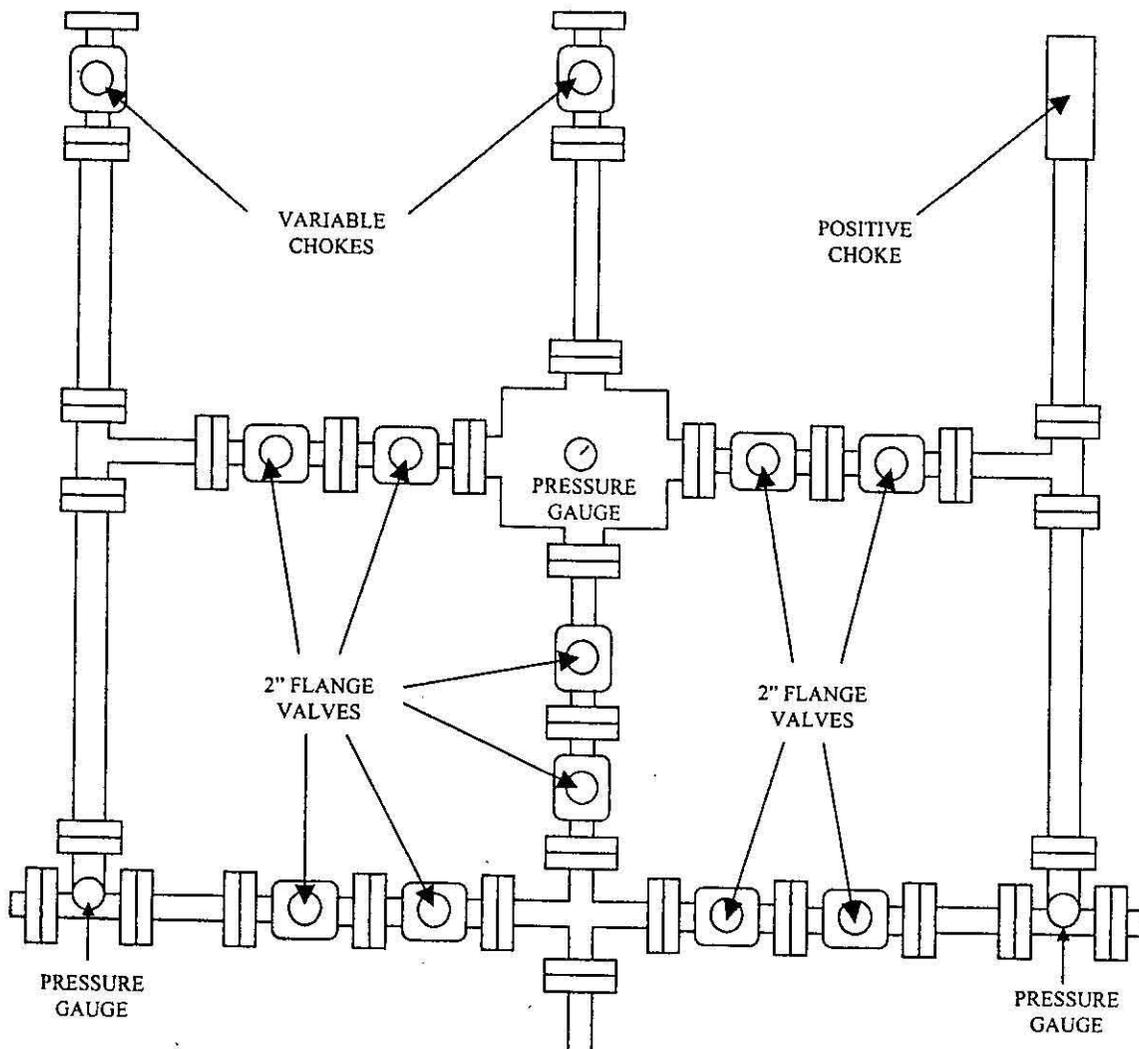
Formation	Surface'
Wasatch	Surface'
Ohio Creek	595'
Upper Mesa Verde	800'
Cameo Coals	2710'
Rollins	2980'
Cozette	3350'
Corcoran	3535'
Mancos	3630'
TD	3640'

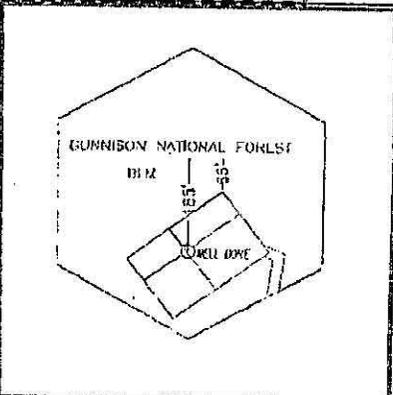


**EXHIBIT "J"**  
**Gunnison Energy Corp.**  
**Blowout Preventer Diagram**  
**(3000 PSI)**



**EXHIBIT "K"**  
**Gunnison Energy Corp.**  
**Choke Manifold Diagram**  
**(3000 PSI)**





**1 MILE RADIUS**

**COC-65529**

**COAL GULCH  
JEEP TRAIL**

Hawksnest Fed 13-90 #1-2

Highway 133

North Fork Gunnison River

North Fork Gunnison River

EXHIBIT L

**LEGEND:**

- New Access Road
- Existing Road
- Water Well
- Proposed Well Spot
- County Road
- State Highway
- Railroad
- Canal
- Federal Lease

Thompson Creek Fed 12-90 #1-35  
 BHL: SW/4 SE/4 Sec. 35 T12S R90W  
 SHL: NE/4 NE/4 Sec. 2 T13S R90W  
 Gunnison County, CO  
 Federal Lease: COC-65529



1801 Broadway  
 Suite 1200  
 Denver, CO 80202  
 (303)296-4222

**EXHIBIT "M"**  
**Thompson Creek 12-90 #1-35**  
**Threatened and Endangered Species Assessment**

The habitat characteristics of the Thompson Creek well site were evaluated in the field in October 2002. This information, in conjunction with a review of current listings of threatened and endangered species for Gunnison County, was assessed to determine which threatened and endangered species could potentially be affected by well site development. Information on the known ranges and habitat preferences of threatened and endangered species was also compared to the location and habitat characteristics of the well site to determine which threatened and endangered species may need additional analysis. Habitat characteristics of the Thompson Creek well site (elevation - 8,200 feet) and access road are comprised entirely of oakbrush vegetation. A relatively narrow, linear stand of aspen is located approximately 500 feet north of the well site. No wetlands or other surface water features are located near the well site.

Table 1 provides a summary of the preliminary evaluation of threatened, endangered, and candidate species potentially occurring in the study area, based on their ranges and habitat preferences in relation to habitat conditions at the well site and access road. Four federally endangered fish species occur in river segments (Gunnison and Colorado Rivers) located downstream of the watersheds that encompass the drill site and access road: Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. Also, the bald eagle may occasionally wander over the analysis area but suitable habitat for this species is only present outside of the analysis area along the North Fork Gunnison River. Potential impacts to bald eagle would only be associated with possible indirect effects on wintering habitat along the North Fork Gunnison River resulting from reduced flows into the river. Based on the preliminary hydrology analysis, exploratory drilling would not affect surface flows for any streams draining into the North Fork of the Gunnison River.

Based on the information provided in Table 1, no listed or candidate species require additional analysis with regard to the Thompson Creek well site. The rationale for this conclusion is provided in Table 1.

**Table 1**  
**Evaluation of Potential Presence of Threatened, Endangered,**  
**and Candidate Species for the Thompson Creek Well Site and Access Road**

Common Name / Scientific Name	Status <sup>1</sup>	Probability of Occurrence in Analysis Area	Potential Habitat in Analysis Area
<b>Plants</b>			
Clay-loving buckwheat <i>Eriogonum pelinophilum</i>	E	None	None; grows in Mancos shale badlands in salt desert shrub communities at elevations ranging from 5,200-6,400 feet..
Uinta Basin hookless cactus <i>Sclerocactus glaucus</i>	T	None	None; found in desert shrub communities at elevations ranging from 4,500 to 6,000 feet.
<b>Invertebrates</b>			
Uncompahgre fritillary butterfly <i>Bolaria acrocneuma</i>	E	None	None; found in alpine tundra, snow willow vegetation patches.
<b>Amphibians</b>			
Boreal toad <i>Bufo boreas boreas</i>	C	None	Breeds in beaver ponds, lakes, and other surface water with shallow shoreline areas and lacking strong currents from 8,500 to 11,000 feet in elevation. Breeding habitat is not present.
<b>Fish</b>			
Colorado pikeminnow <i>Ptychocheilus lucius</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
Humpback chub <i>Gila cypha</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
Bonytail chub <i>Gila elegans</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
Razorback sucker <i>Xyrauchen texanus</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
<b>Birds</b>			
Bald eagle <i>Haliaeetus leucocephalus</i>	T	Low	None; potential effects from decreased flow into the North Fork Gunnison River are not anticipated.
Whooping crane <i>Grus americana</i>	E	None	None; rare migrant in region but no suitable stopover habitats in analysis area.
Mexican spotted owl <i>Strix occidentalis</i>	T	None	None; prefers pockets of Douglas-fir on steep canyon sideslopes.

Table 1 (Continued)

Common Name / Scientific Name	Status <sup>1</sup>	Probability of Occurrence in Analysis Area	Potential Habitat in Analysis Area
Southwestern willow flycatcher <i>Empidonax trailii extimus</i>	E	None	None; no suitable habitat within 0.25 mile of well sites or access roads; found in large riparian complexes of dense shrub pockets with a tree overstory usually with nearby surface water and stream gradients of less than 4 percent.
Gunnison sage-grouse <i>Centrocercus minimus</i>	C	None	None. Lower elevation sagebrush habitat.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	C	None	None; rare summer resident in western valleys, primarily from Mesa County southward; nests in mature, closed canopy riparian forest.
<b>Mammals</b>			
Black-footed ferret <i>Mustela nigripes</i>	E	None	None; preferred habitat represented by prairie dog towns in lower elevation valleys.
Canada lynx <i>Lynx lynx</i>	P	None	None; wide-ranging but prefers spruce-fir/lodgepole pine forests; the Thompson Creek site is considered non-lynx habitat (entirely oakbrush habitat with no adjacent conifer forests).

<sup>1</sup> Status:

E = Listed as Endangered by the U.S. Fish and Wildlife Service under the Endangered Species Act. Species that are in imminent jeopardy of extinction.

T = Listed as Threatened by the U.S. Fish and Wildlife Service under the Endangered Species Act. Species that are threatened with extinction.

C = Proposed as a Candidate for listing as Threatened or Endangered by the U.S. Fish and Wildlife Service.

## EXHIBIT "N"

### Gunnison Energy Well Site Flora and Fauna Information

#### Thompson Creek

##### A. Flora

The access road and well site are located entirely within oak brush habitat. This habitat is dominated by dense stands of Gambel's oak with a relative sparse understory of grasses and forbs. Characteristic understory species include silvery lupine, white-flowered peavine, western wheatgrass, and needle-and-thread.

##### B. Fauna

Mule deer, elk, black bear, and mountain lion occur within the analysis area and are known to use oak brush habitat. Black bear and mountain lion are wide ranging and may occasionally wander through or near the well site. Oak brush habitat is typically used as winter range by mule deer and elk. Furbearers and predators likely to use the well site area include coyote, long-tailed weasel, striped skunk, and bobcat. Raptors potentially using oak brush as hunting and nesting habitat include sharp-shinned hawk and long-eared owl. However, no stick nests were observed during an October 2002 survey within 300 meters of the well pad site and new access road. Typical small mammal residents in oak brush habitat include least chipmunk, golden-mantled ground squirrel, and deer mouse. House wren, blue-gray gnatcatcher, and spotted towhee are common songbird residents.

## EXHIBIT O

Well name:	Thompson Creek Federal 12-90 #1-35
Operator:	Gunnison Energy Corporation
String type:	Surface
Location:	SWSE, Sec. 35, 12S, 90W, Gunnison Cty., CO

<b>Design parameters:</b> <u>Collapse</u> Mud weight: 8.400 ppg Design is based on evacuated pipe.	<b>Minimum design factors:</b> <u>Collapse:</u> Design factor 1.000  <u>Burst:</u> Design factor 1.00  <u>Tension:</u> 8 Round STC: 1.80 (J) 8 Round LTC: 1.70 (J) Buttress: 1.80 (J) Premium: 1.50 (J) Body yield: 1.50 (B)  Tension is based on buoyed weight. Neutral point: 526 ft	<b>Environment:</b> H2S considered? No Surface temperature: 75 °F Bottom hole temperature: 83 °F Temperature gradient: 1.40 °F/100ft Minimum section length: 40 ft  Cement top: 560 ft  Non-directional string.  Re subsequent strings: Next setting depth: 4,040 ft Next mud weight: 8.400 ppg Next setting BHP: 1,763 psi Fracture mud wt: 10,000 ppg Fracture depth: 600 ft Injection pressure: 312 psi
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Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finis	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	600	9.625	32.30	H-40	ST&C	600	600	8.876	4961

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	262	1370	5.23	307	2321	7.56	17	254	14.95 J

Prepared by: M. McCallister  
GEC

Date: November 15, 2002

Remarks  
Collapse strength is based on the Westcott, Dunlop & Kemfer method of biaxial correction for tension.

PAGE 1 OF 3

In addition, burst strength is biaxially adjusted for tension.

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

## EXHIBIT O

Well name:	Thompson Creek Federal 12-90 #1-35
Operator:	Gunnison Energy Corporation
String type:	Conductor
Location:	SWSE, Sec. 35, 12S, 90W, Gunnison Cty., CO

<p><b>Design parameters:</b></p> <p><u>Collapse</u>  Mud weight: 8.340 ppg  Design is based on evacuated pipe.</p> <p><u>Burst</u>  Max anticipated surface pressure: 17 psi  Internal gradient: 0.000 psi/ft  Calculated BHP: 17 psi  Gas gravity: 0.65  Annular backup: 8.40 ppg</p>	<p><b>Minimum design factors:</b></p> <p><u>Collapse:</u>  Design factor: 1.000</p> <p><u>Burst:</u>  Design factor: 1.00</p> <p><u>Tension:</u>  8 Round STC: 1.80 (J)  8 Round LTC: 1.70 (J)  Buttress: 1.60 (J)  Premium: 1.50 (J)  Body yield: 1.50 (B)</p> <p style="text-align: center;">Tension is based on buoyed weight.  Neutral point: 35 ft</p>	<p><b>Environment:</b></p> <p>H2S considered? No  Surface temperature: 75 °F  Bottom hole temperature: 76 °F  Temperature gradient: 1.40 °F/100ft  Minimum section length: 2,500 ft</p> <p>Cement top: -20,960 ft</p> <p style="text-align: center;">Non-directional string.</p>
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Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	40	16	65.00	H-40	ST&C	40	40	15.125	713

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	17	630	36.35	17	1643	94.91	2.3	439	99.99 J

Prepared by: M. McCallister  
GEC

Date: November 15, 2002

Remarks  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
In addition, burst strength is biaxially adjusted for tension.

### EXHIBIT O

Well name:	Thompson Creek Federal 12-90 #1-35
Operator:	Gunnison Energy Corporation
String type:	Production
Location:	SWSE, Sec. 35, 12S, 90W, Gunnison Cty., CO

**Design parameters:**

Collapse:

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

**Minimum design factors:**

Collapse:

Design factor 1.000

Burst:

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 132 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 2,500 ft  
 Cement top: 3,440 ft

Burst

Max anticipated surface pressure: 1,551 psi  
 Intomal gradient: 0.052 psi/ft  
 Calculated BHP: 1,763 psi  
 Gas gravity: 0.65  
 Annular backup: 8.40 ppg

Tension:

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.70 (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: 3,525 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)	Est. Cost (\$)
1	4040	5.5	17.00	N-80	LT&C	4040	4040	4.767	22771
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	1763	6290	3.57	1551	8258	5.32	59.9	348	5.81 J

Prepared by: M. McCallister  
 GEC

Date: November 15, 2002

**Remarks**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

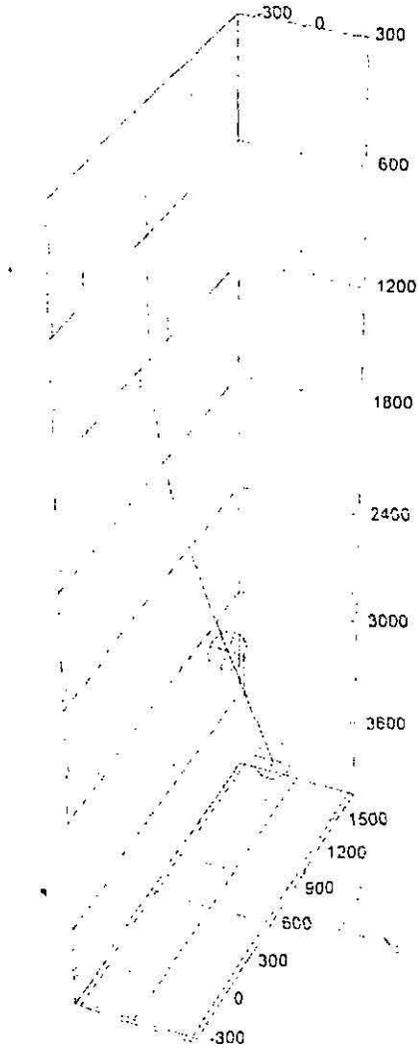
In addition, burst strength is biaxially adjusted for tension.

# 3D<sup>3</sup> Directional Drilling Planner - 3D View

Company: Gunnison Energy Corporation

Well: New Well

EXHIBIT P



	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+S- [ft]	E+W- [ft]	D.L.S. [°/100ft]	ToolFace [°]	T.F. Ref. [HS/GN]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	600.00	0.00	0.00	600.00	0.00	0.00	2.69	0	GN
3	656.17	1.51	0.00	656.15	0.74	0.00	2.69	360	HS
4	984.25	10.32	0.00	982.18	34.52	0.00	2.69	360	HS
5	1312.34	19.13	0.00	1299.17	117.04	0.00	2.69	360	HS
6	1667.07	25.98	0.00	1534.28	215.50	0.00	0.00		
7	1707.39	25.93	0.00	1560.42	275.96	0.00	0.00		
8	1968.50	26.85	0.00	1894.27	393.12	0.00	0.34	360	HS
9	2296.59	27.93	360.00	2185.52	544.14	0.00	0.34	360	HS
10	2524.67	29.07	360.00	2473.80	700.74	0.00	0.34	360	HS
11	2898.34	29.98	360.00	2710.19	834.60	0.00	0.00		
12	2995.34	30.00	360.00	2710.00	835.00	0.00	0.00		
13	4039.49	30.00	360.00	3790.00	1405.58	0.00	0.00		



Gunnison Energy Corporation  
Federal Lease: COC-65529  
Well: Thompson Creek Federal 12-90 #1-35  
Surface Location: 185' FNL & 1440' FEL  
Bottom Hole Location: 1221' FSL & 2171' FEL  
Sec. 2, T. 13 S., R. 90 W.  
Gunnison County, Colorado

3160

**Conditions of Approval - Drilling Plan**

1. All Surface Use Conditions of Approval ( Attached ) must be adhered to.
2. Notify this office at least **72 hours** prior to:
  - a. spudding the well
  - b. running casing strings and cementing
  - c. BOP tests
  - d. Drill Stem Testing

**For the above procedures, Operators must talk to BLM personnel directly. Do not leave messages on answering machines.**

3. All BOP tests will be performed with a test plug in place. BOP will be tested to full stack working pressure and annular preventer to 50% maximum stack working pressure. All accumulators will be function tested as per Onshore Order #2. All 2M or greater systems require **adjustable** chokes as per Onshore Order #2. The BOP needs an annular preventer to qualify as a 3M system. Choke lines must be 3". Kill line must have a check valve.
4. If a BLM Inspector is not present during the initial BOP test, please provide chart record.
5. Submit copies of all logs to this office both paper and in Log ASCII Standard (LAS) format.
6. If any operations are to start over the weekend, notify this office by **noon** Friday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed on the following 'INFORMATIONAL NOTICE - APD's'. Do not leave messages on answering machines.

(Continued on Page 2.)

7. The following tasks are recommended for collecting data that will aid in interpreting the groundwater flow and origin:

1. Pre-stimulation permeability testing should be performed. This testing would entail either a slug test/tank test, or a low rate injection test. Injection fluids would be clean, potable water to avoid introduction of any contaminants into the formation. This testing will provide true formation permeability and identify any pre-existing open fracture systems prior to fracture stimulation.
2. Stabilized bottomhole pressure measurements should be collected after the initial production testing is complete. Ideally, the measurements would be collected over a period of months to determine if pressure is stable at depth or if there are any trends or temporal variations in pressures. A pressure measuring device, connected to a datalogger, would be preferred. In lieu of this, monthly stabilized bottomhole pressure measurements would be acceptable.
3. Pressure response during fracture stimulation treatments should be recorded and provided to BLM and USFS. These data can be evaluated to determine if any pre-existing high permeability pathways were intercepted by the frac job.
4. Gas composition and isotopic analyses should be performed on gas samples collected from each producing zone encountered by the wellbore. These data will allow investigators to determine the origin of the gas in various zones (biogenic vs. thermogenic, conventional gas vs. coalbed methane gas, etc.).
5. Water chemistry testing should be performed on produced water. The following analyses will provide information on the provenance of the groundwater produced by the well. a) major ions, b) metals, c) TDS, d) pH, and stable isotopes of oxygen and hydrogen. These analyses should be conducted after the well has produced over 200% of the injected frac fluids to ensure formation waters are tested, or after 2 months of continuous production from the well. If the well is not produced, a water sample collected at the end of any initial production testing period should be analyzed for the above-listed parameters.

8. A CBL is required if cement is not circulated to the surface on either casing string. BLM verbal approval will be required prior to squeezing.

## INFORMATIONAL NOTICE - APD's

### San Juan Field Office

This notice is an abstract of some major regulations and Onshore Orders and includes notification requirements and information.

1. Drilling Operations (Onshore Order No. 2)

1. If DST's are run, all applicable safety precautions outlined in Onshore Order No. 2 shall be observed.
2. All indications of usable water (10,000 ppm or less TDS) shall be reported to the San Juan Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

2. Well Abandonment (43 CFR 3162.3-4, Onshore Order No. 1-Sec.V)

Approval for abandonment shall be obtained prior to beginning plugging operations. Initial approval for plugging operations may be verbal, but shall be followed-up in writing within 30 days. Subsequent and final abandonment notifications are required and shall be submitted on Sundry Notice (Form 3160-5), in triplicate.

3. Reports and Notifications (43 CFR 3162.3-2, 3162.4-1, 3162.4-3, 00-6)

1. Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions or data obtained and compiled during the drilling, workover, and/or completion operations shall be filed with a Completion Report (Form 3160-4), in triplicate. Submit casing/cementing reports and other subsequent reports via Sundry Notice, Form 3160-5.
2. In accordance with 43 CFR 3162.4-3, this well shall be reported on MMS Form 3160, "Monthly Report of Operations", starting with the month in which drilling operations commence, and continuing each month until the well is physically plugged and abandoned.
3. Notify this office within 5 business days of production start-up if either of the following two conditions occur:
  - (1) The well is placed on production, or
  - (2) The well resumes production after being off production for more than 90 days.

"Placed on production" means shipment or sales of hydrocarbons from temporary tanks, production into permanent facilities or measurement through permanent facilities. Notification may be written or verbal with written follow-up within 15 days.

- d. As per Onshore Order No. 6, III.A.2.b., if hydrogen sulfide is present the "operator shall initially test the H<sub>2</sub>S concentration of the gas stream for each well or production facility..." Submit the results of this test within 30 days of filing Form 3160-4, "Well Completion or Recompletion Report and Log".

4. Environmental obligations and disposition of production (00-7, NTL-3A, NTL-4A, 43 CFR 3162.5-1, 3162.7 and 40 CFR 302-4)

1. With BLM approval, water produced from newly completed wells may be temporarily disposed into unlined pits up to 90 days. During this initial period, application for the permanent disposal method shall be made to this office in accordance with 00-7.

If underground injection is proposed, an EPA or State UIC permit shall also be required and submitted to this office.

2. Spills, accidents, fires, injuries, blowout and other undesirable events shall be reported to this office within the time frames in NTL-3A.
3. Gas may be vented or flared during emergencies, well evaluation, or initial production tests for a time period of up to 30 days or the production of 50 MMCF of gas, whichever occurs first. After this period, approval from this office shall be obtained to flare or vent gas in accordance with NTL-4A.
4. Off-lease measurement and commingling of production must be approved by the authorized officer.

5. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter-quarter section, the section, township and range). The Indian lessor's name may also be required. All markings shall be legible and in a conspicuous place.

6. Bureau of Land Management, San Juan Field Office Address and Contacts:

ADDRESS: Public Lands Center      PHONE: (970) 247-4874  
15 Burnett Court  
Durango, Colorado 81301

BUSINESS HOURS: 7:45 A.M. to 4:30 P.M. (Mountain Time), Monday-Friday

AFTER HOURS:

Terry Galloway      Lead Petroleum Engineering Technician  
Home Phone (970) 884-4067

Marie Gray-Lope      Petroleum Engineering Technician  
Home Phone (505) 632-9346

Gary Retherford      Petroleum Engineering Technician  
Home Phone (970) 884-6138

Appendix 1

**SURFACE USE CONDITIONS OF APPROVAL**

Gunnison Energy Corporation  
Thompson Creek Fed 12-90 #1-35  
NE1/4NE1/4 of Sec. 2, T13S, R90W, 6thPM (Surface)  
Federal Oil and Gas Lease COC-65529 (Bottom Hole)  
Hawksnest Fed 13-90 #1-2  
Federal Oil and Gas Lease COC-65117 (Surface and Bottom Hole)  
Gunnison County, Colorado  
Right-of-way COC66811 for Coal Gulch Road and Thompson Creek well site  
Right-of-way COC66812 for Bear Creek Road

**Approval of this APD is subject to all terms and conditions set forth in the APD surface use plan, any surface owners agreement and the following Conditions of Approval which take precedence.**

**This approved APD is for a well location and associated road as identified in the APD package. If the Thompson Creek Fed 12-90 #1-35 and Hawksnest Fed 13-90 #1-2 wells become producers, additional NEPA and right-of-ways will be required.**

1. The operator or his contractor will contact the authorized officer at the Uncompahgre Field office in Montrose, Colorado (970) 240-5305, 48 hours before work is initiated, and 48 hours prior to beginning site reclamation.
2. Prior to mobilizing onto BLM lands, all equipment will be washed and cleaned to prevent spread of noxious weeds.
3. The Spill Prevention, Control and Countermeasure Plan/Health and Safety Plan, the Storm Water Pollution Prevention Plan, Noxious Weed Management Plan, the Fire Prevention and Suppression Plan and the Surface Use Agreement will be submitted to the BLM for review and approval prior to operations commencing.
4. Lessee's and Operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which (1) conforms with applicable Federal laws and regulations, and (2) with State and local laws and regulations to the extent that such State and local laws are applicable on Federal leases.
5. The operator must notify the USFS and/or BLM of any changes to surface operating plans to secure additional approvals, if needed.
6. A preconstruction site meeting will be held with the BLM to review road and pad designs. A person designated by the company to make decisions will be on site during initial disturbance and set up.
7. Prior to any surface disturbance, a Boundary Line Survey will be performed by a Professional Land Surveyor at the USFS/BLM boundary in the vicinity of the Thompson Creek well site to ensure no encroachment into the IRA. The survey will be marked to FS specification.
8. Design soil stockpiles to minimize risk of wind and soil erosion. The maximum depth will be 4 feet to protect the soil structure.
9. Activities may be curtailed during periods when the soil and/or road subgrade is saturated. This possible restriction would be determined by the BLM. Use of heavy construction equipment would be limited to times when the soil is least susceptible to compaction or rutting.
10. If a spill occurs, contaminated soil will be removed from BLM lands, and be properly disposed of prior to backfilling and reclamation.

