Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2006 MAY 4 AM 9 04
RECEIVED
070 FARMINGTON NM

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. Lease Serial No.: Contract 458

6. If Indian, Allottee or Tribe Name: Jicarilla Apache Nation

7. If Unit or CA Agreement, Name and No:

1a Type of Work: [X] DRILL [ ] REENTER

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

8. Lease Name and Well No: Jicarilla 458-08 13

2 Name of Operator: **Black Hills Gas Resources, Inc.**
E-mail: lbenally@bhep.com
Contact: Lynn Benally

9. API Well No.: 30-039-29894

3a. Address: P.O. Box 249, Bloomfield, NM 87413

3b Phone No *(include area code)*: 505-634-1111

10. Field and Pool, or Exploratory: East Blanco / Pictured Cliffs

4 Location of Well *(Report location clearly and in accordance with any State Requirements.*)*
At surface: 1,000' FNL 2,300' FEL NW /4 NE /4 Lot 2
Lat. 36.83096 Long: 107.17307

11 Sec., T., R., M., or Blk. and Survey or Area: B Sec. 8 T 30N R 3W

At proposed production zone

14 Distance in miles and direction from nearest town or post office *
Well is located approximately 52 miles east of Bloomfield, New