11. Use site preparation methods to conserve fertile, friable topsoil essentially intact.
12. No refueling or lubricating would take place within 100 feet of wetlands and other waterbodies or drainages. Hazardous materials, chemicals, fuels, etc. would not be stored within 100 feet of wetlands or surface waters unless it is within the confines of the constructed drill pad.
13. Prior to pit reclamation, pit residue would be tested for chemicals listed in Appendix C of the EA. If hazardous constituents are present, the materials would be removed from BLM lands and properly disposed.
14. Sedimentation devices will be used along roads and drill pads as directed by the BLM representatives. Devices may include, but are not limited to silt fence, excelsior bales, straw wattles, etc.
15. If an exploration well is found to be capable of production and if fresh ground water zones are encountered during exploration drilling, the Operator will install a groundwater monitoring well adjacent to the specific gas well. The groundwater wells will be completed to monitor the fresh ground water zone(s). If a groundwater well is installed, it will be monitored on a semi-annual basis for water level, total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, specific conductance, total dissolved solids, pH, sulfate, nitrate, nitrite, ammonia, methane, hydrogen sulfide, selenium and barium. Data reports will be submitted to the BLM within one month after the lab analyses are complete.
16. If a well produces water at volumes greater than 1,500 bpd after 60 days of continuous operation, and if this water is less than 2,000 mg/l TDS, the gas well would be shut in until it can be determined whether the source of the water is or is not interconnected with shallow water-bearing units or surface water.
17. Vegetation removal would be minimized by lopping and scattering slash to a depth of no more than 18 inches. Some material may be mulched for use on site during reclamation.
18. All pits, cellars, rat holes, or other holes unnecessary for further operations would be backfilled immediately after the drill rig is released.
19. To facilitate timely reclamation, reserve pits may need to be pumped of fluids. All enhanced evaporation of the reserve pit fluids shall have prior approval of the authorized officer. After reshaping the site, the topsoil material should be distributed to a uniform depth to allow establishment of desirable vegetation. The disturbed area would be scarified prior to placement of surface soil material.
20. Annual coordination with the BLM is required to avoid conflicting with the grazing, coal, recreation and other uses of the Coal Gulch Road.
21. With respect to bald and golden eagle nest sites and winter roosts which may be established:
  - a. No new permanent surface facilities or disturbances shall be located within a 1/4 mile radius buffer zone around each bald or golden eagle nest site.
  - b. No above ground activities will be allowed within a 1/2 mile radius buffer zone around each active eagle nest site from November 15 to July 30 for bald eagles, and around each active golden eagle nest site from February 1 to July 15.
  - c. No above ground activities will be allowed within a 1/4 mile radius of winter roosts between November 15 and March 15; development may be permitted at other periods. If periodic visits are required within the buffer zone after development, activity should be restricted to the hours of 10 a.m. and 2 p.m. from November 15 through March 15.

- d. Any proposed surface facilities, disturbances or activities (noted above) in, or adjacent to, these buffer zones will require approval from the BLM on a site-specific basis, after consultation with the USFWS.
22. Project-related personnel will ensure that equipment operators know that the removal, injury, defacement, or alteration of any object of archaeological or historic interest is a federal crime and may be punishable by fine and/or jail term.
23. The operator and the BLM will conduct a pre-use road condition assessment for affected BLM roads.
24. Any project-related damage to any roads must be repaired as soon as possible to avoid adverse impacts on other authorized road uses on BLM lands.
25. Streams will be crossed at right angles, and on as gentle a grade and slope as possible. Install all crossings in a manner to maintain stable channel conditions and favorable water quality and aquatic habitat as directed by the BLM.
26. Dust abatement will be required on all project-related roads. Water will be the primary dust control measure. Other methods may need to be used as directed by the USFS or BLM.
27. Disposal records of all waste streams must be current and well maintained. Copies of the records will be forwarded to the BLM at the completion of drilling.
28. Control and containment mitigation would be included in the SPCC Plan, Emergency Response Plan, and Safety Plan in the event of a release of a hazardous substance or material. The plans would be provided to BLM prior to construction onsite so approval could be completed prior to any disturbance operations.
29. The Operator will specifically address the following measures in the SPCC for handling of a leak, spill or release event:
- a. Identification of the chemical parameters and sampling requirements to be analyzed in the event of a spill, leak or release, for each petroleum product or hazardous substance handled in or transported onto the drill sites;
  - b. How a spill would be prevented and/or how amount would be minimized from reaching surface water;
  - c. List the required contacts for federal, state, and local agencies regarding reportable spills or leaks;
  - d. How documentation will be maintained over time pertaining to the circumstances of releases, amount and duration of release, the measures taken to control the release, and the measures taken to minimize or mitigate the impacts from the release;
  - e. How released material that has not reached surface water will be recovered;
  - f. Plans to collect water samples documenting the duration and severity of any release that could reach surface water (near the release site, and at impacted downstream locations within the zone of impact).
30. All releases (unless the reportable spill quantity is less than 10 gallons) of any substance to soil or water would be immediately reported to BLM and USFS Compliance Officers (names will be provided

in the SPCC). Containment of the spill will occur immediately, clean up of a spill will occur within 3 days, or as soon as practicable and proof of cleanup provided for the record.

31. To further facilitate coordination with local emergency services, GEC would provide mapped locations of the proposed well sites, including GPS location (latitude/longitude) and MSDS sheets in the SPCC Plan, Fire Prevention Plan, Health and Safety Plan to the Federal agencies with responsible for drilling activities. A courtesy copy will be provided to the respective emergency services personnel, as applicable, in advance of any exploration drilling activities. In addition, the operator would have phones or radios onsite, as appropriate, to provide accessibility to emergency services.

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109

APPLICATION FOR PERMIT TO:

CONFIDENTIAL

1. TYPE OF WORK  Drill  Deepen  Re-enter  Recomplete and Operate

2. TYPE OF WELL OIL  GAS  COAL BED  OTHER  Refilling  SINGLE ZONE  MULTIPLE ZONE  COMINGLE ZONE  Side Track

3. OGCC Operator Number: 100122 4. Name of Operator: Gunnison Energy Corporation 5. Address: 1801 Broadway, Suite 1200 City: Denver State: CO Zip: 80202 6. Contact Name & Phone: Mark McCallister No: 303.296.4222 Fax: 303.296.4555 7. Well Name: Hawksnest Federal 13-90 Well Number: #1-2 8. Unit Name (if applicable): Unit Number: 9. Proposed Total Depth: 3,490'

10. Qtr Qtr: SE 1/4 NW 1/4 Sec: 2 Twp: 13S Rng: 90W Meridian: 6th Footage From Exterior Section Lines: At Surface: 1,750' FNL 1,745' FWL 11. Field Name: Wildcat Field Number: 99999 12. Ground Elevation: 8,204' GR 13. County: Gunnison #051 14. If well is:  Directional  Horizontal (Highly Deviated), submit drilling plan. Footage From Exterior Section Lines: At Top of Production Zone: If directional, at Production Zone: At Bottom Hole: 15. Location is in high density area (Rule 603b)?  Yes  No 16. Distance to nearest building, public road, above ground utility or railroad: 3.4 miles south to Highway 133 17. Distance to Nearest Property Line: 331' 18. Distance to nearest well completed in same formation: ±2,465'

19. LEASE, SPACING, AND POOLING INFORMATION Objective Formation (s) Formation Code Spacing Order Number Unit Acreage Assigned to Well Unit Configuration Cameo Coals - Mesaverde CAMMV 20. Mineral Ownership: Fee State  Federal  Indian Lease #: COC65117 21. Surface Ownership: Fee State  Federal  Indian Is the Surface Owner also the Mineral Owner?  Yes  No Surface Surety ID #: If No:  Surface Owner's Agreement Attached or  \$25,000 Blanket Bond  \$2,000 Surface Bond  \$5,000 Surface Bond 23. Describe lease area associated with the proposed well by Qtr/Qtr, Sec, Twp, Rng (attach sheet/map if required): See Attached Map T13S R90W Sec. 1: SW1/4, W1/2 SE1/4, Sec. 2: S1/2, S1/2 NE1/4, SE1/4 NW1/4; Sec. 3: SE1/4, Sec. 10: E1/2 NE1/4, Sec. 11: S1/2; Sec. 12 NW1/4, W1/2 NE1/4 24. Distance to nearest Lease Line: 331' 25. Total Acres in Lease: 1,596

DRILLING PLANS AND PROCEDURES 26. Approximate Spud Date: June 1, 2003 \* If Air/Gas Drilling, Notify Local Fire Officials 27. Drilling Contractor Number: Name: Phone #: 28. Is H2S Anticipated:  No  Yes If yes, attach contingency plan. 29. Will salt sections be encountered during drilling?  No  Yes 30. Will salt (>15,000 ppm TDS Cl) or oil-based muds, be use during drilling?  No  Yes 31. If questions 29 or 30 are yes, is the location in a sensitive area (Rule 903)?  No  Yes 32. Mud disposal:  Offsite  Onsite Method  Land Farming  Land Spreading  Disposal Facility  Other: Cuttings buried in place

33. CASING AND CEMENTING PROGRAM

Casing	Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Sks Cement	Cement Bottom	Cement Top
Surface	12-1/4"	9-5/8"	H-40 32.3# ST&C New	500'	To surface (± 253 sxs Type "III" w/ 2% CaCl2 + cello-flake/sk)	500'	Surface
Production	7-7/8"	5-1/2"	N-80 17# ST&C New	3,490'	To surface ( Stage 1: Lead: 223 sxs Premium Lite HS w/additives; Tail: 77 sxs Premium Lite HS w/additives; Stage 2: Lead: 223 sxs Premium Lite HS w/ additives; Tail: 77 sxs Premium Lite HS w/additives)	3,490'	Surface

34. BOP Equipment:  Annular Preventor  Double Ram  Rotating Head  None 35. Comments, if any:

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete. Print Name: Mark A. McCallister 303.296.4222 Signed: *Mark A. McCallister* Title: Operations Manager Date: December 6, 2002

OGCC Approved: *R. Thibault* Director of COGCC Date: 5/2/03

API NUMBER 05-051-06090-00 Permit Number: 20022272 Expiration Date: 5/1/04

CONDITIONS OF APPROVAL, IF ANY: see attached EXHIBIT D

RECEIVED DEC - 6 02 COGCC Plugging Bond Surety ID #: APD Original and 2 Copies  Op OGCC Form 2A (Reclamation) & 1 Copy  Permit Fee  NA Well Location Plat  Copy of Topo Map  Plugging Surety  Mineral Lease map  Surface Agreement/Surety  Pit Permit (Form 15)  Deviated Drilling Plan  Request for Exception Location  Exception Location Waivers  H2S Contingency Plan  Federal Drilling Permit (1 set)  30-day Notice  Sent Complete Permit Package to County

Permit Conditions

Hawksnest Federal 13-90 #1-2 Well

SE ¼ NW ¼ Section 2, Township 13 South, Range 90 West, Gunnison County

1. **Spud Notice.** Twenty-four (24) hour spud notice required. Notify Jaime Adkins at 970-285-9000.
2. **Notification of the local COGCC office prior to casing cement operations.** The operator shall notify the Northwest Colorado COGCC staff at least twelve (12) hours prior to casing cement operations.
3. **Cement Bond Log Requirement.** The operator shall run a cement bond log in the existing 7" production casing to verify that the top of cement is at least 200 feet above the shallowest completed interval. If the well is completed in a coal seam, the 7" production casing is required to be cemented to surface and the operator shall run a cement bond log across the entire length of the 7" production casing.



DEPARTMENT OF NATURAL RESOURCES

Bill Owens, Governor  
1120 Lincoln St., Suite 801  
Denver, CO 80203  
Phone: (303) 894-2100  
FAX: (303) 894-2109  
www.oil-gas.state.co.us

January 10, 2003

John Devore  
Gunnison County  
200 E. Virginia  
Gunnison, CO 81230

Re: Gunnison Energy Corporation Application for Permit to Drill ("APDs")

**Hawksnest Federal 13-90 #1-2 Well**

SE ¼ NW ¼ Section 2, Township 13 South, Range 90 West, Gunnison County

**Thompson Creek Federal 12-90 #1-35 Well**

NW ¼ NE ¼ Section 2, Township 13 South, Range 90 West, Gunnison County

Dear John:

Although Gunnison County has not submitted comments on the above captioned Applications to Drill through its local governmental designee, the following information is provided as a courtesy to Gunnison County.

The Rules and Regulation of the COGCC are designed to address all stages of oil and gas operations as defined in the Oil and Gas Conservation Act (the "Act") that are conducted in Colorado. Compliance with these rules and with the statute adequately protect public health, safety and welfare. In addition, each well bore constitutes a point of compliance as defined in the COGCC rules from which ground water standards established under the Water Quality Control Commission can be determined to be in compliance. When applicable, certain conditions of permit approval not specifically addressed in the COGCC rules may be imposed upon an APD by the Director.

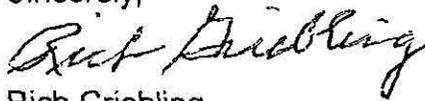
Permit approval is an administrative function under the Act delegated to the Director by the Commission. I have carefully reviewed the Applications to Drill with members of our staff to ensure that public health, safety, and welfare is protected by the APD as conditioned and by existing COGCC rules and statutes. In addition, both the surface estate and the mineral estate where the wells are located are owned and managed by the federal government. The U. S. Forest Service manages the surface lands where the wells are located, and the COGCC shares a dual responsibility with the U.S. Bureau of Land Management in permitting the subsurface aspects of oil and gas development. As such, we have been in communication with staff at the U.S. Bureau of Land

Management and the U.S. Forest Service to gain an understanding of their extensive review processes for APD's.

The Applications to Drill filed by Gunison Energy Corporation are complete application packages submitted using standard petroleum industry practices and complying with COGCC rules. The Permits have been issued with conditions of permit approval. That document is attached herein and includes a description of how pertinent COGCC rules and the proposed well bore construction protect public health, safety and welfare.

For further information, you can find a copy of the brochure titled "Typical Questions From The Public About Oil and Gas Development in Colorado" at the COGCC web site [www.oil-gas.state.co.us](http://www.oil-gas.state.co.us) to further assist you in understanding the COGCC's role.

Sincerely,



Rich Griebing

cc: Well file

## **HOW ISSUES RELATED TO PUBLIC HEALTH, SAFETY AND WELFARE ARE ADDRESSED BY THE APPLICATION AND COGCC RULES**

COGCC Rules and Regulations and the Fire Prevention Directive for Oil & Gas Operations are available on the COGCC website at [www.oil-gas.state.co.us](http://www.oil-gas.state.co.us) under "Rules" and "Announcements" respectively.

Gunnison Energy Corporation Application for Permit to Drill ("APDs")

### **Hawksnest Federal 13-90 #1-2 Well**

SE ¼ NW ¼ Section 2, Township 13 South, Range 90 West, Gunnison County

### **Thompson Creek Federal 12-90 #1-35 Well**

NW ¼ NE ¼ Section 2, Township 13 South, Range 90 West, Gunnison County

The following is a discussion of how various issues regarding the above-listed wells are addressed by the applications and COGCC rules. Issues not addressed by the applications and COGCC rules have been addressed through specific conditions of permit approval.

### **Protection of Water Quality**

In order to obtain APD approval, the COGCC requires all APDs to be in compliance with all applicable COGCC Rules governing well drilling, construction, and completion to ensure protection of surface and ground waters, including all water quality standards or classifications established by the Water Quality Control Commission of the Colorado Department of Public Health and Environment for waters of the State.

**Rule 317. requires that sufficient surface casing be set to protect all known usable water zones and that the individual well casing program prevent migration of oil, gas, or water from one horizon to another. The COGCC considers each well bore to be a point of compliance for ground and surface water quality protection.**

The well bore designs for the above APD has been reviewed by a COGCC staff petroleum engineer and fully comply with COGCC requirements as specified in Rule 317. The casing and cement design for the Federal 13-90 #1-2 Well includes surface casing that is to be set at a minimum depth of 500 feet, which is below the depth of all permitted water wells within a one mile radius of the well site. The production casing is proposed to be set at 3490 feet and is required to be cemented to surface. A bond log will be run from the bottom of the casing to surface. The final result will be a well with good integrity and a minimum of four layers of protection for ground and surface waters (surface casing pipe and cement and production casing pipe and cement).

The casing and cement design for the Federal 12-90 #1-35 Well includes surface casing that is to be set at a minimum depth of 600 feet, which is below the depth of all permitted water wells within a one mile radius of the well site. The production casing is proposed to be set at 4040 feet and is required to be cemented to surface. A bond log will be run from the bottom of the casing to surface. The final result will be a well with good integrity and a minimum of four layers of protection for ground and surface waters (surface casing pipe and cement and production casing pipe and cement).

An extensive data set will be gathered by Gunnison Energy Corporation ("GEC") during the normal course of well drilling and completion, fracture stimulation, and production testing. These data will provide usable information regarding subsurface geology, hydrogeology, the presence and absence of fluids and gases, water and gas compositions, and the feasibility of natural gas production. Data obtained will include fracture stimulation treatment data, showing rock properties, frac geometry, and reservoir pressures. Additionally, GEC will conduct extensive production testing of this well that will include produced water quality and quantity evaluations. The data collected by the operator will provide adequate information to evaluate subsurface formation conditions and the potential for adverse impacts to public health, safety and welfare, and the environment.

#### **Initial Water Quality Baseline Testing**

The APD submitted by GEC includes the plan to perform initial water quality baseline testing. The operator is planning to perform initial water quality and quantity baseline testing for all known water wells or springs for which surface owner access is granted within a one mile radius area prior to re-entry and sidetrack operations on the proposed well. Baseline information on springs will include location coordinates and photo documentation in addition to quantity measurements and documentation of the method of quantity measurement where possible. The initial water quality baseline testing will include benzene, toluene, ethylbenzene, and xylenes, methane, major cations and anions, TDS (Total Dissolved Solids), iron and manganese, ammonia, pH, presence of bacteria, specific conductance, and hydrogen sulfide.

If free gas or a methane concentration greater than 2 mg/L is detected, then a sample of the gas will be collected and analyzed for composition and the ratio of stable carbon isotopes in the methane to determine gas type (thermogenic, biogenic or mixture).

Copies of all test results described above will be provided to the COGCC, Delta County, the U.S. Bureau of Land Management, the U.S. Forest Service, and any other owner of lands where the water quality testing well or spring is located within three (3) months of collecting the samples used for the test. If it is determined that the well will be a producing well, the operator will submit a plan for periodic monitoring of water wells and springs in the area.

### **Safety**

The 600 Series rules address protection of health, safety and welfare of the general public during the drilling, completion and operation of oil and gas wells and producing facilities.

### **Fire Prevention and Emergency Preparedness**

Rule 606. requires operators to comply with a comprehensive set of fire prevention and protection standards.

The operator will be required to comply with U.S. Forest Service requirements for fire suppression.

Local Government requirements for fire prevention and emergency preparedness planning are communicated directly between the local government and the operator, and not through the COGCC APD approval process. One of the primary purposes of the COGCC LGD program is to provide a notification tool to local governments so that this planning can take place.

### **Property Values and Quality of Life**

The law that created the COGCC and empowers its regulation of the oil and gas industry provides for the COGCC to promulgate rules to protect the health, safety and welfare of the general public in the conduct of oil and gas operations. The law is designed to keep the general public safe when drilling and development occurs, and is not directed at protecting individual property values or a preferred quality of life.



January 10, 2003

John Devore  
Gunnison County  
200 E. Virginia  
Gunnison, CO 81230

Re: Gunnison Energy Corporation Applications for Permit-to-Drill ("APDs")

**Hawksnest Federal 13-90 #1-2 Well**

SE¼ NW¼ Section 2, Township 13 South, Range 90 West, Gunnison County

**Thompson Creek Federal 12-90 #1-35 Well**

NW¼ NE¼ Section 2, Township 13 South, Range 90 West, Gunnison County

Dear John:

Although Gunnison County has not submitted comments on the above captioned APDs through its Local Governmental Designee, the following information is provided as a courtesy to Gunnison County.

The Rules and Regulation of the COGCC are designed to address all stages of oil and gas operations as defined in the Oil and Gas Conservation Act (the "Act") that are conducted in Colorado. Compliance with these rules and with the statute adequately protect public health, safety and welfare. In addition, each wellbore constitutes a point of compliance as defined in the COGCC Rules from which ground water standards established under the Water Quality Control Commission can be determined to be in compliance. When applicable, certain conditions of permit approval not specifically addressed in the COGCC Rules may be imposed upon an APD by the Director.

Permit approval is an administrative function under the Act delegated to the Director by the Commission. I have carefully reviewed the APDs with members of our staff to ensure that public health, safety, and welfare is protected by the APDs as conditioned and by existing COGCC Rules and statutes. In addition, both the surface estate and the mineral estate where the wells are located are owned and managed by the federal government. The U. S. Forest Service manages the surface lands where the wells are located, and the COGCC shares a dual responsibility with the U.S. Bureau of Land Management in permitting the subsurface aspects of oil and gas development. As such, we have been in communication with staff at the U.S. Bureau of Land Management and the U.S. Forest Service to gain an understanding of their extensive review processes for APDs.

The APDs filed by Gunnison Energy Corporation are complete application packages submitted using standard petroleum industry practices and complying with COGCC rules. The Permits have been issued with conditions of permit approval. Those documents are attached herein and include a description of how pertinent COGCC Rules and the proposed wellbore construction protect public health, safety and welfare.

You can find a copy of the brochure titled "Typical Questions From The Public About Oil and Gas Development in Colorado" at the COGCC website to further assist you in understanding

July 3, 2002

Page 2 of 2

the COGCC's role.

Sincerely,

Rich Griebing

cc: Well file

# NOTICE TO OPERATORS

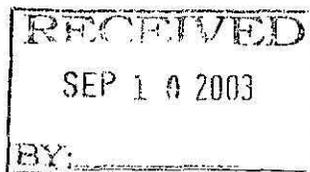
All Spud notifications must be given to BLM personnel directly. Do not leave messages on answering machines. Spud notices are to be phoned into the BLM office during regular working hours; (Monday-Friday, 8:00-4:30).

If any operations are to start over the weekend or holiday, notify this office by noon Friday or the day prior to the holiday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed below. Do not leave messages on answering machines.

Terry Galloway	Technician	work: 970-385-1347	home: 970-884-4067
Gary Retherford	Technician	work: 970-385-1364	home: 970-884-6138
Marie Gray	Technician	work: 970-385-1349	home: 505-632-9346
Dan Rabinowitz	Engineer	work: 970-385-1363	home: 970-247-9585

PLEASE NOTE: 1) SITE SPECIFIC CONDITIONS OF APPROVAL

APDnoticeOp.wpd



BANKO  
PETROLEUM  
MANAGEMENT INC.

Ruth  
Richardson

FEDERAL EXPRESS - PRIORITY OVERNIGHT

Ms. Helen Mary Johnson  
Bureau of Land Management  
Durango Field Office  
15 Burnett Court  
Durango, CO 81301



December 5, 2002

RE: Application for Permit to Drill  
Electronic Submission #15965  
Gunnison Energy Corporation  
Hawksnest Federal #13-90 #1-2  
1,750' FNL 1,745' FWL (SE/4 NW/4)  
Sec. 2 T13S R90W  
Gunnison County, Colorado  
Federal Lease: COC65117

**RECEIVED**

DEC 11 2002

Bureau of Land Management  
Durango, Colorado

Dear Ms. Johnson:

Please find attached the Application for Permit to Drill (APD) for the above captioned well, filed on behalf of Gunnison Energy Corporation (GEC). The application was filed electronically.

Your early attention to this application is greatly appreciated, thank you for your concern.

Very truly yours,

/s/ David F. Banko

David F. Banko  
Agent for Gunnison Energy Corporation

DFB:mgd  
Enclosures

cc: Gunnison County Planning Department, Certified Mail  
BLM - Montrose District Office  
Colorado Oil and Gas Conservation Commission  
Gunnison Energy Corporation  
Oxbow Power Corporation - West Palm Beach, FL  
Bjork, Lindley, Dannielsen, & Baker, P.C.  
Keith Dana

**RECEIVED**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Durango, Colorado

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

DEC 11 2002

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		<b>CONFIDENTIAL</b>	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		<input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone	
2. Name of Operator <b>Gunnison Energy Corporation</b>		Contact: Mark McCallister E-Mail: mark_mccallister@opsi.oxbow.com	5. Lease Serial No. COC65117
3a. Address 1801 Broadway, Suite 1200, Denver, CO 80202		3b. Phone No. (include area code) 303.296.4222	6. If Indian, Allottee or Tribe Name
4. Location of Well (Report location clearly and in accordance with any State Requirements.) At surface    1,750' FNL    1,745' FWL    38.949785 Lat.    107.419105 Long.    SE /4    NW /4		7. If Unit or CA Agreement, Name and No. Hawksnest Federal 13-90 #1-2	
At proposed production zone    1,750' FNL    1,745' FWL    38.949785 Lat.    107.419105 Long.		8. Lease Name and Well No.	
14. Distance in miles and direction from nearest town or post office. * ±4 miles northeast of Somerset, Colorado		9. API Well No.	
15. Distance from proposed location to nearest property of lease line, ft. (Also nearest Drig, unit line, if any) Unit= N/A Lease= 3310		10. Field and Pool, or Exploratory Wildcat	
16. No. of legal or equitable title rights held by the operator in the subject lease which are committed hereon...		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 2    T 13S    R 90W	
17. Spacing Unit dedicated to this well 160		12. County or parish Gunnison	
18. Distance from proposed location to nearest well, drilling, completed or applied for, on this lease, ft. ± 2,465'		13. State CO	
20. BLM/BIA Bond No. on file CO1428		19. Estimated duration 45-60 days drig + completion	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 8,204' GR		22. Approximate date work will start * June 1, 2003	

24. Attachments

*Venting / Flaring approved for 90 days per NTL 4A*

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

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

25. Signature <i>Mark McCallister</i>	Name (Printed/Typed) Mark A. McCallister	Date December 5, 2002
Title Operations Manager	<b>APPROVED FOR A PERIOD NOT TO EXCEED 1 YEAR.</b>	

Approved by (Signature) <i>Brian W. Davis</i>	Name (Printed/Typed) /s/ Brian W. Davis	Date SEP 8 2003
Title Acting Field Office Manager	Office	

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

**SEE ATTACHED CONDITIONS OF APPROVAL**

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

Additional Operator Remarks (see next page)

Electronic Submission #15965 verified by the BLM Well Information System  
For GUNNISON ENERGY CORPORATION, sent to the Durango Field Office

**Additional Operator Remarks:**

This document serves as a right of way (ROW) application for the wellsite and the BLM portion of the access road as indicated on Exhibit "L".

The Corcoran, Cozzette, Rollins, Cameo Coals and the Barren Member of the Mesa Verde Formation will be tested.

**Casing and Cement program:**

Conductor: 40' of 16" .375 wall, 17-1/2" hole, 23.6 cu. ft. of cement

Surface: 500' of 9-5/8", 32.3#, H-40, 12-1/4" hole, 352 cu. ft. of cement

Production: 3,490' of 5-1/2", 17# N-80, 7-7/8" hole, 1,372 cu. ft. of cement

**List of Attachments:**

- Exhibit "A" - Drilling Program
- Exhibit "B" - Surface Use Plan
- Exhibit "C" - Survey Plat
- Exhibit "D" - Cut & Fill Diagram
- Exhibit "E" - Drill Pad Layout
- Exhibit "F" - Production Pad Layout
- Exhibit "G" - Area Map
- Exhibit "H" - Water Haul Route
- Exhibit "I" - Wellbore Diagram
- Exhibit "J" - BOP Diagram
- Exhibit "K" - Choke Manifold Diagram
- Exhibit "L" - Access Road Map
- Exhibit "M" - Threatened & Endangered Species Survey
- Exhibit "N" - Flora & Fauna
- Exhibit "O" - Casing Designs
- Exhibit "P" - Grading and Hydrology Plans

The Cultural Resources Survey has been sent under a Metcalf Resources Cover.

Oil and Gas Conservation Commission

DEC 11 2002

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109

APPLICATION FOR PERMIT TO:

Bureau of Land Management  
Durango, Colorado

CONFIDENTIAL

TYPE OF WORK

Drill  Deepen  Re-enter  Recomplete and Operate

TYPE OF WELL

OIL  GAS  COAL BED  OTHER  Refilling   
SINGLE ZONE  MULTIPLE ZONE  COMINGLE ZONE  Side Track

Plugging Bond Surety ID #:

OGCC Operator Number: 100122

Name of Operator: Gunnison Energy Corporation

Address: 1801 Broadway, Suite 1200

City: Denver State: CO Zip: 80202

Well Name: Hawksnest Federal 13-90

Unit Name (if applicable):

Proposed Total Depth: 3,490'

6. Contact Name & Phone

Mark McCallister  
No: 303.296.4222  
Fax: 303.296.4555

Well Number: #1-2

Unit Number:

APD Original and 2 Copies	Op	OGCC
Form 2A (Reclamation) & 1 Copy	X	
Permit Fee	NA	
Well Location Plat	X	
Copy of Topo Map	X	
Plugging Surety		
Mineral Lease map	X	
Surface Agreement/Surety		
Pit Permit (Form 15)		
Deviated Drilling Plan		
Request for Exception Location		
Exception Location Waivers		
H <sub>2</sub> S Contingency Plan		
Federal Drilling Permit (1 set)	X	
30-day Notice		
Sent Complete Permit Package to County	X	

WELL LOCATION INFORMATION

Qtr: SE 1/4 NW 1/4 Sec: 2 Twp: 13S Rng: 90W Meridian: 6th

Footage From Exterior Section Lines:

A Surface: 1,750' FNL 1,745' FWL

1. Well Name: Wildcat Field Number: 99999

2. Ground Elevation: 8,204' GR 13. County: Gunnison #051

3. If well is:  Directional  Horizontal (Highly Deviated), submit drilling plan.

Footage From Exterior Section Lines:

At Top of Production Zone;

If directional, at Production Zone:

At Bottom Hole:

4. Location is in high density area (Rule 603b)?  Yes  No

5. Distance to nearest building, public road, above ground utility or railroad: 3.4 miles south to Highway 133

7. Distance to Nearest Property Line: 331'

18. Distance to nearest well completed in same formation: ±2,465'

LEASE, SPACING, AND POOLING INFORMATION

Objective Formation (s)	Formation Code	Spacing Order Number	Unit Acreage Assigned to Well	Unit Configuration
Cameo Coals - Mesaverde	CAMMV			

6. Mineral Ownership:  Fee  State  Federal  Indian Lease #: COC65117

7. Surface Ownership:  Fee  State  Federal  Indian

8. Is the Surface Owner also the Mineral Owner?  Yes  No

Surface Surety ID #:

If No:  Surface Owner's Agreement Attached or  \$25,000 Blanket Bond  \$2,000 Surface Bond  \$5,000 Surface Bond

9. Describe lease area associated with the proposed well by Qtr/Sec, Twp, Rng (attach sheet/map if required): See Attached Map

10. R90W Sec. 1: SW/4, W/2 SE/4, Sec. 2: S/2, S/2 NE/4, SE/4 NW/4; Sec. 3: SE/4, Sec. 10: E/2 NE/4, Sec. 11: S/2; Sec. 12 NW/4, W/2 NE/4

11. Distance to nearest Lease Line: 331'

25. Total Acres in Lease: 1,596

DRILLING PLANS AND PROCEDURES

12. Approximate Spud Date: June 1, 2003

\* If Air/Gas Drilling, Notify Local Fire Officials

13. Drilling Contractor Number: Name:

Phone #:

14. Is H<sub>2</sub>S Anticipated:  No  Yes If yes, attach contingency plan.

15. Will salt sections be encountered during drilling?  No  Yes

16. Will salt (>15,000 ppm TDS Cl) or oil-based muds, be use during drilling?  No  Yes

17. If questions 29 or 30 are yes, is the location in a sensitive area (Rule 903)?  No  Yes

18. Mud disposal:  Offsite  Onsite  
Method  Land Farming  Land Spreading  Disposal Facility  Other: Cuttings buried in place

CASING AND CEMENTING PROGRAM

Log	Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Sks Cement	Cement Bottom	Cement Top
Surface	12-1/4"	9-5/8"	H-40 32.3# ST&C New	500'	To surface (± 253 sxs Type "III" w/ 2% CaCl <sub>2</sub> + celto-flake/sk)	500'	Surface
Production	7-7/8"	5-1/2"	N-80 17# ST & C New	3,490'	To surface ( Stage 1: Lead: 223 sxs Premium Lite HS w/additives; Tail: 77 sxs Premium Lite HS w/additives; Stage 2: Lead: 223 sxs Premium Lite HS w/ additives; Tail: 77 sxs Premium Lite HS w/additives)	3,490'	Surface
Stage Tool							

19. JOP Equipment:  Annular Preventor  Double Ram  Rotating Head  None

20. Comments, if any:

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Contact Name: Mark A. McCallister 303.296.4222

Signed: *Mark A. McCallister* Title: Operations Manager Date: December 6, 2002

OGCC Approved: \_\_\_\_\_ Director of COGCC Date: \_\_\_\_\_

API NUMBER

05-

Permit Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

**EXHIBIT "A"**



**Gunnison Energy Corporation  
Drilling Program**

**Hawksnest Federal 13-90 #1-2  
1,750' FNL 1,745' FWL (SE/4 NW/4)  
Sec. 2, T13S R90W  
Gunnison County, Colorado  
Federal Lease: COC-65117**

This Application for Permit to Drill (APD) is filed under the Notice of Staking (NOS) process as stated in Onshore Order No. 1 and supporting Bureau of Land Management (BLM) documents. This NOS process included on-site meetings on November 6, 2002, prior to the submittal of the application, at which time the specific concerns of Gunnison Energy Corporation (Gunnison Energy) and the BLM were discussed. All specific concerns of the BLM and United States Forest Service (USFS) representatives are addressed herein, as are specific stipulations from the BLM and USFS.

Please contact Mr. Mark McCallister at Gunnison Energy, (303) 296-4222 if there are any questions or concerns regarding this Drilling Program.

**Gunnison Energy respectfully requests that all information regarding this well be kept confidential.**

<b>ANTICIPATED START DATE</b>	June 1, 2003	
<b>SURFACE ELEVATION</b>	8,204'	
<b>SURFACE FORMATION</b>	Green River (Stony Loam) - Fresh water possible	
<b>ESTIMATED FORMATION TOPS</b>	(Water, oil, gas and/or other mineral-bearing formations)	
Wasatch	N/A	Shales, siltstones and lenticular sandstones, some water or gas bearing
Ohio Creek	445'	Sandstones, shales and siltstones
Upper Mesa Verde	650'	Sandstone, shales & siltstones, some water, oil or gas bearing
Cameo Coals	2,560'	Coal zones w/interbedded sandstone, shales & siltstones, some water, oil or gas bearing
Rollins	2,830'	Sandstone, shales & siltstones, some water, oil or gas bearing
Cozzette	3,200'	Sandstone, shales & siltstones, some water, oil or gas bearing
Corcoran	3,385'	Sandstone, shales & siltstones, some water, oil or gas bearing
Mancos	3,480'	Shales, siltstones and lenticular sandstones, some water or gas bearing
<b>TOTAL DEPTH</b>	<b>3,490'</b>	

**CASING PROGRAM**

Casing	Hole Size	Casing Size	Weight	Grade	Depth Set	Cement Top
Conductor	17-1/2"	16"	.375" wall	LP	40'	Surface
Surface	12-1/4"	9-5/8"	32.3#	H-40	500'	Surface
Production	7-7/8"	5-1/2"	17#	N-80	3,490'	Surface

**ELOAT EQUIPMENT**

1. **SURFACE CASING:** 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
2. **PRODUCTION CASING:** 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' shoe joint. Place a 5-1/2" stage tool at 1,745'. Place a cement basket just below stage tool and centralizers on the first collar above and below stage tool. Run one positive standoff turbulent centralizer every other joint from TD to surface casing. Total turbulent centralizers are 36.

**CEMENTING PROGRAM** (Note: Volumes may be adjusted onsite due to actual conditions)

1. **SURFACE:** Slurry: 253 sx (352 cu.ft.) of "Type III" + 2% CaCl<sub>2</sub> + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 125% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500 psi.
2. **PRODUCTION:** Stage #1: Scavenger - 30 sx (157 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 (Weight = 11#/gal). Lead: 193 sx (378 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32. (Yield = 1.96 cu.ft./sk, Weight = 12.5 #/gal.). Tail: 77 sx (152 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 + .25 #/sk Celloflake + 4% Phenoseal. (Yield = 1.98 cu.ft./sk, Weight = 12.5 #/gal.). Displace cement at a minimum of 8 BPM until pressure is caught then reduce displacement to 4 BPM. Use 50% excess in lead and tail to circulate stage tool. Open stage tool, displace water in casing with air and circulate for 5 hrs before cementing the second stage. Stage #2: Scavenger - 30 sx (157 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 (Weight = 11#/gal). Lead: 193 sx (378 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32. (Yield = 1.96 cu.ft./sk, Weight = 12.5 #/gal.). Tail: 77 sx (152 cu.ft.) of Premium Light HS + 0.65% FL-52 + .32% CD-32 + .25 #/sk Celloflake + 4% Phenoseal. (Yield = 1.98 cu.ft./sk, Weight = 12.5 #/gal.). Displace cement at a minimum of 8 BPM until pressure is caught then reduce displacement to 4 BPM. Use 50% excess in lead and tail to circulate cement to the surface. Total volume = 1,372 cu.ft. WOC 12 hours. Run CBL and squeeze cement if necessary prior to completion.

**ABNORMAL CONDITIONS**

1. Pressures: No abnormal conditions are anticipated.  
Cameo/Rollins, pressure gradient - 0.40 psi/ft  
Cozzette/Corcoran pressure gradient - 0.40 psi./ft
2. Temperatures: No abnormal conditions are anticipated.
3. H<sub>2</sub>S: None anticipated.
4. Estimated bottom hole pressure: 1,396 psi. Corcoran

**PRESSURE CONTROL** (See attached schematic diagram)

BOP's and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever pressure seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventors and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. Annular type preventors will be pressure tested to 50% of their rated working pressure. All casing strings will be pressure tested to 0.22 psi/ft. or 1,500 psi, whichever is greater, not to exceed 70% of internal yield. A manual locking device (i.e. hand wheels) or automatic locking devices shall be installed on the BOP stack.

The choke manifold and accumulator will meet or exceed Onshore Order No. 2 standards. The BOP equipment will be tested after any repairs to the equipment. Pipe rams, blind rams and the annular preventor will be activated on each trip, and weekly BOP drills will be held with each crew. All tests, maintenance, and BOP drill information will be entered on rig "tower" sheet.

A 3M BOP system is proposed for this well; however, the rig may have a 5M BOP system, but will only be required to meet the 3M specifications.

*Statement on Accumulator System and Location of Hydraulic Controls*

*The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with Onshore Order No. 2 for 3,000 psi systems.*

*A remote accumulator will be used. Pressures, capacities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.*

**MUD PROGRAM**

1. Conductor: 0' to 40', 17-1/2" hole no fluid.
2. Surface: 40' to 500', 12-1/4" hole drilled with an air hammer and mist if necessary.
3. Production: 500' to 3490', 7-7/8" hole drilled with an air hammer and mist if necessary.

*(If unable to continue drilling with air due to hole stabilization, the hole will be mudded up with a fresh water LSND system ( M.W. 8.6 - 9.2 ppg, Vis - 35-50 sec, W.L. 15 cc or less). The hole will be treated for*

lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite)

Bloolie lines and pits will be operated and treated to control dust levels and off-site impacts.

#### AUXILIARY EQUIPMENT

1. Upper kelly cock & lower kelly cock in drill string
2. Inside BOP. or stab-in valve (available on rig floor).
3. Mud monitoring will be with a flowing sensor, pit level indicator, and visually observed.

#### LOGGING, CORING TESTING PROGRAM

1. Logging: Intermediate: GR/DIL, CDL/SNL & DPS. CBL after setting casing  
Total Depth: GR/DIL, CDL/SNL & DPS. Possible FMI & RFT. CBL after setting casing.
2. Coring: Possible full core in Cameo Coals, Rollins, Cozzette and Corcoran. Possible sidewall cores as determined by open hole logs.
3. Testing: Possible DST -- Cameo/Rollins/Cozzette/Corcoran. Drill stem tests may be run on shows of interest.

#### COMPLETION

##### CBL

1. Run Cement Bond Log from TD to the surface. Find top of cement and squeeze as necessary if cement was not circulated to the surface.

##### PRESSURE TEST

1. Install wellhead saver.
2. Pressure test 5-1/2" casing to 6500# for 15 minutes.

##### STIMULATION

1. Stimulate with approximately 120,000# of 20/40 sand in a 20# to 30# CMHPG gel in a 70 quality N<sub>2</sub> foam.

*(Note: The number of stages will be adjusted based upon actual conditions)*

##### RUNNING TUBING

1. Run 2-3/8", 4.7#, J-55, EUE tubing with a notched collar on bottom and a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom perforation.

*Mark McCallister*

Mark McCallister  
Operations Manager

## EXHIBIT B



### **GUNNISON ENERGY CORPORATION**

Hawksnest Federal #13-90 #1-2  
1,750' FNL 1,745' FWL (SE/4 NW/4)  
Sec. 2 T13S R90W  
Gunnison County, Colorado  
Federal Lease: COC65117

#### SURFACE USE PLAN

#### WELL LOCATION AND INTRODUCTION:

The proposed surface location is 1,750' FNL 1,745' FWL (SE/4 NW/4) of Section 13 T13S R90W. The wellsite was surveyed and staked on October 2, 2002 by North Star Survey and Mapping, Inc. on a site that was geologically, topographically, and legally acceptable.

An on-site meeting to address compliance issues was held on November 6, 2002. Attending were:

Bureau of Land Management (BLM) (Montrose)	Lynn Lewis Teresa Pfifer Jim Ferguson Danna Knox	Geologist Realty Specialist Wildlife Biologist Surface Compliance Specialist
Gunnison Energy Corporation	Mark McCallister	Operations Manager
Banko Petroleum Management	David Banko	Petroleum Engineer
North Star Mapping	Dominic Chavez	Surveyor
Cordilleran Compliance Services, Inc.	Diane Kocis	Sr. Environmental Scientist

Specific stipulations resulting from the November 6, 2002, meeting are noted below (\*).

The BLM Montrose (Uncompahgre) Field Office Manager or Authorized Officer (AO) will be notified 48 hours by phone prior to commencing construction or any surface disturbance of the drillsite, 48 hours prior to backfilling the reserve pit or commencing reclamation work, and 48 hours before moving equipment from the site (see item 11-H of this submittal).

Contacts: BLM Montrose - Danna Knox - 970.240.5404

Lynn Lewis - 970.240.5305

Gunnison County Local Government Designee (LGD) - John Devore 970.641.0248 x0

The operator's designated representatives, drilling contractor, and dirt contractor will keep a copy of the approved APD Surface Use Plan, containing stipulations at the work site at all times.

Drilling operations are considered to be all phases of drilling a well, from road and drill pad construction through drilling, completion, testing, production hook-up, reclamation, and production. Minor road use may be allowed during any possible shutdown period for well checks under conditions specified by the AO on a day-by-day or case-by-case basis.

Prior to beginning construction of the location, a pre-work conference will be held with the BLM representative, operator's representative, dirt contractor, and GEC compliance inspector to review plans, specifications, requirements, and chain of command.

No merchantable timber on the Hawksnest 13-90 #1-2 is anticipated. Timber of merchantable size, if any, shall be stockpiled for future reclamation use. Sub-merchantable timber may be scattered outside the right-of-way (ROW) so that it lies within 2 feet of the ground.

Certain Surface Use requirements are as follows:

General: The operator shall conduct operations on leasehold on Federal Lands in a manner that minimizes effects on surface resources, prevents unnecessary or unreasonable surface resource disturbance, and that is in compliance with the other requirements of this section. The operator shall comply with the Clean Water Act, National Pollution Discharge Elimination System (NPDES), Stormwater Management Plans, Colorado Department of Public Health and Environment (CDPHE) standards for gas emissions and all other applicable laws pertaining to oil and gas operations.

Notice of operations: The operator must notify the AO 48 hours prior to commencing operations or resuming operations following their temporary cessation. See previous page.

Fire prevention and control: To the extent practicable, the operator shall take measures to prevent uncontrolled fires on the area of operation and to suppress uncontrolled fires resulting from the operations. Fire restrictions/guidelines during periods of high wildfire danger will be followed as required by the AO.

Safety measures:

- (1) The operator must maintain structures, facilities, improvements, and equipment located on the area of operation in a safe and neat manner and in accordance with an approved surface use plan of operations.
- (2) The operator must take appropriate measures in accordance with applicable Federal and State laws and regulations to protect the public from hazardous sites or conditions resulting from the operations. Such measures may include, but not limited to, posting signs, building fences, or otherwise identifying the hazardous site or condition.

DIRECTIONS TO LOCATION:

Beginning at the intersection of Highway 133 and Highway 187 near Paonia, Colorado, in Delta County, Colorado, travel easterly for approximately 8.8 miles on Highway 133 to the town of Somerset, in Gunnison County, Colorado. Continue travel on Highway 133 easterly for approximately 1.5 miles to an existing gravel resource road (Coal Gulch Road). Turn left and travel northerly on the existing gravel resource road for approximately 2.5 miles to the Hawksnest Federal 13-90 #1-2 staked access road. Turn left and travel for 70 feet on new construction to the proposed location.

DIRECTIONS FROM WATER HAUL:

From the Oxbow mine in the town of Somerset, in Gunnison County, Colorado, travel east for 1.75 miles on Highway 133 to an existing gravel resource road (Coal Gulch Road). Turn left and travel northerly on the existing gravel resource road for approximately 2.5 miles to the Hawksnest Federal 13-90 #1-2 staked access road. Turn left and travel for 70 feet on new construction to the proposed location.

1) **EXISTING ROADS**

**Coal Gulch Jeep Trail:**

Existing Jeep Trail: T13S R90W	Sec. 2	±505'	BLM, on lease
	Sec. 2	±1,600'	BLM, off lease
	Sec. 3	±1,245'	BLM, off lease
	Sec. 3	±1,425'	BLM, on lease
		±4,775'	(0.90 miles) Total

Improved Access Road: T13S R90W	Sec. 3	±5,550'	BLM, on lease
	Sec. 3	±225'	BLM, off lease
	Sec. 10	±7,440'	Oxbow Mining, off lease
		±13,215'	(2.50 miles) Total
		17,990'	(3.40 miles) Total Existing Roads

- A) The well is an exploratory well.
- B) Existing roads within 2.0 miles consist of a dirt-surfaced road to within 70 feet of the proposed location.
- \* C) Plans for improvement and/or maintenance of existing roads are to maintain in as good or better conditions than at present. The roads shall be maintained reasonably smooth, free of ruts, soft spots, chuckholes, rocks, slides and washboards. Specific improvements to be completed during 2003 under the operator's road plan are as agreed to between GEC and the BLM. Final Road Plan will be contained in the BLM Conditions of Approval (COA). Coordination and consultation with the parent company to GEC, Oxbow Mining, Inc. (Oxbow), Inc. will occur prior to all road maintenance. A regular maintenance program shall include blading, ditching, sign replacement, surfacing, and culvert maintenance as agreed to with Oxbow and consistent with mining or any other applicable regulatory requirements. The operator is required to correct maintenance deficiencies when documented and directed by the AO.
- \* D) The right-of-way width of existing roads will be maintained as they presently exist unless authority to widen is granted to the operator by the AO.
- \* E) Operations will cease during periods when mud and silt cannot be contained within the road prism, or when construction specification cannot be achieved because of wet or frozen ground.
- \* F) There shall be no mud blading on the access road. Vehicles may be towed through the mud provided they stay on the roadway.
- \* G) The operator will secure necessary road permits from the appropriate County Road Department before doing any work on roads under County jurisdiction.
- \* H) A ROW from the BLM will be required and has been initiated in this APD. Road use requirements within the APD will apply to on-lease as well as off-lease roads.
- \* I) The operator will schedule heavy traffic periods, such as moving the rig in or out, to take place during the week and not on weekends or holidays.
- \* J) The operator will avoid damaging roadside vegetation with snow accumulation created by snow removal.

- \* K) The operator will use dust control materials of a non-toxic and non-polluting nature.
- \* L) Drilling equipment will not be moved to or from location during spring breakup.
- \* M) Construction signing must be in place when construction commences and be in compliance with the Manual of Uniform Traffic Control Devices.
- N) The well location will not be accessible by light truck except during the summer months. All well maintenance requiring heavy equipment will be completed during the summer months. The well and surface facilities will be maintained via snow machine in the winter. The roads are used year round; snow mobiles, snow shoeing and cross country skiing in the winter, horseback riding, hiking, and camping in the non-snow months.

2) PLANNED ACCESS ROADS

**±70 feet (0.01 miles) Total new construction (See Exhibits G, H, L, and P)**

*This Application for Permit to Drill will serve as a request for BLM to initiate a Right-of-Way application for access roads and water haul routes, if necessary. This right-of-way can continue up to the well head.*

- A) The new access road will be upgraded, crowned and ditched. Subgrade (running surface) width to be approximately 14'-16', total disturbed width not to exceed 30'. If conditions are favorable, a "minimum disturbance" road may be built by clearing the brush, width ±20'. No flat blading will be allowed. **For inslope roads on side hills, the road will be sloped inward toward the high side of the hill and a borrow ditch placed at the upslope side of the road. No borrow ditch will be constructed on the downhill side of the road.**
- B) Borrow ditches to be backsloped 2:1 or shallower.
- C) Maximum grades - less than 2% for 70'.
- \* D) One (1) 18" x 30' culvert will be installed prior to commencement of drilling operations. Drainage to consist of borrow ditches on both sides and will be installed prior to commencement of drilling operations. Wing ditches and water dips will be installed, if necessary. Appropriate water bars may be constructed as follows to assure drainage off location to conform to natural drainage patterns (if directed by the AO):

Grade	Spacing
2%	Every 200 feet
2-4%	Every 100 feet
4-5%	Every 75 feet
5+%	Every 50 feet

If the well is completed as commercial, all weak and/or wet soils in this area will have to be hardened with geotextile fabric underlying inch and a half (1-1/2) to three (3) inch minus crushed rock aggregate. Access road portions, which begin to show surface rutting deeper than two (2) inches, will be applied to harden the road. If road conditions are such that vehicles create ruts deeper than 4", travel activities will be temporarily suspended.

- \* E) Surfacing material to consist of native material from the road crown. Topsoil to be windrowed during construction and placed in the borrow ditch backslope. During reclamation, backslope of borrow ditch will be re-seeded per Section 10-E of this Surface Use Plan. Surfacing material is as agreed to between GEC and BLM.
- F) No major road cuts are necessary.
- \* G) Fence cuts and cattleguards will be installed at the road intersections (at new construction access) to the well. There will be a cattle guard at the entrance to location, as well. (A 14'

security gate with a sign will be installed at the start of the new access road and kept locked during operations, to prevent general use of the road).

- \* H) Round the upper edges of all cut banks on the access road and well pad.
- \* I) The operator will use dust control materials on the access road, staging area, and drillsite location of a non-toxic and non-polluting nature, including water, magnesium chloride, emulsified asphalt, or other dust palliatives to decrease the application frequency.

3) LOCATION OF EXISTING WELLS

Within a 3-mile radius per COGCC's requirements:

Proposed	Thompson Creek Fed.	T13S R90W	Sec. 12	SW/4 NW/4
	(12-90 #1-35)			
Drilling	None			
Abandoned	Fansler #7-1	T13S R89W	Sec. 7	SE/4 NW/4
Disposal injection	None			
Shut-In	None			
Producing	None			

Within a 2-mile radius per BLM's requirements:

Proposed	Thompson Creek Fed.	T13S R90W	Sec. 12	SW/4 NW/4
	(12-90 #1-35)			
Drilling	None			
Abandoned	Fansler #7-1	T13S R89W	Sec. 7	SE/4 NW/4
Disposal injection	None			
Shut-In	None			
Producing	None			

LOCATION OF EXISTING PRODUCING FACILITIES OPERATED BY GUNNISON ENERGY CORPORATION

Within two miles      None

4) NEW PRODUCTION FACILITIES PROPOSED

Well will be tested with well test equipment for a period of 7 days – 120 days. The test period will depend on test results from the first several days testing. Water produced during the test period will be stored in a temporary tank, and then hauled to an approved disposal site. Permanent production equipment will be installed when the pipeline is installed. Installation of Production equipment will take from 2 days to 7 days.

Each location will have a separator and meter run mounted on a single skid. Due to extreme winter conditions the surface production equipment will be enclosed in a metal building. The metal buildings will be painted to BLM specifications.

- \* A) Facilities to be constructed on location will be specified after well has been tested. Production equipment will be placed away from edge of "fill." (See Exhibit F for a typical Production Pad Layout.)
- \* B) Dimension of Proposed Facility is approximately 225' x 150'. Pad size will be reduced to minimum size necessary to conduct safe operations cuts and fills will be reduced to 2:1 or shallower.

- C) Site preparation for production will be done with standard excavation equipment using native materials. Additional surface material will be obtained from commercial sources or an approved borrow area.
- \* D) All above ground permanent structures including production equipment will be painted to blend with the surrounding landscape. Permanent facilities such as production separators will be painted the following the Munsell Color Reference Numbers, color(s) Juniper Green (Munsell Formula: 5G or 7.5G - Hue; 2/, 3/, 4/, 5/ - Value range; /1, /2 - Chroma range), unless safety considerations dictate otherwise. (Colors taken from the standard environmental colors - Rocky Mountain 5-State Interagency Committee.)
- \* E) Production facilities may vary according to actual reservoir conditions and will be engineered upon completion of well tests.
- \* If well is a producer, all production facilities will be authorized by Sundry Notice.
- F) No permanent production pits are anticipated.
- G) No facilities will be constructed off location under this permit. The pipeline will be applied for as part of a special use permit application.
- H) It is probable that this well will produce some water during its productive life. Since no water has yet been produced, the exact composition of this water can't be known. All produced water will be piped via a water line laid in conjunction with the gas pipeline to a holding facility located at the bottom of the hill, or as an alternative the water line will be surface laid to the Oxbow mine. The water will then be trucked to an approved disposal site, injected into an approved disposal well, or discharged to a stream using an NPDES serialized outfall.
- I) Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area, back sloping and contouring all cut and fill slopes. These areas will be re-seeded. Refer to section 10 for additional details on the restoration of the surface.
- J) No fluid is anticipated in the reserve pit. Production pit to be netted "bird-tight" as soon as drilling is completed, if there is any fluid in the reserve pit. Pursuant to On-Shore Order No. 7, this is a request for authorization for disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by BLM and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method will be submitted along with any necessary water analyses, in compliance with On-Shore Order No. 7 as soon as possible, but no later than 45 days after the date of first production. Any method of disposal, which has not been approved prior to the end of the authorized 90-day period, will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by BLM.
- K) A dike shall be constructed around the production separator, of sufficient capacity to contain at least 120 percent (per BLM requirements) of the storage capacity of the production separator, within the dike.
- L) All well flow lines will be buried and will be on the well site.
- M) The location will be fenced (stock tight) on all sides outside of the disturbed area. A cattle guard will be installed at the entrance to location. The reserve pit will be fenced on three sides during drilling operations and the fourth side will be fenced when the drilling rig moves off location. - All pits containing liquids will be allowed to evaporate the liquid portion before the pits are closed. The reserve pit backfill will provide a minimum cover of 4' to 5'.

5) LOCATION OF WATER SUPPLY

- A) Water will be obtained from the Oxbow Mine, east of the well location, near the town of Somerset, under existing permits. Water will be transported by truck. If another source is used, the appropriate agencies will be notified and appropriate state permits will be secured. See Exhibit K.
- B) Anticipated water use is as follows:
  - 1) Air drilling water requirements are anticipated to be 3,427 Bbls (143,934 gallons or 0.44 acre-feet);
  - 2) Mud drilling water requirements are anticipated to be 5,407 Bbls (227,094 gallons or 0.70 acre-feet)

6) SOURCE OF CONSTRUCTION MATERIALS

- A) Construction of the pad will consist of native cut and fill materials from the well-site construction areas.
- B) Surfacing materials will be obtained from available permitted sources, if needed, and consist of pit gravel.

7) WASTE DISPOSAL

- A) Drilling fluid will be evaporated, and then buried in the reserve pit when dry. Drill cuttings will be buried on location in a lined reserve pit when dry, or in a flare pit for air drilling. The reserve pit backfill will provide a minimum cover of 4' to 5'. The reserve pit will be utilized while the drilling rig is on location. The reserve pit will be constructed with a minimum of half the total depth below the original ground surface, with a minimum of not less than a 2-foot freeboard maintained at all times. All oil or floating debris will be kept out of the reserve pit. See also item 10-B.
- B) Upon completion of drilling operations, remaining drilling fluids, excess water produced during drilling must be contained on the site or be removed to a certified disposal area. Trip tickets must be kept and be made available to the AO upon request.
- \* C) No condensate is anticipated. Produced fluid including dehydrator bent/condensate line affluent, if any, will be contained in test tanks during completion and testing. Any unavoidable spills of oil, gas, salt water, or other noxious fluids will be cleaned up and disposed of in accordance with applicable regulations.
- \* D) Sewage disposal facilities will be in accordance with State and Local Regulations. Sewage disposal facilities will be chemical holding tanks and portable chemical toilets. Contents will be hauled to a CDPHE approved disposal site in accordance with State and Local Regulations. Sewage may not be buried on location or put in a borehole.
- \* E) Garbage and other waste - All trash will be placed in trash receptacles. Trash receptacles are required on location through the production hook-up phase or through the time when the site is rehabilitated. Well rework or other significant activity on the location will require trash receptacles. These receptacles shall prevent wind scattering any trash. Cage and contents will be transported to a CDPHE approved Sanitary Landfill upon completion of operations.
- F) Fencing: refer to items 4-M and 9-M.
- G) Upon release of the drilling rig, ratholes and mouseholes will be filled. Debris and excess equipment will be removed.
- \* H) Bloeie lines and pits will be operated and treated to control dust levels and off-site impacts.

- \* I) The operator will prevent drilling mud, gas, diesel fuel, oil, grease, any other petroleum products or hazardous materials from entering any live stream or riparian area, or from migrating off the location.
- \* J) If sufficient potable water is discovered, the operator and the AO will work together to determine feasibility of usage and upon positive determination, implement methods of making this water available to cattle and wildlife.

8) ANCILLARY FACILITIES

No ancillary facilities will be necessary. Full time supervision personnel, as well as geologist/mud logger will live on location in 2 to 3 trailers on location during drilling. Vehicle traffic will be kept to a minimum. Anticipated full time personnel are as follows:

<u>Drilling</u>	<u>Completion</u>
1 - GEC supervisor	1 - GEC supervisor
1 - Drilling rig supervisor	4 - Completion rig crew
4 - Drilling rig crew	
1 - Geologist/Mud logger	

Part-time technical support persons will be on-site from time to time as necessary.  
No intermediate staging area will be used.

9) WELLSITE LAYOUT

- A) See attached drillsite plat (Exhibit C) and cut/fill diagram (Exhibit D).
- \* B) A lined pit will be constructed to hold drill cuttings. Prior to pit closure, all non-exempt materials and liquids, which have been placed in the pit, must be hauled to an approved disposal site unless another method of disposal is approved in writing by the AO. Initial pit closure must be completed within 12 months from the date the well is spudded or as determined by the BLM according to ground conditions and year drilled. Trip tickets showing, at a minimum, the date, driver's name and address, company, location hauling from, location hauling to and amount of material being hauled, will be kept and made available to the AO upon request.
- C) The reserve pit liner shall be made of any man-made synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than  $1 \times 10^{-7}$  cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use thereof. The liner shall be chemically compatible with all substances, which shall be put into the pit. The pit liner shall be placed on a smooth surface, free of any sharp rocks. When placed on rocky bottom pit, it shall be bedded with a material such as soil, sand, straw, or hay to avoid the possibility of puncturing the liner.
- D) Small cuttings will be buried on location in the reserve pit.
- \* E) Backslopes to be 1:1 or shallower during drilling operations.
- \* F) A contour trench or trenches and sediment traps will be constructed prior to beginning of pad construction to divert overland flow away from the pad. Prior to rigging up, a one-foot berm will be constructed around the perimeter of the wellpad to protect the surrounding surface from all storm events/spills from going downstream of the wellpad. A lined sump pump may be utilized to contain such fluids. The need for the berm will be re-assessed upon the completion of the well and production is established. Sediment traps are required along the bottom edge of all fill slopes to prevent water from migrating to drainages. Applying these precautions permits waiver of stipulation (c)(4) of the "SUPPLEMENTAL

STIPULATION TO STIPULATION FOR LANDS UNDER JURISDICTION OF DEPARTMENT OF AGRICULTURE" in the original lease.

- \* G) Excess rock, which is turned up and is unusable, will be buried in the fill side of the location or otherwise disposed of as directed by the AO. Stockpiling of topsoil is approved for the location as shown in Location Layout Plat (Exhibit E) submitted as part of the Application for Permit to Drill. Quantities must be shown on the subject diagram and verified by the operator as being sufficient to allow a minimum four-inch layer over all disturbed areas of the location during reclamation.
- \* H) The drill pad will be graded and ditched to drain into a shallow holding basin on the location.
- \* I) Any brush or "slash" will be distributed at slope toes for water run-off dispersion (See 10-F for brush and slash use at reclamation).
- \* J) Flare pit for air drilling will (if used) be located minimum 100' from wellbore.
- \* K) A Tree Permit will be obtained from the BLM. All brush and trees in the area will be cut and piled, if necessary, per BLM requirements, and utilized for reclamation.
- \* L) A diversion ditch will be constructed as shown on the Grading And Surface Hydrology Plan as prepared by Buckhorn Geotech, Inc. (Exhibit P).
- M) The location will be fenced (stock tight) on all sides outside of the disturbed area. A cattle guard will be installed at the entrance to location. The reserve pit will be fenced on three sides during drilling operations and the fourth side will be fenced when the drilling rig moves off location. Fencing to be woven wire with 2 strands of barbed wire. Corner braces will be wooden "H" brace type construction. The fence shall be maintained in good repair while the pit is drying and must remain until the pit is dry and site restoration begins.
- N) If the well is a producer and noise becomes a nuisance with any production operations, adequate muffling techniques such as hospital type mufflers will be applied.

10) SURFACE RESTORATION

- \* A) Topsoil as available, will be removed prior to location construction from all disturbed areas. Topsoil depth to be removed as stipulated by BLM. Proposed topsoil depth will be 6"-12" or as available. The topsoil is to be piled as shown on the Location Layout Plat (Exhibit P).
- \* B) Backfilling, leveling and contouring are planned as soon as all pits have dried, leaving no depressions that will trap water or form ponds. If production is obtained, the unused area will be restored as soon as possible. The reserve pit solids will not be squeezed out of reserve pit. The liner shall be cut off at the mud level and removed to an approved disposal site. There will be a minimum of 2 feet of overburden on the pit prior to replacing the topsoil and seeding. See also item 7-A.
- C) The soil-banked material will be spread evenly over the disturbed area. Revegetation will be accomplished by planting mixed grasses as per formula by the BLM. Revegetation is recommended for road area as well as around drill pad.
- D) The rehabilitation will begin as soon as feasible after the drilling rig is removed. Any hydrocarbon liquid or debris, which inadvertently enters the cuttings pit, will be removed immediately. Other cleanup will be done as needed. Planting and revegetation is considered best in fall, unless requested otherwise.
- \* E) The operator will apply seed to all disturbed areas in and out of the work area as below. Seed mix to be used for aspen and oak vegetative zones, 8,000 to 9,600 feet. Seeding will be done during fall planting season, September 15 through first frost. Seeding must be completed immediately after seedbed preparation.  
A proposed seed mix for the oak vegetative zone is:

	Lbs/Acre
	<u>90% P.L.S.</u>
Western Wheatgrass var Arriba	0.96#/acre PLS
Slender Wheatgrass var San Luis	0.66#/acre PLS
Mountain Brome (Bromus marginatus) var Bromar	1.50#/acre PLS
Big Bluegrass var Sherman	0.18#/acre PLS
Bottlebrush Squirreltail	0.96#/acre PLS
Canada Wildrye	0.94#/acre PLS
American Vetch	0.60#/acre PLS
Rocky Mountain Penstemon	0.09#/acre PLS
Western Yarrow	<u>0.06#/acre PLS</u>
	*5.95#/acre PLS

\*These rates apply when the seed is to be drilled. When broadcasting, increase amount by 50%.

Seed should be covered with 1/2 to 1 inch of soil.

Seed application will be within 60 days after completion and re-seeded, if necessary, until satisfactorily revegetated as determined by the AO. See Items 10-G and 10-J of this submittal.

All seeding rates are pure live seed (P.L.S.) amounts.

To verify P.L.S., a bag label from each seed lot with the following information will be submitted to the AO. The seed label will be submitted not less than 10 days before seed application.

Label of Test Information Required:

1. Kind and variety of seed.
2. Purity.
3. Germination.
4. Calculation of P.L.S.
5. Source of origin of seed.
6. Lot Number.
7. Names and amounts of weed seeds.

Further Requirements:

All seed must meet all requirements of the Federal Seed Act (7 U.S.C., Sec. 1551-1610, inclusive); Federal Specifications JJJ-S-181; the seed laws and the noxious weed laws of the State of Colorado.

- \* F) Prepare seedbed by disking or ripping to a depth of 4"-6" following the natural contour. A rough surface will be left. Drill seed on contour with a "rangeland" type seed drill. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into soil before the stockpiled brush and trees are scattered back over the reclaimed area. Certified seed is required.
- \* G) If the well is commercial, reclamation of the drill pad will be required of all areas, which are not needed for production facilities. Generally, the area used for these facilities will lie between the rig anchors, which are established during drilling of the well. Areas which house production facilities will have sufficient surface rock (gravel) placed to prevent

deformation of the surface during routine production operations. The remainder of the location must be revegetated. This work will be completed within 60 days of determining whether or not the well is a producer unless an extension of time is granted in writing by the AO.

If the well is commercial, compaction and construction of the berms surrounding the tank or tank batteries will be designed to prevent lateral movement of fluids through the utilized materials, prior to storage of fluids. The berms must be constructed to contain at a minimum 120% of the storage capacity of the largest tank within the berm. All load lines and valves shall be placed inside the berm.

- \* H) If the well is not a commercial or is abandoned at some future date, the access road and drillsite will be reclaimed to near-natural contours, blocked to prevent vehicular travel, and seeding according to the specifications in items 10-E and 10-F of this submittal. If the well is not a commercial BLM may request that the access road be left in usable condition. Following receipt of Notice of Intent to Abandon, final BLM recommendations for surface reclamation will be specified.
- \* I) The operator will fence the reclaimed well pad according to the specifications in items 4-M and 9-M of this submittal and will maintain the fencing in good condition until notified in writing by the AO that the site is satisfactorily reclaimed and the fencing may be removed. All rehabilitation work shall be completed; including a satisfactory stand of grass within two growing seasons after the reserve pit is dry.
- \* J) All dirt work and seeding related to reclamation will be completed within 60 days after completion of the well unless an extension is granted in writing by the AO.

11) GENERAL INFORMATION

- A) Project area is situated in the uplands of the southern portion of Grand Mesa.
- B) Topographic and geologic features - moderate relief area, well-drained, clay deposition with rocks and small boulders.
- C) Soil characteristics - Stony loam.
- D) Flora - See exhibit "N".
- E) Fauna - See exhibit "N".
- F) Concurrent surface use - grazing and hunting.
- G) Mineral Lessor - Bureau of Land Management.
- H) Surface Owner
  - Drillsite - Bureau of Land Management
  - Access - Bureau of Land Management
  - Oxbow Mining, Inc.
  - 1601 Forum Pl, Suite 1400
  - West Palm Beach, FL 33401 Phone: 561.640.8711
- I) Proximity of water, occupied dwellings or other features; See Grading And Surface Hydrology Plan as prepared by Buckhorn Geotech, Inc. (Exhibit P).
- \* J) Annual or noxious weeds shall be monitored and controlled on all disturbed areas for the life of the well in accordance with Gunnison County regulations. As directed by the BLM Uncompahgre Field Office Manager and/or the AO Method of control shall be by an approved mechanical method or an Environmental Protection Agency (EPA) registered herbicide. All herbicide application proposals must be approved by the BLM. Application of herbicides must be under direct field supervision of an EPA certified pesticide applicator.

If, during the construction process, vehicles and equipment are take over areas infested with noxious weeds to areas not infested, vehicles and equipment will be cleaned with high pressure spray equipment before moving to ensure that weeds are not spread from existing infested areas.

- \* K) Archaeological, cultural and historical information will be submitted separately by Metcalf Archaeological Consultants, Inc.
- \* L) Biological Assessment and Biological Evaluation information is contained in the attached Summary Sheet, along with the Threatened and Endangered Species Assessment and TABLE 1 Evaluation by ENSR dated November 18, 2002.
- \* M) If any fossils are discovered during construction, the operator shall cease construction immediately and notify the Uncompahgre Field Manager, BLM AO so as to determine the significance of the discovery.
- \* N)
  - a. The BLM is responsible for assuring that the area to be disturbed on this permit is inventoried to determine the presence of cultural resources and to specify those cultural resources requiring protection and/or mitigation measures to be undertaken by the operator. Unless notified to the contrary by the BLM, the operator may, at his discretion and cost, conduct the inventory on the lands to be disturbed. This intensive inventory must be done by, or under the supervision of, a qualified archaeologist approved by the BLM. Upon review of the inventory report, the BLM will specify those cultural resources requiring protection and/or mitigation measures to be undertaken by the operator. All costs of protection and salvage of cultural resource values will be borne by the operator and all data and materials salvaged will remain under the jurisdiction of the U.S. Government as appropriate.
  - b. The operator shall bring to the attention of the BLM and the AO of the U.S. Geological Survey, significant paleontological values encountered in areas to be disturbed, for evaluation and for instructions as to the appropriate action to be followed by the operator.
  - c. The operator shall immediately cease operations in areas in which any antiquities or other objects of historic or scientific interest are discovered and bring the discovery to the attention of the BLM and the AO of the U.S. Geological Survey. Any such discoveries shall be left intact until the operator is permitted to proceed by the AO.
- \* O) Development plans of the location, access roads, and other improvements related to the exercise of the rights of this lease, must be approved in advance in writing by the BLM Uncompahgre Field Manager.
- \* P) The operator's off-lease activities will be authorized by and subject to the terms of a Special Use Permit, Road Use Permit, or other arrangement as appropriate.
- \* Q) The operator will appoint and maintain, at all times during the term of this permit, a local agent upon whom may be served written orders or notices respecting matters contained in this permit, and to inform the AO in writing, of the name and address of such agent. If a substitute agent is appointed, the operator shall immediately so inform the AO.
- \* R) Surface disturbance and vehicular travel will be limited to approved locations (roadway, parking, and wellpad). Construction equipment will be restricted at all times to the road ROW. Any additional area needed must be approved in advance by the AO. Any staging areas, turnout/pullouts must be approved by the AO.
- \* S) Violations to these stipulations is grounds for shutting down any or all portions of this project. Shut down notices will be given to the operator or his on-site representative by the AO or his representative.

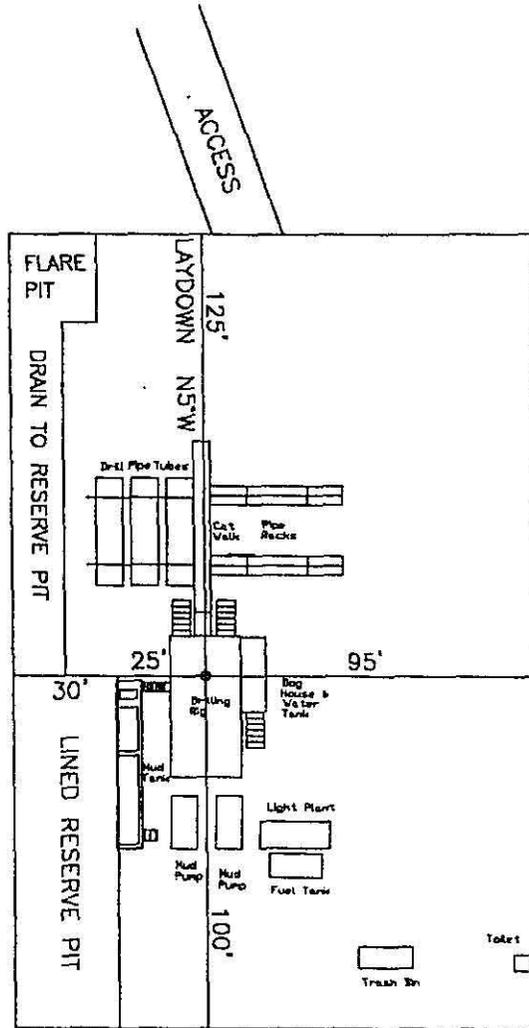
- \* T) Additional stipulations can be required by the BLM as necessary for resource protection; such stipulations must fall within the scope of the original lease. They may become necessary as new operating details or unanticipated problems arise.
- \* U) The locations of water sources for activities associated with this well will be shown in the APD.
- \* V) No firearms will be discharged on the access road or on the location during any phase of the operation. GEC employees and contractors will not be allowed to carry firearms.
- \* W) Twin or multiple wells are not anticipated to be drilled at this site; however if in the future 2 or more wells are planned at this site, to allow for more efficient and safer operations while insuring that the pad design would accommodate all expected activities, twin-well rig layout and twin-well production facility layout diagrams will be submitted if twin-wells are a viable consideration for the operator.
- \* X) *In the event of any conflict between the clauses in the APD relating to surface use, and the clauses in the approval stipulations, the stipulation clauses will control.*
- \* Y) The operator will have sufficient fire equipment on hand during the fire season to equip the drilling crew.
- \* Z) The operator will install approved spark arrestors on all combustible engines used on the job.

AA) Hazardous Materials:

Gunnison Energy Corporation maintains a file, per 29 CFR 1910.1200(g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances which are used during the course of construction, drilling, completion, and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud and cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or combustible substances and acids/gels (corrosives). The opportunity for Superfund Amendments and Reauthorization Act (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment. A Spill Prevention Control and Countermeasure (SPCC) will be prepared and submitted.

Signs will be posted on-site that identify potential hazards associated with its operation including noise, high pressure, and chemical hazards. MSDS for treatment chemicals will be maintained on site during the construction phase. Equipment operators will be required to wear appropriate personal protective equipment to minimize exposure to these hazards.

# EXHIBIT "E" RIG LAYOUT



COMPANY: GUNNISON ENERGY CORP.  
 WELL NAME: HAWKSNEST FEDERAL 13-90 #1-2  
 FOOTAGE: 1750' FNL 1745' FWL  
 SEC. 2 TWN. 13.S RNG. 90 W 6th P.M.  
 COUNTY: DELTA STATE: COLO.  
 ELEVATION: 8204

DRAWN BY: C.R.  
 CHECKED BY: K.R.  
 FILE NO.: GEC16

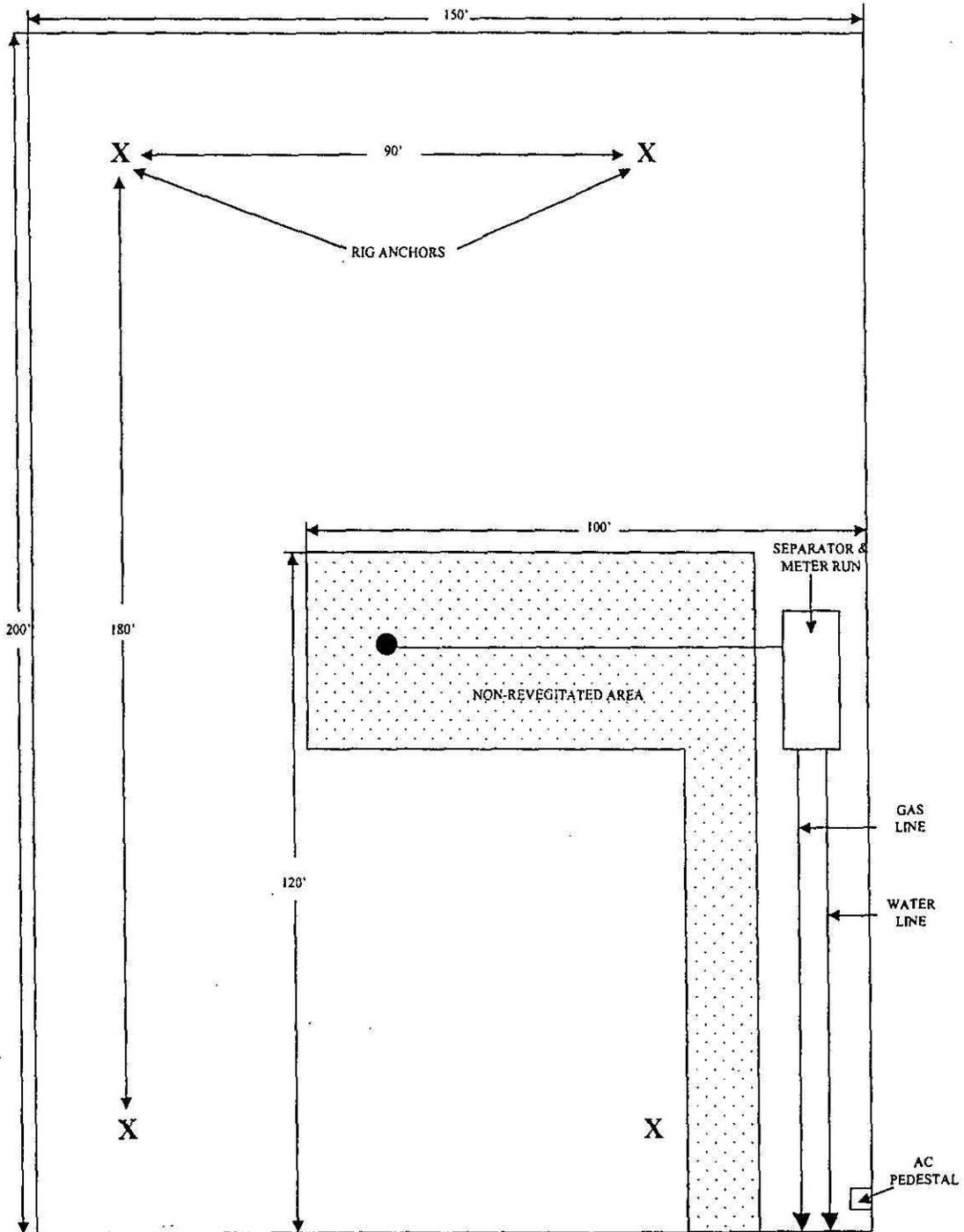
PREPARED FOR:  
**GUNNISON ENERGY CORPORATION**  
 SHEET 4 OF 7

**NORTHSTAR**  
**SURVEYING & MAPPING, INC.**

75 County Rd. 231  
 DURANGO, CO. 81303  
 (970) 385-0851

Gunnison Energy Corporation  
Production Pad Layout

EXHIBIT F



Total Acres

Workover = .67

Production = .28

12) LESSEE'S OR OPERATOR'S REPRESENTATIVE:

Operator

Corporate Office:  
Gunnison Energy Corporation  
1801 Broadway, Suite 1200  
Denver, CO 80202  
303.296.4222  
303.296.4555- Fax

Mark McCallister – Operations Manager  
Anthony Gale – Vice President  
Trish Diehl – V.P. Environmental  
Regulatory Matters

- \* Contact to arrange on-site meeting
- + Contact for any questions or comments regarding this permit.

Permit Consultant

Banko Petroleum Management, Inc.  
9285 Teddy Lane, Suite 100  
Lone Tree, CO 80124-5475  
303.820.4480 – office  
303.820.4124 – fax

- + David Banko – Consulting Petroleum Engineer  
*david@banko1.com*
- + Kathy Schneebeck – Regulatory Analyst  
*Kathys@banko1.com*
- \* Keith Dana – Range Mgmt. Consultant  
307.389.8227 – Cell  
307.362.5822 – Home  
*krlcdana@fascination.com*

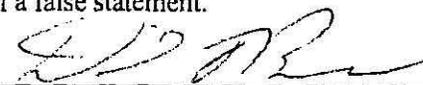
13) CERTIFICATION:

I hereby certify that a Surface Use Agreement with the Private Surface Owner, Oxbow Mining Inc., has been completed.

I hereby certify that Gunnison Energy Corporation is responsible under the terms and conditions of the lease to conduct lease operations in conjunction with the application. Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Gunnison Energy Corporation under their BLM Bond CO1428.

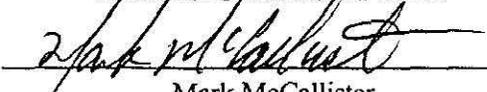
I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road; that I am familiar with the conditions which presently exist; that the statements made in this plan area, to the best of my knowledge, are true and correct; and that the work associated with the operations proposed herein will be performed by Gunnison Energy Corporation and its contractors and sub-contractors in conformity with this plan 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.

December 4, 2002

  
\_\_\_\_\_

David F. Banko

Permit Agent for Gunnison Energy Corporation  
Electronic Submission # 15965

  
\_\_\_\_\_

Mark McCallister  
Operations Manager

EXHIBIT "C"

GUNNISON ENERGY CORPORATION

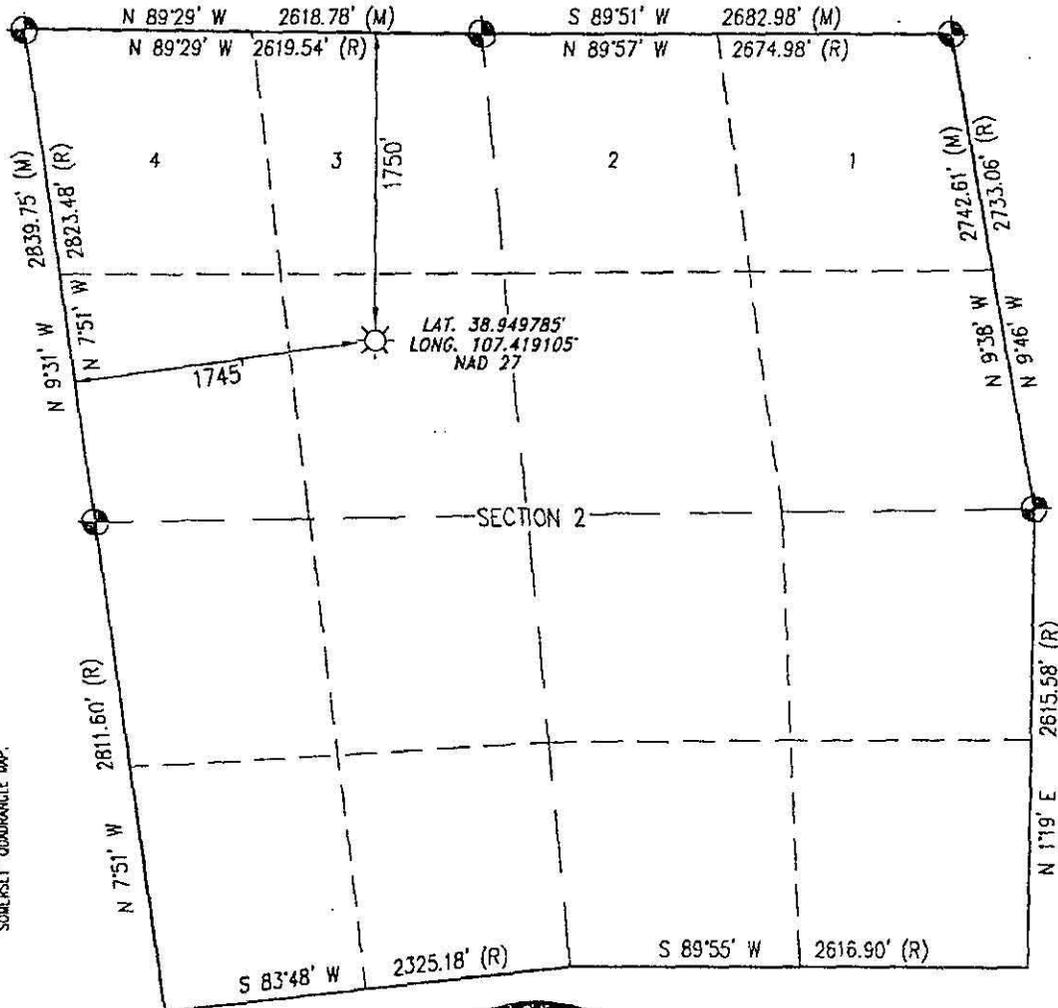
HAWKSNEST FEDERAL 13-90 #1-2

1750' FNL, 1745' FWL

NW/4 SEC. 2, T-13-S, R-90-W, 6th P.M.,

GUNNISON COUNTY, COLORADO

GROUND LEVEL ELEVATION: 8204'



BASIS OF BEARING:  
1916 G.L.O. SURVEY BEARING: NORTH LINE OF NW/4 OF SECTION 2, T13S, R90W, 6th P.M.,  
GUNNISON COUNTY, CO. MONUMENTED AS SHOWN HEREON. REFERENCE BEARING: N 89° 29' W

BASIS OF ELEVATION:  
TOPO ELEVATION INTERPOLATED FROM U.S.G.C.S. 7.5 MINUTE  
"SOMERSET QUADRANGLE MAP."

☉ DENOTES FOUND 1921 G.L.O. BRASS CAP

(M) = MEASURED DIMINSON

(R) = RECORD DIMINSON AS SHOWN ON  
G.L.O. SURVEY PLAT APPROVED JAN. 12, 1916

NOTES:

1. THERE PRESENTLY EXISTS NO VISIBLE IMPROVEMENTS WITHIN 200' OF THIS LOCATION OTHER THAN THOSE SHOWN HEREON OR ON THE ATTACHED PEG DIAGRAM.
2. SURFACE USE FOR THE LAND SURROUNDING THIS LOCATION IS B.L.M. LAND.

I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Kenneth E. Rea*

KENNETH E. REA  
COLORADO P.L.S. #31941

11-18-02

DATE



0 500 1000  
SCALE: 1"=1000'

DRAWN BY: C.R. SUPERVISED: 10/21/02  
CHECKED BY: K.R. DRAWN: 10/12/02  
FILE NO.: DEC1618P JOB NO. DEC16

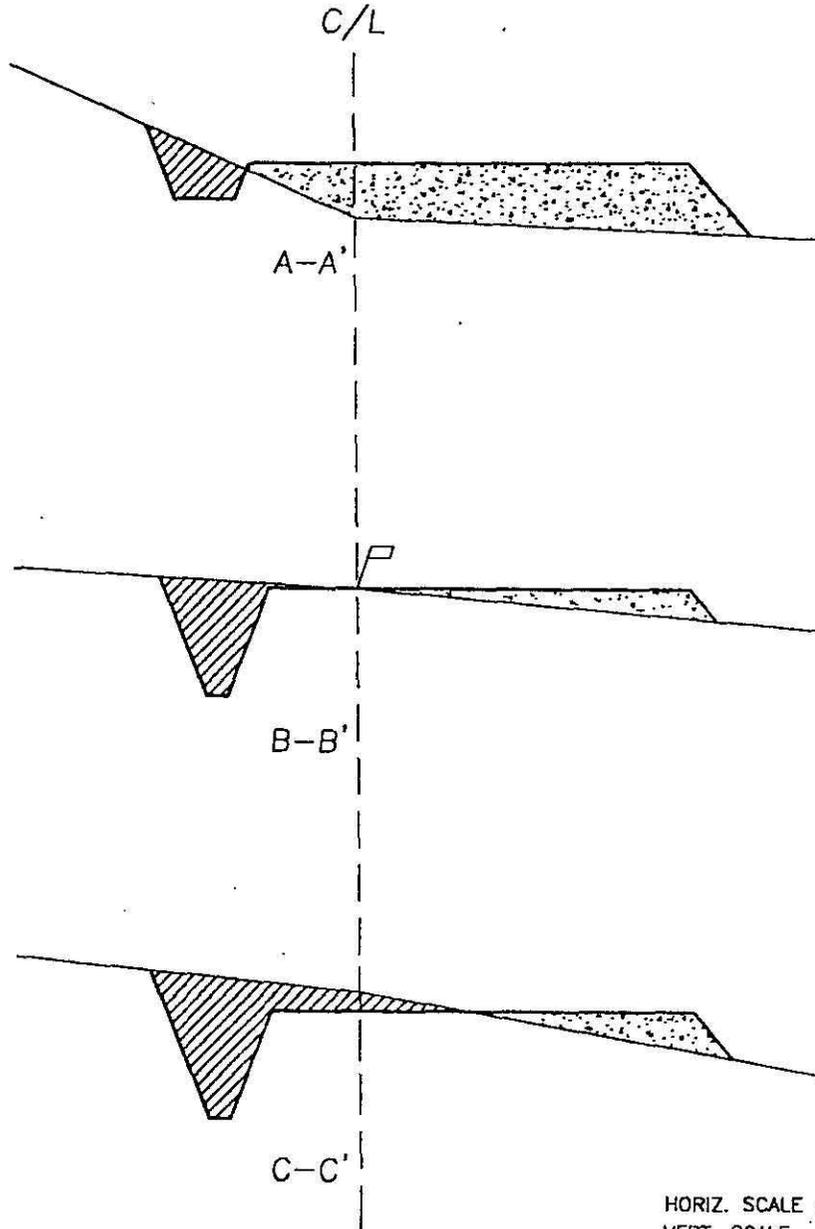
PREPARED FOR:  
GUNNISON ENERGY CORPORATION

**NORTHSTAR**  
SURVEYING & MAPPING, INC.

75 County Rd. 231  
DURANGO, CO. 81303  
(970) 385-0851

EXHIBIT "D"

PIT & PAD CROSS SECTION DIAGRAM



HORIZ. SCALE : 1" = 50'  
 VERT. SCALE : 1" = 20'

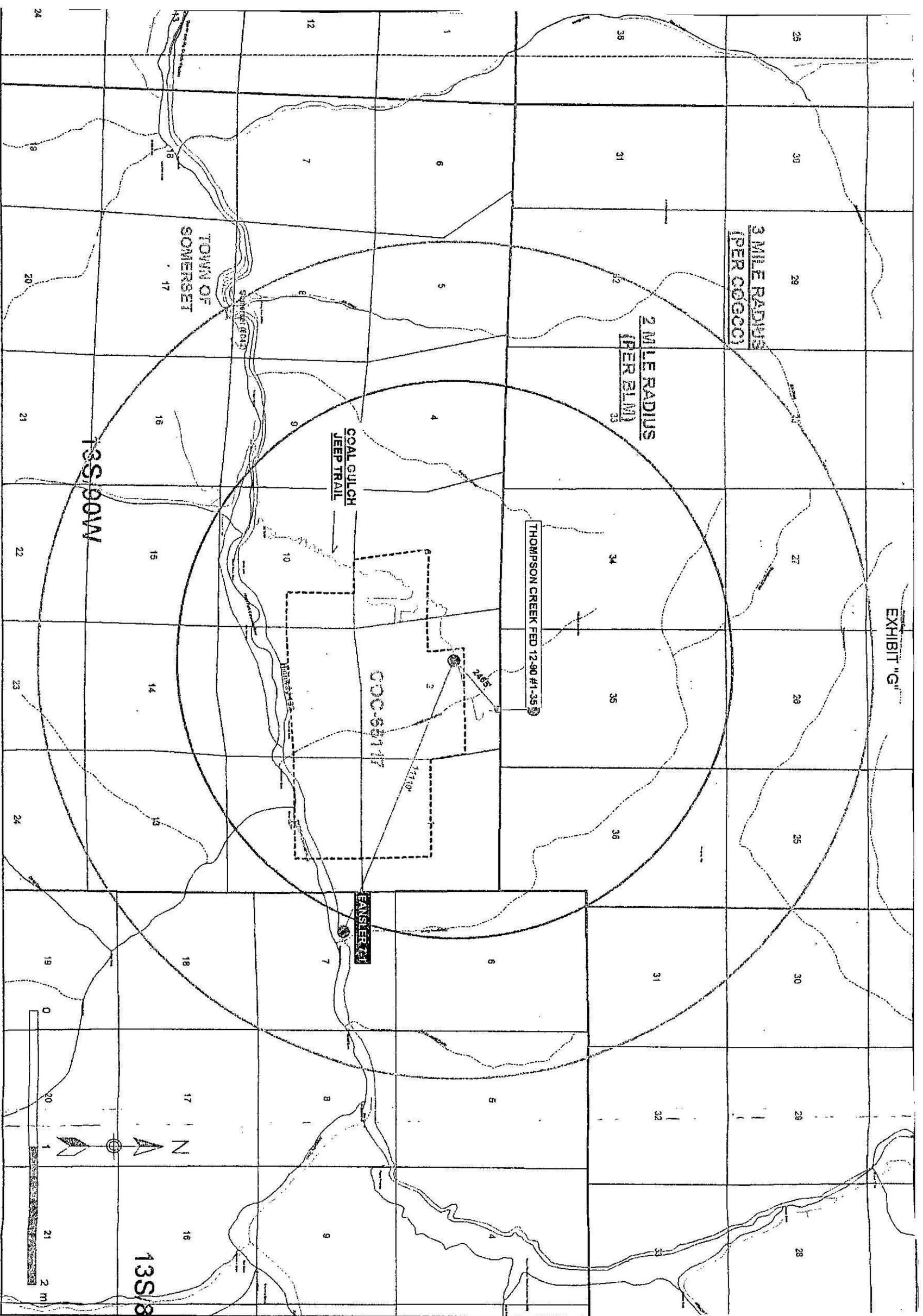
COMPANY: GUNNISON ENERGY CORP.  
 WELL NAME: HAWKSNEST FEDERAL 13-90 #1-2  
 FOOTAGE: 1750' FNL      1745' FWL  
 SEC. 2    TWN. 13 S    RNG. 90 W      6th P.M.  
 COUNTY: GUNNISON      STATE: COLO.  
 ELEVATION: 8204'

DRAWN BY: D.C.H. SURVEYED: 11/17/02  
 CHECKED BY: K.R. DRAINED: 11/18/02  
 FILE NO.: GEC16 JOB NO. GEC16

PREPARED FOR:  
 GUNNISON ENERGY CORPORATION  
 SHEET 3 OF 7

**NORTHSTAR**  
 SURVEYING & MAPPING, INC.

75 County Rd. 231  
 DURANGO, CO. 81303  
 (970) 385-0851



**LEGEND:**

- New Access Road
- Existing Road
- Water Well
- Proposed Well Spot
- County Road
- State Highway
- Railroad
- Canal
- Federal Lease

Hawksnest Fed 13-90 #1-2  
 SE/4 NW/4 Sec. 2 T13S R90W  
 Gunnison County, CO  
 Federal Lease: COC-65117



**GUNNISON ENERGY CORPORATION**

1801 Broadway  
 Suite 1200  
 Denver, CO 80202  
 (303)296-4222

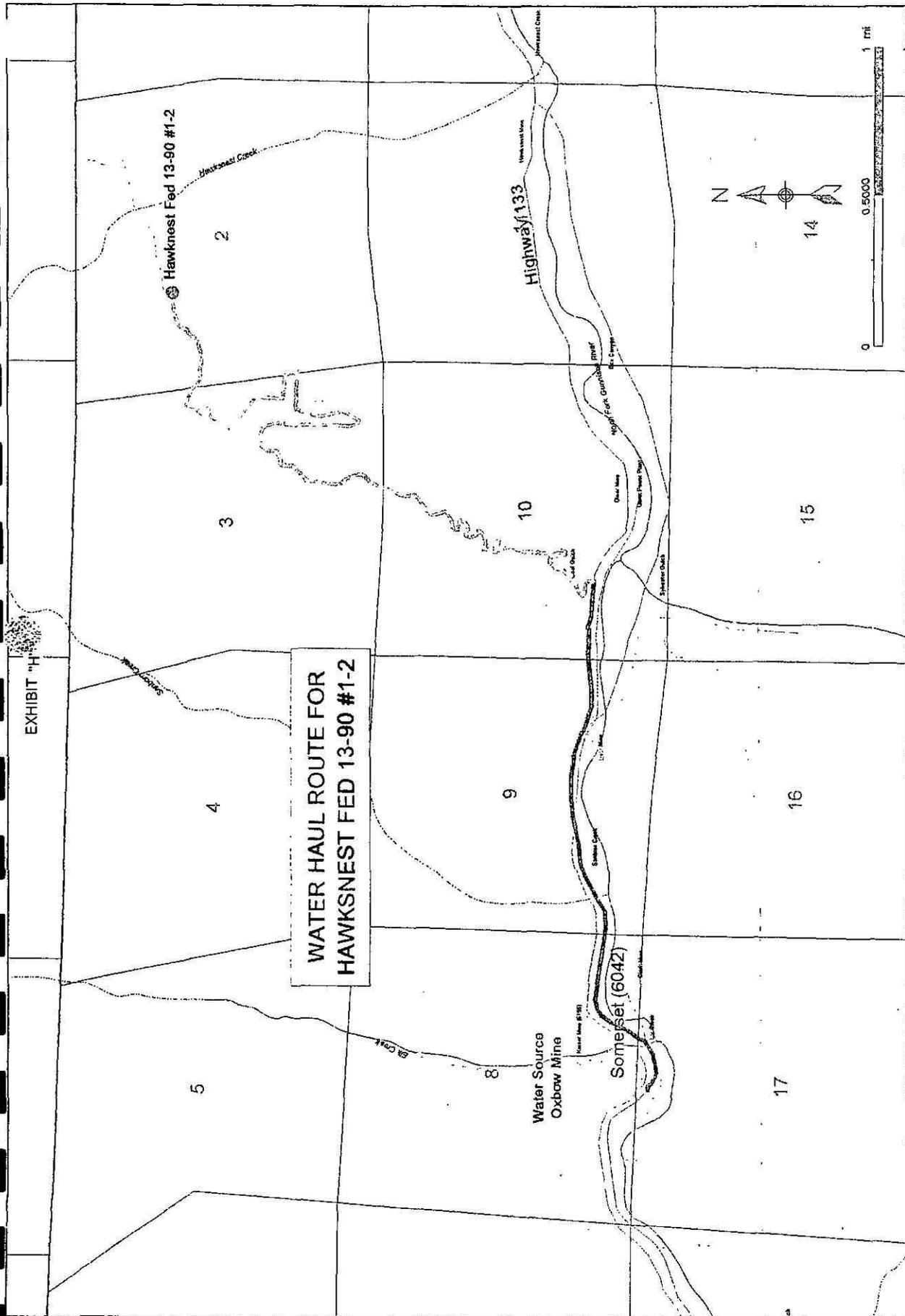


EXHIBIT "H"

WATER HAUL ROUTE FOR  
 HAWKSNEST FED 13-90 #1-2

1801 Broadway  
 Suite 1200  
 Denver, CO 80202  
 (303)296-4222

**GUNNISON ENERGY CORPORATION**

Hawksnest Fed 13-90 #1-2  
 SE/4 NW/4 Sec.2 T13S R90W  
 Gunnison County, CO  
 Federal Lease: COC-65117

**LEGEND:**

	New Access Road		County Road
	Existing Road		State Highway
	Water Well		Railroad
	Proposed Well Spot		Canal
			Federal Lease

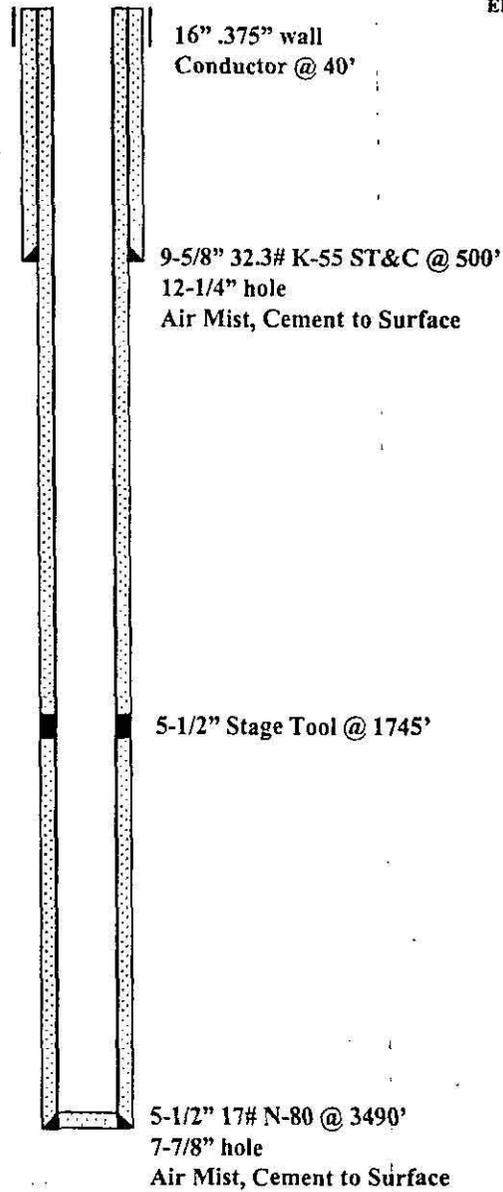
**EXHIBIT "I"**  
**WELLBORE DIAGRAM**  
**Hawksnest Federal 13-90 #1-2**

Location: 1750' FNL, 1745' FWL  
 SE/4 NW/4, Sec. 2, T13S, R90W,  
 Gunnison Co, CO

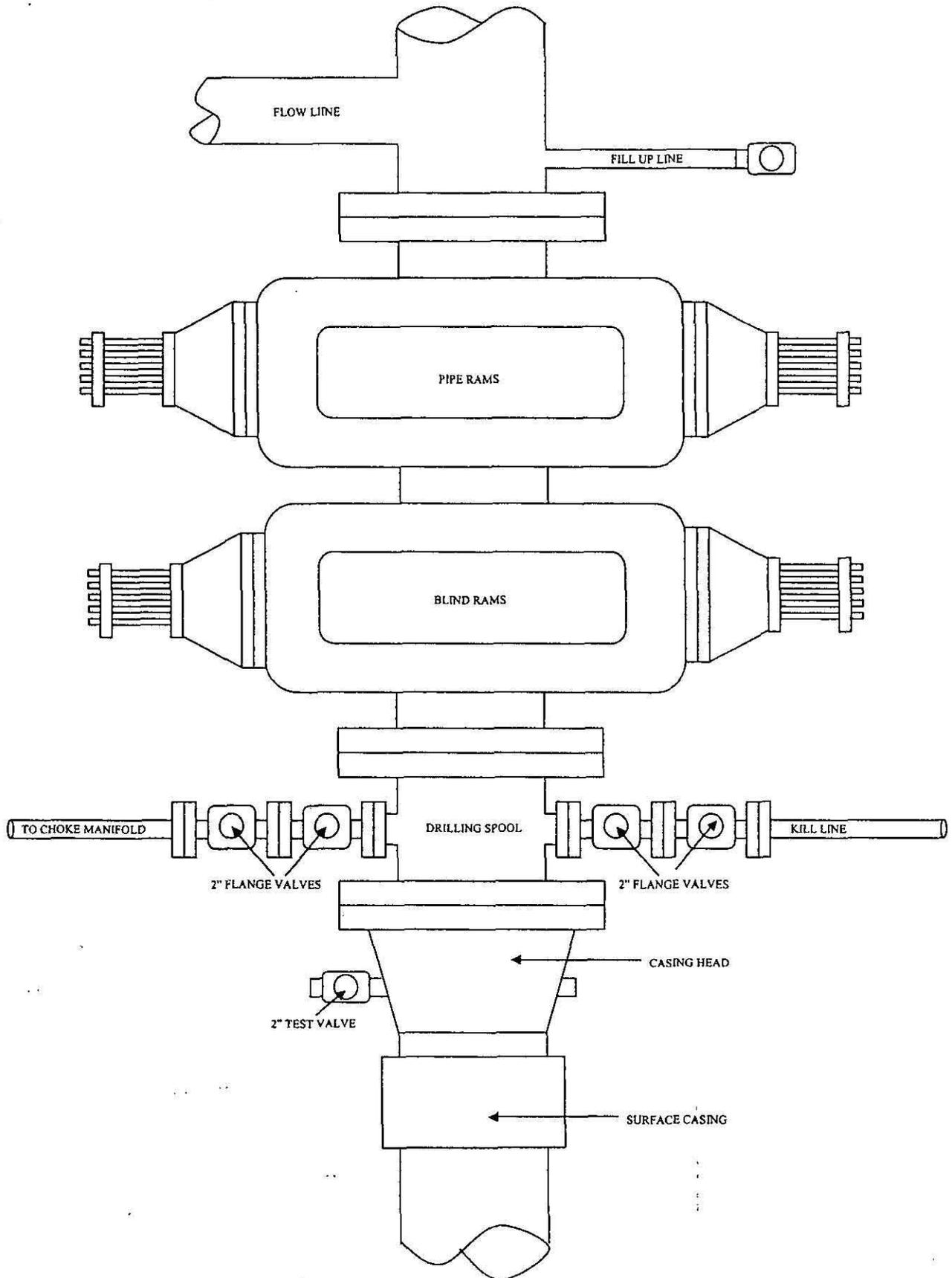
Elevation: 8204' GL

**FORMATION TOPS**

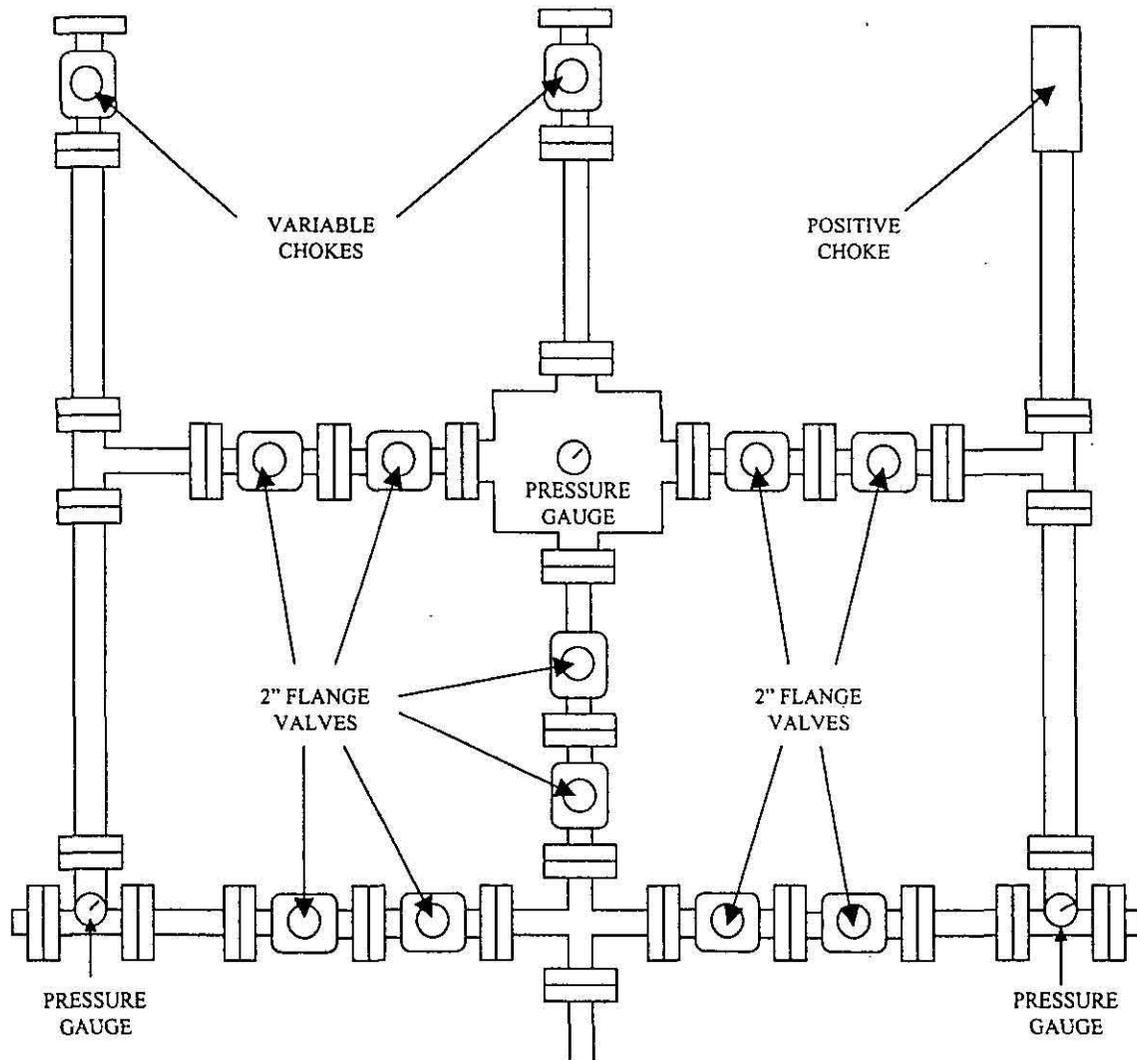
Wasatch	N/A
Ohio Creek	445'
Upper Mesa Verde	650'
Cameo Coals	2560'
Rollins	2830'
Cozzette	3200'
Corcoran	3385'
Mancos	3480'
TD	3490'



**EXHIBIT "J"**  
**Gunnison Energy Corp.**  
**Blowout Preventer Diagram**  
**(3000 PSI)**



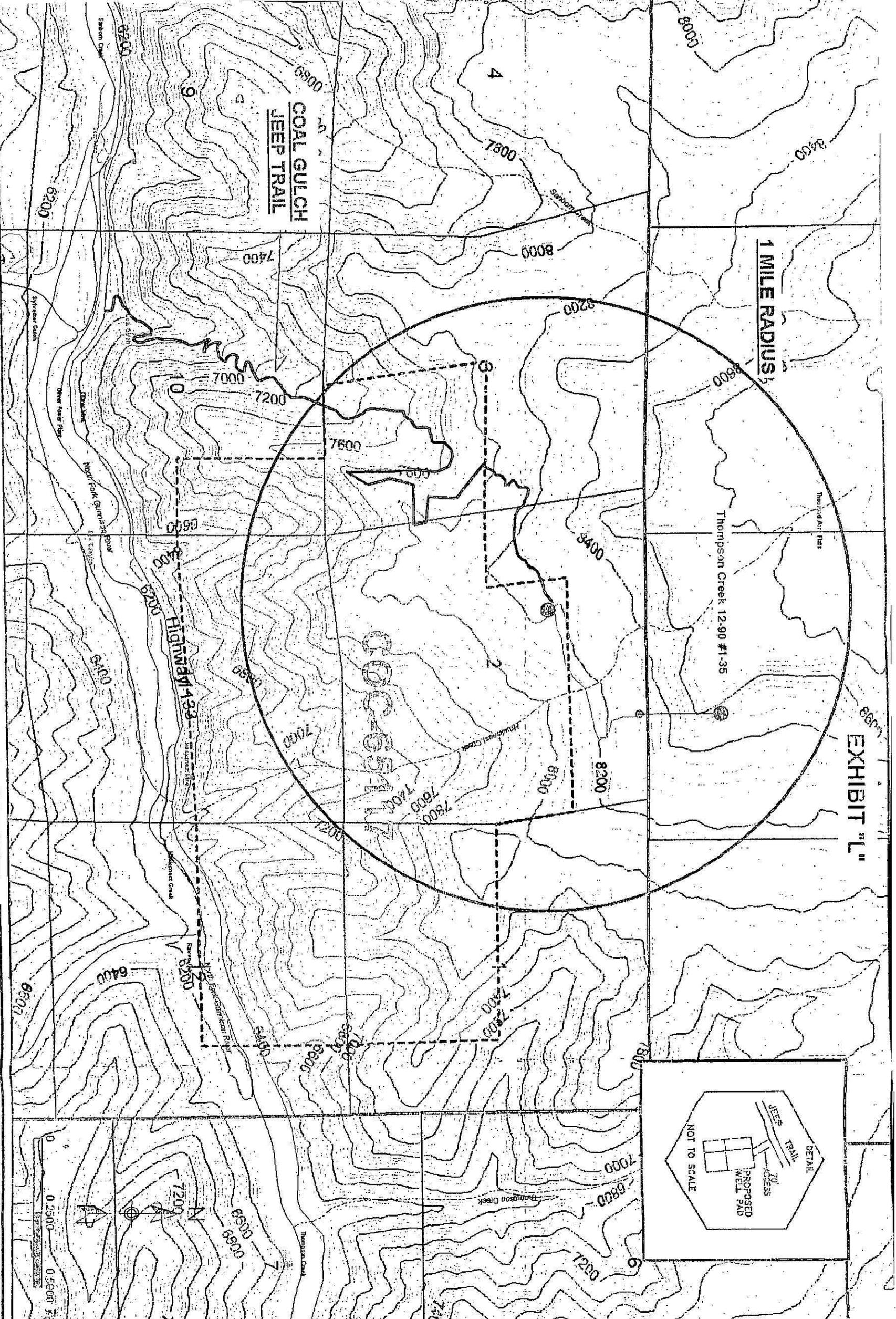
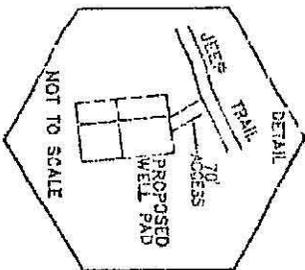
**EXHIBIT "K"**  
**Gunnison Energy Corp.**  
**Choke Manifold Diagram**  
**(3000 PSI)**



**EXHIBIT "L"**

**1 MILE RADIUS**

Thompson Creek 12-90 #1-35



**LEGEND:**

- New Access Road
- Existing Road
- Water Well
- Proposed Well Spot
- County Road
- State Highway
- Railroad
- Canal
- Federal Lease

Hawkstrest Fed 13-90 #1-2  
SE/4 NW/4 Sec. 2 T13S R90W  
Gunnison County, CO  
Federal Lease: COC-65117



1801 Broadway  
Suite 1200  
Denver, CO 80202  
(303)295-4222

GUNNISON ENERGY CORPORATION



01147754

## EXHIBIT "M"

### Threatened and Endangered Species Assessment

The habitat characteristics of the Hawksnest well site were evaluated in the field in October 2002. This information, in conjunction with a review of current listings of threatened and endangered species for Gunnison County, was assessed to determine which threatened and endangered species could potentially be affected by well site development. Information on the known ranges and habitat preferences of threatened and endangered species was also compared to the location and habitat characteristics of the well site to determine which threatened and endangered species may need additional analysis. Habitat characteristics of the Hawksnest well site (elevation - 8,200 feet) and access road are comprised entirely of oakbrush vegetation. The nearest aspen stand is located greater than 1,000 feet north of the well site. Two dry stockpans were located approximately 80 to 100 feet from the access road.

Table 1 provides a summary of the preliminary evaluation of threatened, endangered, and candidate species potentially occurring in the study area, based on their ranges and habitat preferences in relation to habitat conditions at the well site and access road. Four federally endangered fish species occur in river segments (Gunnison and Colorado Rivers) located downstream of the watersheds that encompass the drill site and access road: Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. Also, the bald eagle may occasionally wander over the analysis area but suitable habitat for this species is only present outside of the analysis area along the North Fork Gunnison River. Potential impacts to bald eagle would only be associated with possible indirect effects on wintering habitat along the North Fork Gunnison River resulting from reduced flows into the river. Based on the preliminary hydrology analysis, exploratory drilling would not affect surface flows for any streams draining into the North Fork of the Gunnison River.

Based on the information provided in Table 1, no listed or candidate species require additional analysis with regard to the Hawksnest well site. The rationale for this conclusion is provided in Table 1. Since the stock ponds are usually dry in the summer, they do not represent potential habitat for boreal toad.

**Table 1**  
**Evaluation of Potential Presence of Threatened, Endangered,**  
**and Candidate Species for the Hawksnest Well Site and Access Road**

Common Name / Scientific Name	Status <sup>1</sup>	Probability of Occurrence in Analysis Area	Potential Habitat in Analysis Area
<b>Plants</b>			
Clay-loving buckwheat <i>Eriogonum pelinophilum</i>	E	None	None; grows in Mancos shale badlands in salt desert shrub communities at elevations ranging from 5,200-6,400 feet..
Uinta Basin hookless cactus <i>Sclerocactus glaucus</i>	T	None	None; found in desert shrub communities at elevations ranging from 4,500 to 6,000 feet.
<b>Invertebrates</b>			
Uncompahgre fritillary butterfly <i>Bolaria acrocneema</i>	E	None	None; found in alpine tundra, snow willow vegetation patches.
<b>Amphibians</b>			
Boreal toad <i>Bufo boreas boreas</i>	C	None	Breeds in beaver ponds, lakes, and other surface water with shallow shoreline areas and lacking strong currents from 8,500 to 11,000 feet in elevation. Breeding habitat is not present, since the two stockponds near the access road usually are dry in the summer.
<b>Fish</b>			
Colorado pikeminnow <i>Ptychocheilus lucius</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
Humpback chub <i>Gila cypha</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
Bonytail chub <i>Gila elegans</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
Razorback sucker <i>Xyrauchen texanus</i>	E	None	None; potential effects from increased water withdrawal from upper Colorado River Basin are not anticipated.
<b>Birds</b>			
Bald eagle <i>Haliaeetus leucocephalus</i>	T	Low	None; potential effects from decreased flow into the North Fork Gunnison River are not anticipated.
Whooping crane <i>Grus americana</i>	E	None	None; rare migrant in region but no suitable stopover habitats in analysis area.
Mexican spotted owl <i>Strix occidentalis</i>	T	None	None; prefers pockets of Douglas-fir on steep canyon sideslopes.

Table 1 (Continued)

Common Name / Scientific Name	Status <sup>1</sup>	Probability of Occurrence in Analysis Area	Potential Habitat in Analysis Area
Southwestern willow flycatcher <i>Empidonax trailii extimus</i>	E	None	None; no suitable habitat within 0.25 mile of well sites or access roads; found in large riparian complexes of dense shrub pockets with a tree overstory usually with nearby surface water and stream gradients of less than 4 percent.
Gunnison sage-grouse <i>Centrocercus minimus</i>	C	None	None. Lower elevation sagebrush habitat.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	C	None	None; rare summer resident in western valleys, primarily from Mesa County southward; nests in mature, closed canopy riparian forest.
<b>Mammals</b>			
Black-footed ferret <i>Mustela nigripes</i>	E	None	None; preferred habitat represented by prairie dog towns in lower elevation valleys.
Canada lynx <i>Lynx lynx</i>	P	None	None; wide-ranging but prefers spruce-fir/lodgepole pine forests; the Hawksnest site is considered non-lynx habitat (entirely oakbrush habitat with no adjacent conifer forests).

<sup>1</sup> Status:

E = Listed as Endangered by the U.S. Fish and Wildlife Service under the Endangered Species Act. Species that are in imminent jeopardy of extinction.

T = Listed as Threatened by the U.S. Fish and Wildlife Service under the Endangered Species Act. Species that are threatened with extinction.

C = Proposed as a Candidate for listing as Threatened or Endangered by the U.S. Fish and Wildlife Service.

## EXHIBIT N

### Gunnison Energy Well Site Flora and Fauna Information

#### Hawksnest

##### A. Flora

The access road and well site are located entirely within oak brush habitat. This habitat is dominated by dense stands of Gambel's oak with a relative sparse understory of grasses and forbs. Characteristic understory species include silvery lupine, white-flowered peavine, western wheatgrass, and needle-and-thread.

##### B. Fauna

Mule deer, elk, black bear, and mountain lion occur within the analysis area and are known to use oak brush habitat. Black bear and mountain lion are wide ranging and may occasionally wander through or near the well site. Oak brush habitat is typically used as winter range by mule deer and elk. Furbearers and predators likely to use the well site area include coyote, long-tailed weasel, striped skunk, and bobcat. Raptors potentially using oak brush as hunting and nesting habitat include sharp-shinned hawk and long-eared owl. However, no stick nests were observed during an October 2002 survey within 300 meters of the well pad site and new access road. Typical small mammal residents in oak brush habitat include least chipmunk, golden-mantled ground squirrel, and deer mouse. House wren, blue-gray gnatcatcher, and spotted towhee are common songbird residents.

# EXHIBIT O

Well name:	HAWKSNEST FEDERAL 13-90 #1-2		
Operator:	GUNNISON ENERGY CORPORATION		
String type:	Surface		Project ID: COC-65117
Location:	SEW, 2, 13S 90W, DELTA, CO		

<b>Design parameters:</b> <u>Collapse</u> Mud weight: 9.000 ppg Design is based on evacuated pipe.	<b>Minimum design factors:</b> <u>Collapse:</u> Design factor 1.000  <u>Burst:</u> Design factor 1.00  <u>Tension:</u> 8 Round STC: 1.80 (J) 8 Round LTC: 1.70 (J) Buttress: 1.60 (J) Premium: 1.50 (J) Body yield: 1.50 (B)  Tension is based on buoyed weight. Neutral point: 434 ft	<b>Environment:</b> H2S considered? No Surface temperature: 75 °F Bottom hole temperature: 82 °F Temperature gradient: 1.40 °F/100ft Minimum section length: 500 ft Minimum Drift: 8.750 in Cement top: -3,405 ft  Non-directional string.  Re subsequent strings: Next setting depth: 3,490 ft Next mud weight: 9.000 ppg Next setting BHP: 1,632 psi Fracture mud wt: 10.000 ppg Fracture depth: 500 ft Injection pressure: 260 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)	Est. Cost (\$)
1	500	9.625	32.30	H-40	ST&C	500	500	8.876	4134

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	234	1370	5.86	260	2270	8.74	14	254	18.13 J

Prepared by: MMC  
GEC

Date: November 26, 2002

Remarks  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
In addition, burst strength is biaxially adjusted for tension.

PAGE 1 OF 2

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

# EXHIBIT O

Well name:	HAWKSNEST FEDERAL 13-90 #1-2	
Operator:	GUNNISON ENERGY CORPORATION	
String type:	Production	Project ID: COC-65117
Location:	SENW, 2, 13S 90W, DELTA, CO	

**Design parameters:**

Collapse

Mud weight: 9.000 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**

Collapse:

Design factor 1.000

Burst:

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 124 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 2,500 ft  
Cement top: 2,990 ft

Burst

Max anticipated surface pressure: 1,460 psi  
Internal gradient: 0.049 psi/ft  
Calculated BHP: 1,632 psi  
Gas gravity: 0.65  
No backup mud specified.

Tension:

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (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: 3,014 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)	Est. Cost (\$)
1	3490	5.5	17.00	N-80	LT&C	3490	3490	4.767	19671
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	1632	6290	3.85	1632	7740	4.74	51.2	348	6.79 J

Prepared by: MMC  
GEC

Date: November 26, 2002

**Remarks**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

In addition, burst strength is biaxially adjusted for tension.

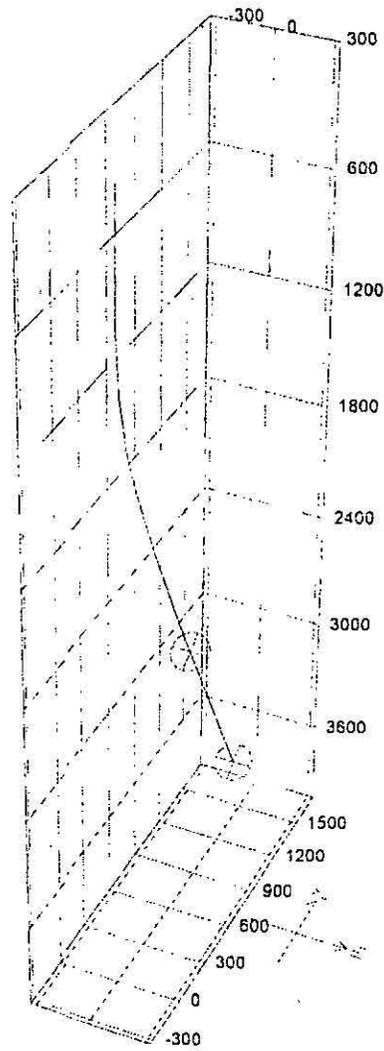
PAGE 2 OF 2

# 3D<sup>3</sup> Directional Drilling Planner - 3D View

Company: Gunnison Energy Corporation

Well: New Well

EXHIBIT P



Simulated Survey - P:\GEC Projects\NFV CBM\Project\Well Files\Thompson Crack Fed 12-00 #1-35\Thompson Crack Fed 12-00 #1-35 Directional Survey.wpp

	M.D. [ft]	Inclination [°]	Azimuth [°]	T.V.D. [ft]	N+/S- [ft]	E+W- [ft]	D.L.S. [°/100ft]	TopFace [°]	T.F. Ref. [HS/GN]
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	600.00	0.00	0.00	600.00	0.00	0.00	2.69	0	GN
3	656.17	1.51	0.00	656.16	0.74	0.00	2.69	360	HS
4	984.25	10.32	0.00	982.18	34.52	0.00	2.69	360	HS
5	1312.34	19.13	0.00	1299.17	117.84	0.00	2.69	360	HS
6	1567.07	25.98	0.00	1534.28	215.50	0.00	0.00		
7	1707.99	25.98	0.00	1600.42	278.96	0.00	0.00		
8	1968.50	26.86	0.00	1894.27	393.12	0.00	0.34	360	HS
9	2296.59	27.96	360.00	2185.52	544.14	0.00	0.34	360	HS
10	2624.67	29.07	360.00	2473.80	700.74	0.00	0.34	360	HS
11	2898.34	20.98	360.00	2710.19	834.60	0.00	0.00		
12	2896.34	30.00	360.00	2710.00	835.00	0.00	0.00		
13	4039.49	30.00	360.00	3700.00	1405.58	0.00	0.00		

EXHIBIT Q

Page 1



Gunnison Energy Corporation  
Federal Lease: COC-65117  
Well: Hawksnest Federal 13-90 #1-2  
Surface Location: 1750' FNL & 1745' FWL  
Bottom Hole Location: 1750' FNL & 1745' FWL  
Sec. 2, T. 13 S., R. 90 W.  
Gunnison County, Colorado

3160

**Conditions of Approval - Drilling Plan**

1. **All Surface Use Conditions of Approval ( Attached ) must be adhered to.**
2. Notify this office at least **72 hours** prior to:
  - a. spudding the well
  - b. running casing strings and cementing
  - c. BOP tests
  - d. Drill Stem Testing

**For the above procedures, Operators must talk to BLM personnel directly. Do not leave messages on answering machines.**

3. All BOP tests will be performed with a test plug in place. BOP will be tested to full stack working pressure and annular preventer to 50% maximum stack working pressure. All accumulators will be function tested as per Onshore Order #2. All 2M or greater systems require **adjustable** chokes as per Onshore Order #2. The BOP needs an annular preventer to qualify as a 3M system. Choke lines must be 3". Kill line must have a check valve.
4. If a BLM Inspector is not present during the initial BOP test, please provide chart record.
5. Submit copies of all logs to this office both paper and in Log ASCII Standard (LAS) format.
6. **If any operations are to start over the weekend, notify this office by noon Friday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed on the following 'INFORMATIONAL NOTICE - APD's'. Do not leave messages on answering machines.**

(Continued on Page 2.)

7. The following tasks are recommended for collecting data that will aid in interpreting the groundwater flow and origin:

1. Pre-stimulation permeability testing should be performed. This testing would entail either a slug test/tank test, or a low rate injection test. Injection fluids would be clean, potable water to avoid introduction of any contaminants into the formation. This testing will provide true formation permeability and identify any pre-existing open fracture systems prior to fracture stimulation.
2. Stabilized bottomhole pressure measurements should be collected after the initial production testing is complete. Ideally, the measurements would be collected over a period of months to determine if pressure is stable at depth or if there are any trends or temporal variations in pressures. A pressure measuring device, connected to a datalogger, would be preferred. In lieu of this, monthly stabilized bottomhole pressure measurements would be acceptable.
3. Pressure response during fracture stimulation treatments should be recorded and provided to BLM and USFS. These data can be evaluated to determine if any pre-existing high permeability pathways were intercepted by the frac job.
4. Gas composition and isotopic analyses should be performed on gas samples collected from each producing zone encountered by the wellbore. These data will allow investigators to determine the origin of the gas in various zones (biogenic vs. thermogenic, conventional gas vs. coalbed methane gas, etc.).
5. Water chemistry testing should be performed on produced water. The following analyses will provide information on the provenance of the groundwater produced by the well. a) major ions, b) metals, c) TDS, d) pH, and stable isotopes of oxygen and hydrogen. These analyses should be conducted after the well has produced over 200% of the injected frac fluids to ensure formation waters are tested, or after 2 months of continuous production from the well. If the well is not produced, a water sample collected at the end of any initial production testing period should be analyzed for the above-listed parameters.

8. A CBL is required if cement is not circulated to the surface on either casing string. BLM verbal approval will be required prior to squeezing.

9. Do not hydraulically fracture the coals at the same depth as the Sanborn Mine B Seam active workings.

## INFORMATIONAL NOTICE - APD's

### San Juan Field Office

This notice is an abstract of some major regulations and Onshore Orders and includes notification requirements and information.

1. Drilling Operations (Onshore Order No. 2)

1. If DST's are run, all applicable safety precautions outlined in Onshore Order No. 2 shall be observed.
2. All indications of usable water (10,000 ppm or less TDS) shall be reported to the San Juan Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

2. Well Abandonment (43 CFR 3162.3-4, Onshore Order No. 1-Sec.V)

Approval for abandonment shall be obtained prior to beginning plugging operations. Initial approval for plugging operations may be verbal, but shall be followed-up in writing within 30 days. Subsequent and final abandonment notifications are required and shall be submitted on Sundry Notice (Form 3160-5), in triplicate.

3. Reports and Notifications (43 CFR 3162.3-2, 3162.4-1, 3162.4-3, 00-6)

1. Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions or data obtained and compiled during the drilling, workover, and/or completion operations shall be filed with a Completion Report (Form 3160-4), in triplicate. Submit casing/cementing reports and other subsequent reports via Sundry Notice, Form 3160-5.
2. In accordance with 43 CFR 3162.4-3, this well shall be reported on MMS Form 3160, "Monthly Report of Operations", starting with the month in which drilling operations commence, and continuing each month until the well is physically plugged and abandoned.
3. Notify this office within 5 business days of production start-up if either of the following two conditions occur:
  - (1) The well is placed on production, or
  - (2) The well resumes production after being off production for more than 90 days.

"Placed on production" means shipment or sales of hydrocarbons from temporary tanks, production into permanent facilities or measurement through permanent facilities. Notification may be written or verbal with written follow-up within 15 days.

- d. As per Onshore Order No. 6, III.A.2.b., if hydrogen sulfide is present the "operator shall initially test the H<sub>2</sub>S concentration of the gas stream for each well or production facility..." Submit the results of this test within 30 days of filing Form 3160-4, "Well Completion or Recompletion Report and Log".

4. Environmental obligations and disposition of production (00-7, NTL-3A, NTL-4A, 43 CFR 3162.5-1, 3162.7 and 40 CFR 302-4)

1. With BLM approval, water produced from newly completed wells may be temporarily disposed into unlined pits up to 90 days. During this initial period, application for the permanent disposal method shall be made to this office in accordance with 00-7.

If underground injection is proposed, an EPA or State UIC permit shall also be required and submitted to this office.

2. Spills, accidents, fires, injuries, blowout and other undesirable events shall be reported to this office within the time frames in NTL-3A.

3. Gas may be vented or flared during emergencies, well evaluation, or initial production tests for a time period of up to 30 days or the production of 50 MMCF of gas, whichever occurs first. After this period, approval from this office shall be obtained to flare or vent gas in accordance with NTL-4A.

4. Off-lease measurement and commingling of production must be approved by the authorized officer.

5. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter-quarter section, the section, township and range). The Indian lessor's name may also be required. All markings shall be legible and in a conspicuous place.

6. Bureau of Land Management, San Juan Field Office Address and Contacts:

ADDRESS: Public Lands Center      PHONE: (970) 247-4874  
15 Burnett Court  
Durango, Colorado 81301

BUSINESS HOURS: 7:45 A.M. to 4:30 P.M. (Mountain Time), Monday-Friday

AFTER HOURS:

Terry Galloway      Lead Petroleum Engineering Technician  
Home Phone (970) 884-4067

Marie Gray-Lope      Petroleum Engineering Technician  
Home Phone (505) 632-9346

Gary Retherford      Petroleum Engineering Technician  
Home Phone (970) 884-6138

**Appendix 1**

**SURFACE USE CONDITIONS OF APPROVAL**

Gunnison Energy Corporation  
Thompson Creek Fed 12-90 #1-35  
NE1/4NE1/4 of Sec. 2, T13S, R90W, 6thPM (Surface)  
Federal Oil and Gas Lease COC-65529 (Bottom Hole)  
Hawksnest Fed 13-90 #1-2  
Federal Oil and Gas Lease COC-65117 (Surface and Bottom Hole)  
Gunnison County, Colorado  
Right-of-way COC66811 for Coal Gulch Road and Thompson Creek well site  
Right-of-way COC66812 for Bear Creek Road

**Approval of this APD is subject to all terms and conditions set forth in the APD surface use plan, any surface owners agreement and the following Conditions of Approval which take precedence.**

**This approved APD is for a well location and associated road as identified in the APD package. If the Thompson Creek Fed 12-90 #1-35 and Hawksnest Fed 13-90 #1-2 wells become producers, additional NEPA and right-of-ways will be required.**

1. The operator or his contractor will contact the authorized officer at the Uncompahgre Field office in Montrose, Colorado (970) 240-5305, 48 hours before work is initiated, and 48 hours prior to beginning site reclamation.
2. Prior to mobilizing onto BLM lands, all equipment will be washed and cleaned to prevent spread of noxious weeds.
3. The Spill Prevention, Control and Countermeasure Plan/Health and Safety Plan, the Storm Water Pollution Prevention Plan, Noxious Weed Management Plan, the Fire Prevention and Suppression Plan and the Surface Use Agreement will be submitted to the BLM for review and approval prior to operations commencing.
4. Lessee's and Operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which (1) conforms with applicable Federal laws and regulations, and (2) with State and local laws and regulations to the extent that such State and local laws are applicable on Federal leases.
5. The operator must notify the USFS and/or BLM of any changes to surface operating plans to secure additional approvals, if needed.
6. A preconstruction site meeting will be held with the BLM to review road and pad designs. A person designated by the company to make decisions will be on site during initial disturbance and set up.
7. Prior to any surface disturbance, a Boundary Line Survey will be performed by a Professional Land Surveyor at the USFS/BLM boundary in the vicinity of the Thompson Creek well site to ensure no encroachment into the IRA. The survey will be marked to FS specification.
8. Design soil stockpiles to minimize risk of wind and soil erosion. The maximum depth will be 4 feet to protect the soil structure.
9. Activities may be curtailed during periods when the soil and/or road subgrade is saturated. This possible restriction would be determined by the BLM. Use of heavy construction equipment would be limited to times when the soil is least susceptible to compaction or rutting.
10. If a spill occurs, contaminated soil will be removed from BLM lands, and be properly disposed of prior to backfilling and reclamation.

11. Use site preparation methods to conserve fertile, friable topsoil essentially intact.
12. No refueling or lubricating would take place within 100 feet of wetlands and other waterbodies or drainages. Hazardous materials, chemicals, fuels, etc. would not be stored within 100 feet of wetlands or surface waters unless it is within the confines of the constructed drill pad.
13. Prior to pit reclamation, pit residue would be tested for chemicals listed in Appendix C of the EA. If hazardous constituents are present, the materials would be removed from BLM lands and properly disposed.
14. Sedimentation devices will be used along roads and drill pads as directed by the BLM representatives. Devices may include, but are not limited to silt fence, excelsior bales, straw wattles, etc.
15. If an exploration well is found to be capable of production and if fresh ground water zones are encountered during exploration drilling, the Operator will install a groundwater monitoring well adjacent to the specific gas well. The groundwater wells will be completed to monitor the fresh ground water zone(s). If a groundwater well is installed, it will be monitored on a semi-annual basis for water level, total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, specific conductance, total dissolved solids, pH, sulfate, nitrate, nitrite, ammonia, methane, hydrogen sulfide, selenium and barium. Data reports will be submitted to the BLM within one month after the lab analyses are complete.
16. If a well produces water at volumes greater than 1,500 bpd after 60 days of continuous operation, and if this water is less than 2,000 mg/l TDS, the gas well would be shut in until it can be determined whether the source of the water is or is not interconnected with shallow water-bearing units or surface water.
17. Vegetation removal would be minimized by lopping and scattering slash to a depth of no more than 18 inches. Some material may be mulched for use on site during reclamation.
18. All pits, cellars, rat holes, or other holes unnecessary for further operations would be backfilled immediately after the drill rig is released.
19. To facilitate timely reclamation, reserve pits may need to be pumped of fluids. All enhanced evaporation of the reserve pit fluids shall have prior approval of the authorized officer. After reshaping the site, the topsoil material should be distributed to a uniform depth to allow establishment of desirable vegetation. The disturbed area would be scarified prior to placement of surface soil material.
20. Annual coordination with the BLM is required to avoid conflicting with the grazing, coal, recreation and other uses of the Coal Gulch Road.
21. With respect to bald and golden eagle nest sites and winter roosts which may be established:
  - a. No new permanent surface facilities or disturbances shall be located within a 1/4 mile radius buffer zone around each bald or golden eagle nest site.
  - b. No above ground activities will be allowed within a 1/2 mile radius buffer zone around each active eagle nest site from November 15 to July 30 for bald eagles, and around each active golden eagle nest site from February 1 to July 15.
  - c. No above ground activities will be allowed within a 1/4 mile radius of winter roosts between November 15 and March 15; development may be permitted at other periods. If periodic visits are required within the buffer zone after development, activity should be restricted to the hours of 10 a.m. and 2 p.m. from November 15 through March 15.

- d. Any proposed surface facilities, disturbances or activities (noted above) in, or adjacent to, these buffer zones will require approval from the BLM on a site-specific basis, after consultation with the USFWS.
22. Project-related personnel will ensure that equipment operators know that the removal, injury, defacement, or alteration of any object of archaeological or historic interest is a federal crime and may be punishable by fine and/or jail term.
23. The operator and the BLM will conduct a pre-use road condition assessment for affected BLM roads.
24. Any project-related damage to any roads must be repaired as soon as possible to avoid adverse impacts on other authorized road uses on BLM lands.
25. Streams will be crossed at right angles, and on as gentle a grade and slope as possible. Install all crossings in a manner to maintain stable channel conditions and favorable water quality and aquatic habitat as directed by the BLM.
26. Dust abatement will be required on all project-related roads. Water will be the primary dust control measure. Other methods may need to be used as directed by the USFS or BLM.
27. Disposal records of all waste streams must be current and well maintained. Copies of the records will be forwarded to the BLM at the completion of drilling.
28. Control and containment mitigation would be included in the SPCC Plan, Emergency Response Plan, and Safety Plan in the event of a release of a hazardous substance or material. The plans would be provided to BLM prior to construction onsite so approval could be completed prior to any disturbance operations.
29. The Operator will specifically address the following measures in the SPCC for handling of a leak, spill or release event:
- a. Identification of the chemical parameters and sampling requirements to be analyzed in the event of a spill, leak or release, for each petroleum product or hazardous substance handled in or transported onto the drill sites;
  - b. How a spill would be prevented and/or how amount would be minimized from reaching surface water;
  - c. List the required contacts for federal, state, and local agencies regarding reportable spills or leaks;
  - d. How documentation will be maintained over time pertaining to the circumstances of releases, amount and duration of release, the measures taken to control the release, and the measures taken to minimize or mitigate the impacts from the release;
  - e. How released material that has not reached surface water will be recovered;
  - f. Plans to collect water samples documenting the duration and severity of any release that could reach surface water (near the release site, and at impacted downstream locations within the zone of impact).
30. All releases (unless the reportable spill quantity is less than 10 gallons) of any substance to soil or water would be immediately reported to BLM and USFS Compliance Officers (names will be provided

in the SPCC). Containment of the spill will occur immediately, clean up of a spill will occur within 3 days, or as soon as practicable and proof of cleanup provided for the record.

31. To further facilitate coordination with local emergency services, GEC would provide mapped locations of the proposed well sites, including GPS location (latitude/longitude) and MSDS sheets in the SPCC Plan, Fire Prevention Plan, Health and Safety Plan to the Federal agencies with responsible for drilling activities. A courtesy copy will be provided to the respective emergency services personnel, as applicable, in advance of any exploration drilling activities. In addition, the operator would have phones or radios onsite, as appropriate, to provide accessibility to emergency services.



## United States Department of the Interior



**Bureau of Land Management**  
Uncompahgre Field Office  
2505 South Townsend Avenue  
Montrose, Colorado 81401

**FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD**  
Environmental Assessment (EA) No. CO-150-2003-046 EA  
Gunnison Energy Corporation's Proposed Exploratory Gas Drilling Project  
Gunnison County, Colorado

### Finding of No Significant Impact

Based on the analysis of potential environmental impacts contained in the Gunnison Energy Corporation's Proposed Exploratory Gas Drilling Project Environmental Assessment CO-150-2003-046, I have determined that the proposed project on BLM managed surface is in conformance with the Uncompahgre Basin Resource Management Plan, 1989, and with the BLM standard practices applied to surface-disturbing activities, and the additional environmental protection measures identified in the EA, the project will not have significant impacts on the human environment and an Environmental Impact Statement is not required. The proposed action described in the EA is to drill two exploration gas wells on BLM managed surface. The project area is in the North Fork Valley, northeast of Somerset, Colorado.

### The Decision Record

It is my decision to authorize the Proposed Action Alternative with Conditions of Approval as described in Gunnison Energy Corporation's Proposed Exploratory Gas Drilling Project Environmental Assessment (EA CO-150-2003-046). Under this alternative, Gunnison Energy will drill two exploration gas wells (Hawksnest Fed 13-90 #1-2 and Thompson Creek Fed 12-90 #1-35), construct 105 feet of new road and use 13,825 feet of existing roads on BLM managed surface. The total surface disturbance for the two well pads and roads is 14 acres. The Conditions of Approval (Appendix 1) are specifically designed for this project to minimize impacts to the resources. It is my conclusion that selection of the Proposed Action Alternative with the Conditions of Approval will adequately mitigate impacts associated with the Hawksnest Fed 13-90 #1-2 and the Thompson Creek Fed 12-90 #1-35 well sites. The Hawksnest Fed 13-90 #1-2 well is located on oil and gas lease COC65117 in the SE1/4NW1/4 of Sec. 2, T13S, R90W, 6thPM. The surface location of the Thompson Creek Fed 12-90 #1-35 is NE1/4NE1/4 of Sec. 2, T13S, R90W, 6thPM, and the bottom hole location is on oil and gas lease COC65529, SW1/4SE1/4 of Sec. 35, T12S, R90W, 6thPM. See Map 1. This decision is in full force and effect per 43 CFR 3165.3 (b).

This decision includes granting FLPMA access road and drill site rights-of-way, COC-66811 and COC66812, to Gunnison Energy Corporation for 10 year terms consistent with the leases and subject to the Surface Use Plans and Conditions of Approval contained in the approved APDs. The dimensions of the off-lease road right-of-way COC66811 which provides access to the Hawksnest and Thompson Creek well sites along the existing Coal Gulch Road is 13,825 feet long by 30 feet wide and contains approximately 9.5 acres. This right-of-way also authorizes the off-lease Thompson Creek drill site which is 230 feet by 280 feet and contains approximately 1.4 acres. This right-of-way crosses public land in Sec. 2 and 3, T13S, R90W, 6<sup>th</sup> PM as shown on Figure B-10 of Volume II Appendices of the EA. The dimensions of the off-lease road right-of-way COC66812 which provides access to the Hubbard Creek and Oakbrush well sites (on Forest Service land) along the existing Bear Creek Road is 7,970 feet long by 30 feet wide and

**EXHIBIT**

tabbles

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contains approximately 5.5 acres. This right-of-way crosses public land in Sec. 36, T12S, R91W, Sec. 7 and 18, T13S, R90W, and Sec. 1, T13S, R91W, 6<sup>th</sup> PM as shown on Figure B-9 of Volume II Appendices of the EA. Pages 2-7 and 2-8 of the EA states that approximately 4,220 feet on Bear Creek Road would be off-lease right-of-way on BLM lands. The right-of-way is actually 7,970 feet long instead. No new upgrade work (i.e., widening or culvert installation) would be required for this road, therefore the EA analysis is accurate and this Decision Record only changes the right-of-way length. This decision is in full force and effect per 43 CFR 2804.1(b).

### **Rational for Decision**

The decision to allow the proposed action does not result in any undue or unnecessary environmental degradation and is in conformance with the 1989 Uncompahgre Basin Resource Management Plan. It has been made in consideration of the impacts to the affected resources. Conditions of Approval have been applied to the proposed action which will meet or exceed the standards for Public Land Health.

In reaching this decision and in my determination of the Finding of No Significant Impact, I considered the above referenced EA, the errata sheet and public comments received during the 30-day scoping and the 30-day public review period. The Response to Comments and Errata sheet are found in Appendix L of the EA.

Best available data was used in the preparation of this EA. Another EIS for this area would not, in all likelihood, provide any significant new information. These lands have been leased for oil and gas development under the provisions of the Mineral Leasing Act, 1920, 30 USC 181 et. seq., as amended.

The no significant impact determination is based on the following:

- Extensive site-specific mitigation measures are included in the ADP Surface Use Plan, and attached Conditions of Approval, and will be attached to the approved Applications for Permit to Drill (APD). These mitigation measures are directed toward reducing short and long term impacts to air, soils, water quality (surface and groundwater), vegetation, wildlife, threatened and endangered, proposed, candidate or sensitive species, visual, cultural resources, and recreation, transportation, hazardous materials, and safety.
- After mitigation measures are applied, surface and subsurface disturbances are not of significant scale in terms of context or intensity.
- With the application of these mitigation measures, the wells and associated roads will not contribute significantly to the cumulative impacts to the region as a result of oil gas exploration.

The EA addressed two alternatives, the No Action and Proposed Action Alternatives. Three other alternatives: Other Well Locations, Alternative Other Drilling Methods, and Seismic Exploration were considered but eliminated from the EA analysis. The Other Well Location was not considered because as part of the well site selection process BLM evaluated the two BLM sites, and the Thompson Creek site was moved as a result of resource concerns. Alternative Drilling Methods were considered in the Proposed Action and the Seismic Exploration Alternative would not yield the desired data on quantity and quality of gas present. The No Action Alternative was not selected because it does not recognize Gunnison Energy Corporation's valid right to explore for oil and gas resources on existing leases.

## Public Involvement

The BLM and USFS initiated a public scoping process during which the public, appropriate agencies, and specific interested parties, had the opportunity to submit written comments on the proposed project. This scoping process included a 30-day comment period from December 30, 2002 through January 31, 2003, for submittal of written comments. The USFS and BLM published notices inviting comments for scoping on the proposed project in the *Grand Junction Daily Sentinel*, on December 28, 29 and 30, 2002. News releases on scoping were submitted to the *Grand Junction Daily Sentinel*, *Mountain Valley News*, *Delta County Independent* and *Montrose Daily Press*. A notification letter was sent to about 950 known interested parties on December 30, 2002.

A public scoping open house was held on January 22, 2003, in Hotchkiss, Colorado to give the public an opportunity to ask questions about the proposed project and to provide an additional opportunity for the public to submit written comments. Thirty-eight individuals signed the open house attendance register. Scoping comments were received from 279 parties either in writing, via the scoping open house, by telephone or email.

Scoping input was reviewed, analyzed, and summarized to represent the issues and concerns of the respondents. Based on the issues and concerns of the respondents, and in response to the issues raised (Section 2.3 and 2.4 of the EA), alternatives were developed that address both the project issues and the purpose and need for the project, as described in Section 2.5 in the EA.

Following the preparation of the EA, it was sent for a 30-day public review from May 23, 2003 through June 23, 2003. The EA was mailed to 285 addressees. A legal notice announced the availability of the EA for public review and comment appeared in the in the *Grand Junction Daily Sentinel* on May 23, 2003, and again on May 24, 2003. A news release appeared in the *North Fork Times* on May 28, 2003. News releases were also sent to the *Montrose Daily Press* and the *Mountain Valley News*. One hundred ten (110) parties commented on the EA during the comment period. The Response to Comments are contained in Appendix L of the EA.

BLM reviewed all comments. There were no substantive comments that necessitated the BLM to revisit the proposed project though additional NEPA procedures.

## Compliance and Monitoring

The mitigation measures, which contain provisions for monitoring and compliance, have been developed for the proposed action and are incorporated by reference into this decision. Normal routine compliance inspections will take place periodically throughout the life of the project. The inspections will be designed to monitor environmental effects of the project and to insure that the operator complies with the Conditions of Approval and stipulations identified above. Compliance actions are to insure that these operations are conducted in accordance with the terms and conditions of the approval and associated stipulations, the elements of the proposed action, BLM standard practices for surface-disturbing activities and the mitigation measures listed in the EA.

/s/ Allan J. Belt

9/5/03

Field Manager  
Uncompahgre Field Office

Date

## ATTACHMENTS:

Map 1

Appendix 1 - Conditions of Approval for Hawksnest Fed 13-90 #1-2 and Thompson Creek Fed 12-90 #1-35

**Appendix 1**

**SURFACE USE CONDITIONS OF APPROVAL**  
Gunnison Energy Corporation  
Thompson Creek Fed 12-90 #1-35  
NE1/4NE1/4 of Sec. 2, T13S, R90W, 6thPM (Surface)  
Federal Oil and Gas Lease COC-65529 (Bottom Hole)  
Hawksnest Fed 13-90 #1-2  
Federal Oil and Gas Lease COC-65117 (Surface and Bottom Hole)  
Gunnison County, Colorado  
Right-of-way COC66811 for Coal Gulch Road and Thompson Creek well site  
Right-of-way COC66812 for Bear Creek Road

**Approval of this APD is subject to all terms and conditions set forth in the APD surface use plan, any surface owners agreement and the following Conditions of Approval which take precedence.**

**This approved APD is for a well location and associated road as identified in the APD package. If the Thompson Creek Fed 12-90 #1-35 and Hawksnest Fed 13-90 #1-2 wells become producers, additional NEPA and right-of-ways will be required.**

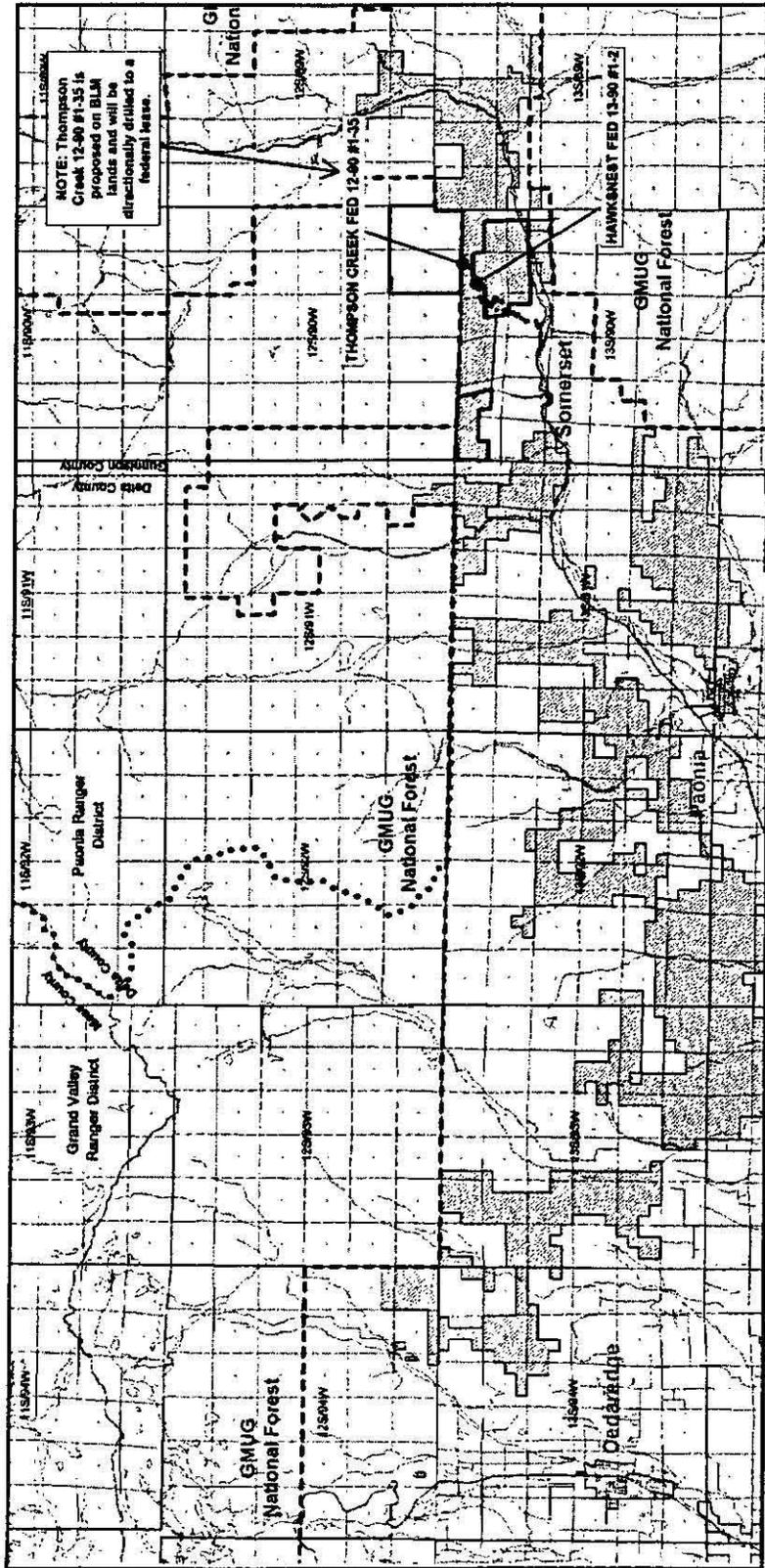
1. The operator or his contractor will contact the authorized officer at the Uncompahgre Field office in Montrose, Colorado (970) 240-5305, 48 hours before work is initiated, and 48 hours prior to beginning site reclamation.
2. Prior to mobilizing onto BLM lands, all equipment will be washed and cleaned to prevent spread of noxious weeds.
3. The Spill Prevention, Control and Countermeasure Plan/Health and Safety Plan, the Storm Water Pollution Prevention Plan, Noxious Weed Management Plan, the Fire Prevention and Suppression Plan and the Surface Use Agreement will be submitted to the BLM for review and approval prior to operations commencing.
4. Lessee's and Operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in such a manner which (1) conforms with applicable Federal laws and regulations, and (2) with State and local laws and regulations to the extent that such State and local laws are applicable on Federal leases.
5. The operator must notify the USFS and/or BLM of any changes to surface operating plans to secure additional approvals, if needed.
6. A preconstruction site meeting will be held with the BLM to review road and pad designs. A person designated by the company to make decisions will be on site during initial disturbance and set up.
7. Prior to any surface disturbance, a Boundary Line Survey will be performed by a Professional Land Surveyor at the USFS/BLM boundary in the vicinity of the Thompson Creek well site to ensure no encroachment into the IRA. The survey will be marked to FS specification.
8. Design soil stockpiles to minimize risk of wind and soil erosion. The maximum depth will be 4 feet to protect the soil structure.
9. Activities may be curtailed during periods when the soil and/or road subgrade is saturated. This possible restriction would be determined by the BLM. Use of heavy construction equipment would be limited to times when the soil is least susceptible to compaction or rutting.
10. If a spill occurs, contaminated soil will be removed from BLM lands, and be properly disposed of prior to backfilling and reclamation.

11. Use site preparation methods to conserve fertile, friable topsoil essentially intact.
12. No refueling or lubricating would take place within 100 feet of wetlands and other waterbodies or drainages. Hazardous materials, chemicals, fuels, etc. would not be stored within 100 feet of wetlands or surface waters unless it is within the confines of the constructed drill pad.
13. Prior to pit reclamation, pit residue would be tested for chemicals listed in Appendix C of the EA. If hazardous constituents are present, the materials would be removed from BLM lands and properly disposed.
14. Sedimentation devices will be used along roads and drill pads as directed by the BLM representatives. Devices may include, but are not limited to silt fence, excelsior bales, straw wattles, etc.
15. If an exploration well is found to be capable of production and if fresh ground water zones are encountered during exploration drilling, the Operator will install a groundwater monitoring well adjacent to the specific gas well. The groundwater wells will be completed to monitor the fresh ground water zone(s). If a groundwater well is installed, it will be monitored on a semi-annual basis for water level, total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, specific conductance, total dissolved solids, pH, sulfate, nitrate, nitrite, ammonia, methane, hydrogen sulfide, selenium and barium. Data reports will be submitted to the BLM within one month after the lab analyses are complete.
16. If a well produces water at volumes greater than 1,500 bpd after 60 days of continuous operation, and if this water is less than 2,000 mg/l TDS, the gas well would be shut in until it can be determined whether the source of the water is or is not interconnected with shallow water-bearing units or surface water.
17. Vegetation removal would be minimized by lopping and scattering slash to a depth of no more than 18 inches. Some material may be mulched for use on site during reclamation.
18. All pits, cellars, rat holes, or other holes unnecessary for further operations would be backfilled immediately after the drill rig is released.
19. To facilitate timely reclamation, reserve pits may need to be pumped of fluids. All enhanced evaporation of the reserve pit fluids shall have prior approval of the authorized officer. After reshaping the site, the topsoil material should be distributed to a uniform depth to allow establishment of desirable vegetation. The disturbed area would be scarified prior to placement of surface soil material.
20. Annual coordination with the BLM is required to avoid conflicting with the grazing, coal, recreation and other uses of the Coal Gulch Road.
21. With respect to bald and golden eagle nest sites and winter roosts which may be established:
  - a. No new permanent surface facilities or disturbances shall be located within a 1/4 mile radius buffer zone around each bald or golden eagle nest site.
  - b. No above ground activities will be allowed within a 1/2 mile radius buffer zone around each active eagle nest site from November 15 to July 30 for bald eagles, and around each active golden eagle nest site from February 1 to July 15.
  - c. No above ground activities will be allowed within a 1/4 mile radius of winter roosts between November 15 and March 15; development may be permitted at other periods. If periodic visits are required within the buffer zone after development, activity should be restricted to the hours of 10 a.m. and 2 p.m. from November 15 through March 15.

- d. Any proposed surface facilities, disturbances or activities (noted above) in, or adjacent to, these buffer zones will require approval from the BLM on a site-specific basis, after consultation with the USFWS.
22. Project-related personnel will ensure that equipment operators know that the removal, injury, defacement, or alteration of any object of archaeological or historic interest is a federal crime and may be punishable by fine and/or jail term.
23. The operator and the BLM will conduct a pre-use road condition assessment for affected BLM roads.
24. Any project-related damage to any roads must be repaired as soon as possible to avoid adverse impacts on other authorized road uses on BLM lands.
25. Streams will be crossed at right angles, and on as gentle a grade and slope as possible. Install all crossings in a manner to maintain stable channel conditions and favorable water quality and aquatic habitat as directed by the BLM.
26. Dust abatement will be required on all project-related roads. Water will be the primary dust control measure. Other methods may need to be used as directed by the USFS or BLM.
27. Disposal records of all waste streams must be current and well maintained. Copies of the records will be forwarded to the BLM at the completion of drilling.
28. Control and containment mitigation would be included in the SPCC Plan, Emergency Response Plan, and Safety Plan in the event of a release of a hazardous substance or material. The plans would be provided to BLM prior to construction onsite so approval could be completed prior to any disturbance operations.
29. The Operator will specifically address the following measures in the SPCC for handling of a leak, spill or release event:
  - a. Identification of the chemical parameters and sampling requirements to be analyzed in the event of a spill, leak or release, for each petroleum product or hazardous substance handled in or transported onto the drill sites;
  - b. How a spill would be prevented and/or how amount would be minimized from reaching surface water;
  - c. List the required contacts for federal, state, and local agencies regarding reportable spills or leaks;
  - d. How documentation will be maintained over time pertaining to the circumstances of releases, amount and duration of release, the measures taken to control the release, and the measures taken to minimize or mitigate the impacts from the release;
  - e. How released material that has not reached surface water will be recovered;
  - f. Plans to collect water samples documenting the duration and severity of any release that could reach surface water (near the release site, and at impacted downstream locations within the zone of impact).
30. All releases (unless the reportable spill quantity is less than 10 gallons) of any substance to soil or water would be immediately reported to BLM and USFS Compliance Officers (names will be provided

in the SPCC). Containment of the spill will occur immediately, clean up of a spill will occur within 3 days, or as soon as practicable and proof of cleanup provided for the record.

31. To further facilitate coordination with local emergency services, GEC would provide mapped locations of the proposed well sites, including GPS location (latitude/longitude) and MSDS sheets in the SPCC Plan, Fire Prevention Plan, Health and Safety Plan to the Federal agencies with responsible for drilling activities. A courtesy copy will be provided to the respective emergency services personnel, as applicable, in advance of any exploration drilling activities. In addition, the operator would have phones or radios onsite, as appropriate, to provide accessibility to emergency services.



NOTE: Thompson Creek 12-90 #1-35 is proposed on BLM lands and will be directionally drilled to a federal lease.

NOTE ON WELL NAMING CONVENTION

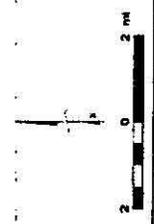
Wells are named by the following convention:

EX-OAKBRUSH FED 12-91 #1-20

Legend symbols include: Well, Proposed Well, and Well on Section.

Legend:

- Proposed Well
- BLM Public Lands
- Federal Minerals Lease
- Natl. Forest Boundary
- Proposed Road Access
- Ranger District Boundary



**Natural Gas Exploratory Drilling Project**

Map 1  
Decision Map

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
OFFER TO LEASE AND LEASE FOR OIL AND GAS

Serial No.

4-2154  
COC65529

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

Name: GUNNISON ENERGY CORP  
Street: 1801 BROADWAY #1200  
City, State, Zip Code: DENVER, CO 80202

This application/offer/lease is for: (Check only One)  PUBLIC DOMAIN LANDS

ACQUIRED LANDS (percent U.S. interest \_\_\_\_\_)

Surface managing agency if other than BLM: \_\_\_\_\_ Unit/Project \_\_\_\_\_

Legal description of land requested: \_\_\_\_\_ \*Parcel No.: \_\_\_\_\_ \*Sale Date (m/d/y): 11 / 8 / 2001

\*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.

T. \_\_\_\_\_ R. \_\_\_\_\_ Meridian \_\_\_\_\_ State \_\_\_\_\_ County \_\_\_\_\_

Amount remitted: Filing fee \$ \_\_\_\_\_

Rental fee \$ \_\_\_\_\_

Total acres applied for \_\_\_\_\_

Total \$ \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE

Land included in lease:

T. 12 S R. 90 W Meridian 6TH PM State Colorado County Gunnison  
Sec. 35 : Lot 1-20;  
Sec. 35 : N2;  
Sec. 36 : Lot 1-20;  
Sec. 36 : N2;

Total acres in lease 2,030.330

Rental retained \$ 3,046.50

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

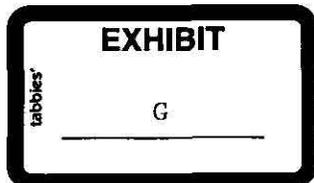
NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease:

Noncompetitive lease (ten years)

Competitive lease (ten years)

Other \_\_\_\_\_



THE UNITED STATES OF AMERICA

by Donna L. Kronauge  
(Signing Officer)

LAND LAW EXAMINER

(Title)

FEB 29 2002

(Date)

EFFECTIVE DATE OF LEASE

MAR 01 2002

NOTICE FOR LANDS OF THE NATIONAL FOREST SYSTEM  
UNDER JURISDICTION OF  
DEPARTMENT OF AGRICULTURE

The permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of Interior in the permit. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of an exploration plan by the Secretary of the Interior, (2) uses of all existing improvements, such as forest development roads, within and outside the area permitted by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by an exploration plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed

to: District Ranger, Paonia Ranger District  
Grand Mesa-Uncompahgre-Gunnison NF  
PO Box 1030, Paonia, CO 81428  
Phone: 970-527-4131

who is the authorized representative of the Secretary of Agriculture.

NOTICE

**CULTURAL AND PALEONTOLOGICAL RESOURCES** - The FS is responsible for assuring that the leased lands are examined to determine of cultural resources are present and to specify mitigation measures. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or operator, unless notified to the contrary by the FS, shall:

1. Contact the FS to determine if a site specific cultural resource inventory is required.
2. Engage the services of a cultural resource specialist acceptable to the FS to conduct a cultural resource inventory of the area of proposed surface disturbance. The operator may elect to inventory an area larger than the area of proposed disturbance to cover possible site relocation which may result from environmental or other considerations. An acceptable inventory report is to be submitted to the FS for review and approval at the time a surface disturbing plan of operation is submitted.

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FS-01

*Serial # COC-65529*

3. Implement mitigation measures required by the FS and BLM to preserve or avoid destruction of cultural resource values. Mitigation may include relocation of proposed facilities, testing, salvage, and recordation or other protective measures. All costs of the inventory and mitigation will be borne by the lessee or operator, and all data and materials salvaged will remain under the jurisdiction of the U.S. Government as appropriate.

The lessee or operator shall immediately bring to the attention of the FS and BLM any cultural or paleontological resources or any other objects of scientific interest discovered as a result of surface operations under this lease, and shall leave such discoveries intact until directed to proceed by FS and BLM.

**ENDANGERED OR THREATENED SPECIES** - The FS is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species listed or proposed for listing as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act of 1973 by detrimentally affecting endangered or threatened species or their habitats.

The lessee/operator may, unless notified by the FS that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the FS. An acceptable report must be provided to the FS identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.

NO SURFACE OCCUPANCY STIPULATION.  
WETLANDS/FLOODPLAINS/RIPARIAN AREAS

No surface occupancy or use is allowed on the lands defined as a Wetland, a Floodplain, or a Riparian area. These areas are generally shown on USGS quadrangle maps.

Wetlands, Floodplains and Riparian Areas of any defined drainage or location containing these specific ecosystem types come under jurisdiction of this stipulation. Drill pads, staging areas and storage sites will not be allowed in these areas. When road locations must occur in these areas, streams will be crossed at right angles and access across other areas will be held to a minimum. Streams will not be paralleled by roads through these areas.

Location of these areas which is more specific than can be identified on USGS topographical maps will come at the APD stage based on on-the-ground observations.

**For the purpose of:**

The management of wetlands and floodplains are subject to Executive Orders 11990 and 11988, respectively. The purpose of the EO's are to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and floodplains and to avoid direct or indirect support of new construction in wetlands wherever there is a practical alternative.

Also, it is recognized that there is a direct relationship between impacts on such areas and effects on water quality and aquatic ecosystems. There is a high risk of irreversible and irretrievable impacts on the latter with operation and developments in wetlands, floodplains and riparian areas.

Waivers, exceptions, or modifications (WEM's) to this stipulation will be considered only at the time operations are proposed, and will be subject to the Forest Land and Resource Management Plan in effect at the time of consideration, and will be subject to applicable regulatory and environmental compliance requirements. Granting of a WEM is a discretionary action which the operator should not routinely expect. The Forest Service reserves the right to impose other stipulations in the same area of this leasehold if a WEM is granted.

**Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)**

**TIMING LIMITATION STIPULATION  
BIG GAME WINTER RANGE**

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

1. Exploration, drilling and development activity will not be allowed during the period from December 1 to April 30.
2. New oil and gas roads on public lands will be closed yearlong to the public.

**On the lands described below:**

Winter ranges for big game (mule deer, elk, bighorn sheep and turkey). All or portions of Sections 35 and 36, T.12S, R90W, 6th PM as shown on the attached map prepared by Liane Mattson on 11/18/99, which becomes a part hereof. All lands which are classified as big game winter range fall within jurisdiction of this stipulation.

**For the purpose of (reasons):**

Preventing unnecessary stress on the wintering wildlife herds and causing an increase in mortality resulting from disturbances and habitat losses. These areas are critical for mule deer, bighorn sheep, elk and turkey during winter. They serve as key concentration areas which support and sustain these species and are extremely important for animal survival.

Waivers, exceptions, or modifications (WEM's) to this stipulation will be considered only at the time operations are proposed, and will be subject to the Forest Land and Resource Management Plan in effect at the time of consideration, and will be subject to applicable regulatory and environmental compliance requirements. Granting of a WEM is a discretionary action which the operator should not routinely expect. The Forest Service reserves the right to impose other stipulations in the same area of this leasehold if a WEM is granted.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

**CONTROLLED SURFACE USE STIPULATION  
MODERATE GEOLOGIC HAZARDS**

Surface occupancy or use is subject to the following special operating constraints.

Special interdisciplinary team analysis and mitigation plans detailing construction and mitigation techniques will be required on areas having moderate geologic hazards. (Interdisciplinary team disciplines could include: geotechnical engineer, soils engineer, roads engineer, oil and gas specialist and reclamation specialist.) Attributes constituting moderate geologic hazard include stabilized earthflows, stabilized mudflows and stabilized landslides; slopes adjacent to failed slopes or active earthflows, mudflows or landslides and avalanche chutes; areas of rockfall; flash flood zones; and areas with potential mining related problems (i.e., subsidence, acid drainage).

**On lands described below:**

Portions of Sections 35 and 36, T12S., R90W, 6th PM as shown on the attached map prepared on 11/18/99 by Liane Mattson, which becomes a part hereof. Any area within the leasehold which is identified as having moderate geologic hazard falls under jurisdiction of this stipulation.

**For the purpose of:**

To insure the stability of facilities required (roads, pipelines, drillpads, etc.) during the oil and gas operations and to insure the stability of lands adjacent to these facilities.

Waivers, exceptions, or modifications (WEM'S) to this stipulation will be considered only at the time operations are proposed, and will be subject to the Forest Land and Resource Management Plan in effect at the time of consideration, and will be subject to applicable regulatory and environmental compliance requirements. Granting of a WEM is a discretionary action which the operator should not routinely expect. The Forest Service reserves the right to impose other stipulations in the same area of this leasehold if a WEM is granted.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1650 and 2820.)

CSU-MGH 2/94

**CONTROLLED SURFACE USE STIPULATION  
SLOPES 40-60%**

Surface occupancy or use is subject to the following special operating constraints.

Special inter-disciplinary team analysis and mitigation plans detailing construction and mitigation techniques will be required on areas with slopes ranging from 40-60%. (Inter-disciplinary team disciplines could include engineering, soil scientist, hydrologist, landscape architect, reclamation specialist and oil and gas specialist.)

Mitigation may include use of erosion control cloths, mats, geoweb soil support materials, lifting and saving local native vegetation in chunks of sod to be later placed over disturbed areas, reseeding disturbed banks with stabilizing seed mix, use of chemical stabilizers, tackifiers and blankets and careful design of surface water flow.

**On lands described below:**

All or portions of Sections 35 and 36, T12S., R90W, 6TH PM as shown on the attached map prepared on 11/18/99 by Liane Mattson which becomes a part hereof. Any area within the leasehold which has slopes ranging from 40-60% falls under jurisdiction of this stipulation.

**For the purpose of:**

Minimizing potential for soil loss, mass land movement, revegetation failure and unacceptable visual impairment.

Waivers, exceptions, or modifications (WEM'S) to this stipulation will be considered only at the time operations are proposed, and will be subject to the Forest Land and Resource Management Plan in effect at the time of consideration, and will be subject to applicable regulatory and environmental compliance requirements. Granting of a WEM is a discretionary action which the operator should not routinely expect. The Forest Service reserves the right to impose other stipulations in the same area of this leasehold if a WEM is granted.

**Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1650 and 2820.)**

**CONTROLLED SURFACE USE STIPULATION  
BIG GAME WINTER RANGE**

Surface Occupancy or use is subject to the following special operating constraints.

Limit road use to periods when animals are not present on the winter range. Restrict road use to operators. Recontour and revegetate to prior existing conditions (to extent possible) new roads when work is complete.

Operation and maintenance of production facilities will be scheduled to minimize adverse effects on big game (Elk, Mule Deer, Big Horn Sheep, and Turkey) from December 1 to April 30.

On the lands described below:

All or portions of Sections 35 and 36, T12S, R90W, 6th PM as shown on the attached map created by Liane Mattson on 11/18/99 which becomes a part hereof. Any area within the leasehold which is classified as Big Game winter range for one of the 4 species listed above falls under jurisdiction of this stipulation.

For the purpose of (reasons):

Protecting big game winter range for Elk, Mule Deer, Big Horn Sheep, and Turkey. These ranges are extremely important for animal survival during winter. Disturbances and habitat losses may place unnecessary stress on wintering wildlife herds and cause increase in herd mortality.

Waivers, exceptions, or modifications (WEMs) to this stipulation will be considered only at the time operations are proposed, and will be subject to the Forest Land and Resource Management Plan in effect at the time of consideration, and will be subject to applicable regulatory and environmental compliance requirements. Granting of a WEM is a discretionary action which the operator should not routinely expect. The Forest Service reserves the right to impose other stipulations in the same area of the leasehold if a WEM is granted.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

TL-SWH 2/94

Serial No. C-19991014-8

Parcel No. COC-65529

**LEASE NOTICE**

**Roadless Area Conservation Rule**

Lands contained in this lease may be subject to the rule entitled "Special Areas; Roadless Area Conservation Rule; Final Rule" published in the Federal Register on January 12, 2001.

**FURTHER INFORMATION:**

In accordance with the memorandum "Regulatory Review Plan" issued from the Assistant to the President and Chief of Staff on January 20, 2001 and published in the Federal Register on January 24, 2001, the effective date of the above-referenced rule is temporarily delayed from March 13, 2001 to May 12, 2001.

SOMERSET SPRINGFIELD UNITED STATES  
 COLORADO-GUNNISON CO. DEPARTMENT OF THE INTERIOR  
 7.5 MINUTE SERIES (TOPOGRAPHIC) GEOLOGICAL SURVEY

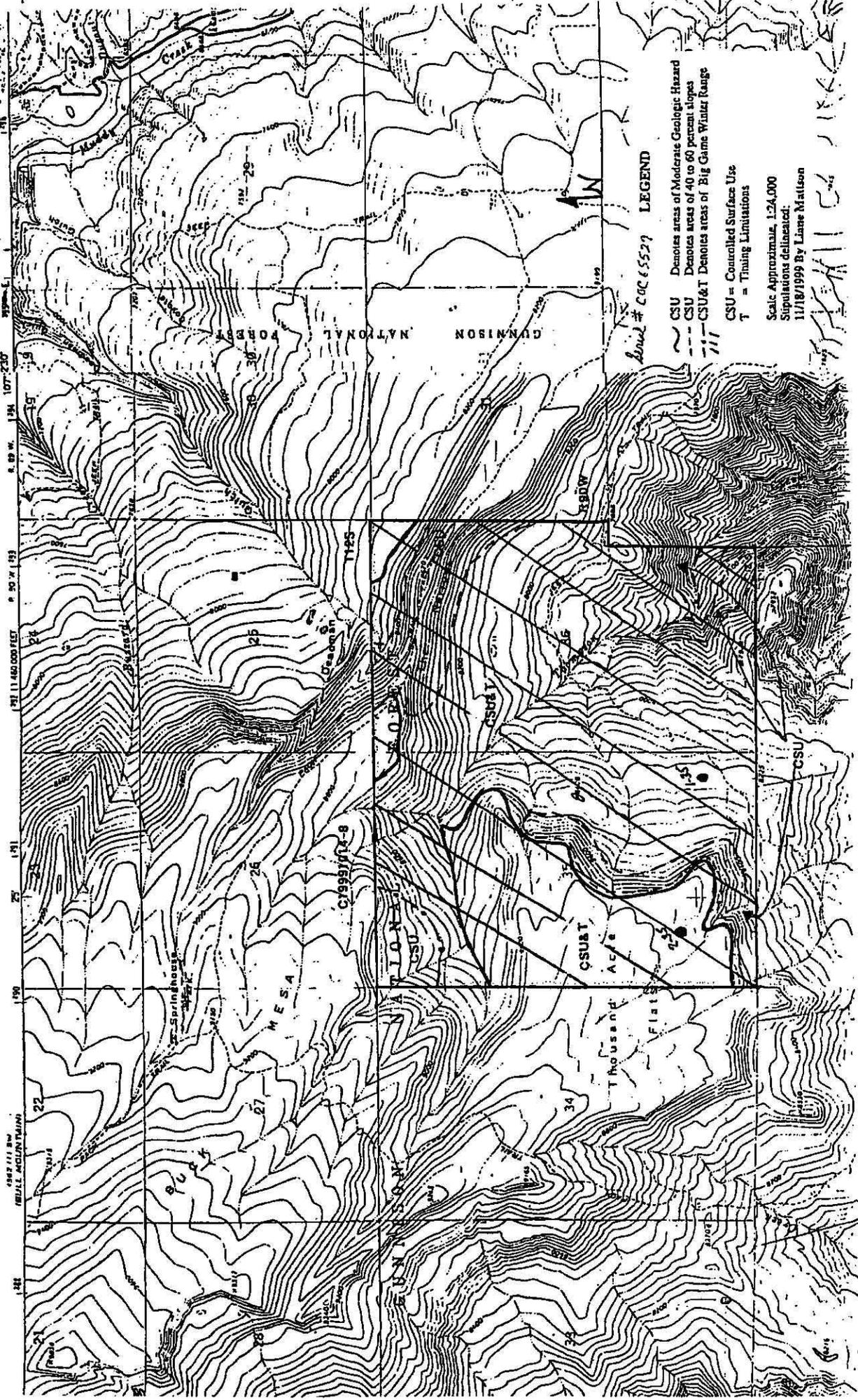


EXHIBIT UB-10

Lease Number: COC65529

COALBED METHANE/COAL MINING STIPULATION

On the lands described below:

T. 0120S., R. 0900W., 6<sup>th</sup> PM

Section 35: Lot 1-20;

Section 35: N2;

Section 36: Lot 1-20;

Section 36: S2NE,NW;

For the purpose of (reasons):

To protect the maximum economic recovery and safety of coal mining where the overburden is 3500 feet or less.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

**EXCEPTION CRITERIA:** Within the Paonia-Somerset Known Recoverable Coal Resource Area (KRCRA), coal and oil and gas leasing and development will be managed consistent with land use plans and lease terms. More specifically, the portions of the KRCRA where the overburden above the B-Seam of the Mesa Verde coals is less than 3500 feet will be managed primarily for the exploration and development of the coal resources. Oil and gas operators anticipating exploration or development operations are encouraged to consult and coordinate their activities with the affected coal operators. In the event that the oil and gas and coal operators are unable to reach agreement on proposed oil and gas exploration or development, the BLM authorized officer will intervene and use all pertinent lease terms, regulations, and policy to determine what course of action is in the public's interest. However, under no circumstances will the BLM approve any oil and operations that compromise maximum economic coal recovery or the safety of underground mining operations.

4-2150

Form 3100-11b  
October 1992

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Serial No.

COC65117

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (reverse) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

Name **R L WRIGHT**  
Street **PO BOX 11841**  
City, State, Zip Code **SALT LAKE CITY, UT 84147-**

This application/offer/lease is for: (Check only One)  PUBLIC DOMAIN LANDS  ACQUIRED LANDS (percent U.S. interest \_\_\_\_\_)  
Surface managing agency if other than BLM: \_\_\_\_\_ Unit/Project \_\_\_\_\_  
Legal description of land requested: \_\_\_\_\_ \*Parcel No.: \_\_\_\_\_ \*Sale Date (m/d/y): 8 / 9 / 2001

\*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.

T. \_\_\_\_\_ R. \_\_\_\_\_ Meridian \_\_\_\_\_ State \_\_\_\_\_ County \_\_\_\_\_

Amount retained: Filing fee \$ \_\_\_\_\_ Rental fee \$ \_\_\_\_\_ Total acres applied for \_\_\_\_\_  
Total \$ \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE

Land included in lease:

T. 13 S R. 90 W Meridian 6TH PM State Colorado County Gunnison  
Sec. 1 : Lot 14-19; Sec. 12 : SWNE,S2NW;  
Sec. 2 : Lot 10-20;  
Sec. 3 : Lot 13,14,17,18;  
Sec. 5 : Lot 7-10,14-19;  
Sec. 6 : Lot 8-17;  
Sec. 10 : Lot 1,2;  
Sec. 11 : Lot 1-8;  
Sec. 12 : Lot 2-4;

Total acres in lease 2,044.380  
Rental retained \$ 3,067.50

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (except helium) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Term and primary term of lease:

Noncompetitive lease (ten years)

Competitive lease (ten years)

Other \_\_\_\_\_



THE UNITED STATES OF AMERICA

by Sharon [Signature]

LAND LAW EXAMINER (Title)

AUG 30 2001 (Date)

(Title)

SEP 01 2001 (Date)

EFFECTIVE DATE OF LEASE

EXHIBIT UB-10

Lease Number: COC65117

COALBED METHANE/COAL MINING STIPULATION

On the lands described below:

ALL LANDS

For the purpose of (reasons):

To protect the maximum economic recovery and safety of coal mining where the overburden is 3500 feet or less.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Exception Criteria:

Within the Paonia-Somerset Known Recoverable Coal Resource Area (KRCRA), coal and oil and gas leasing and development will be managed consistent with land use plans and lease terms. More specifically, the portions of the KRCRA where the overburden above the B-Seam of the Mesa Verde coals is less than 3500 feet will be managed primarily for the exploration and development of the coal resources. Oil and gas operators anticipating exploration or development operations are encouraged to consult and coordinate their activities with the affected coal operators. In the event that the oil and gas and coal operators are unable to reach agreement on proposed oil and gas exploration or development, the BLM authorized officer will intervene and use all pertinent lease terms, regulations, and policy to determine what course of action is in the public's interest. However, under no circumstances will the BLM approve any oil and gas operations that compromise maximum economic coal recovery or the safety of underground mining operations

EXHIBIT UB-04

Lease Number: COC65117

TIMING LIMITATION STIPULATION

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

December 1 - April 30

On the lands described below:

PM: 6 T: 0130S R: 0900W  
Section 12: SWNE, S2NW;  
Section 12: 2-4;  
Section 11: 1-8;  
Section 10: 1,2;  
Section 6: 8,9,14,15;  
Section 5: 8,9,14-19;  
Section 3: 14,17,18;  
Section 2: 13,14,17-20;  
Section 1: 14-19;

For the purpose of (reasons):

To protect crucial deer and elk winter ranges.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

EXHIBIT UB-03

Lease Number: COC65117

TIMING LIMITATION STIPULATION

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

December 1 - April 30

On the lands described below:

PM: 6 T: 0130S R: 0900W  
Section 12: SWNE, S2NW;  
Section 12: 2-4;  
Section 11: 5-8;  
Section 10: 2;

For the purpose of (reasons):

To protect bald eagle winter concentration areas.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Table 2-7  
Lease Stipulations in Effect for Federal Oil and Gas Leases Related to the Proposed Project

Lease Numbers	Comments
COC-68117	Hawksnest
COC-65529	Thompson Creek
COC-65534	Hubbard Creek
COC-65534	Oakbrush
COC-65535	Powerline
COC-65537	Bull Park
C-13563A	Leon Lake #4
C-13563A	Leon Lake #5
	None.
	Applies to Sections 35 and 36 in T12S and 90W; Sections 31 and 32 in T12S, T91W; and Sections 1, 2, 3, 5, 6, 10-12, T13S, R90W.
	Applies to portions of Sections 35 and 36 in T12S and 90W and Sections 31 and 32 in T12S, T91W.
	Applies to Sections 10-12, T13S, R90W.
	Special interdisciplinary team analysis and potential mitigation plans is required for surface occupancy or use in areas with moderate geologic hazards.
	None.
	Special interdisciplinary team analysis and potential mitigation plans would be required for surface occupancy or use in areas with slopes ranging from 40 to 60 percent.
	None.

Table 2-7 (Continued)

Lease Numbers	Comments
COC-65117	Hawknest
COC-6529	Thompson Creek <sup>1</sup>
COC-65534	Hubbard Creek
COC-65534	Oakbrush
COC-65535	Powerline
COC-65537	Bull Park
C-13653A	Leon Lake #4
C-13653A	Leon Lake #5
	Portions of these leases contain parts of IRA, which would be affected by the RACR. If implemented, the RACR would prohibit road construction and reconstruction in IRAs that overlap minerals leases issued after January 12, 2001. None of the proposed well sites are within the boundaries of an IRA.
	Oil and gas development must allow maximum economic coal recovery and maintain safe underground mining operations.
	Exception would be evaluated for the Leon Lake #5 site, which is located approximately 330 feet from FR 127.
	None.
	Exception would be evaluated for the Leon Lake #4 site (located approximately 460 feet from the high-water line of an unnamed pond).
	Exception would be evaluated for the Leon Lake #5 (located approximately 97 feet from an intermittent stream).
	None.
	None.
	None.

<sup>1</sup>The Thompson Creek site is not located on a lease, and thus requires a ROW from the BLM. It targets potential gas held in Lease COC-65529, but proposes to drill from off-lease.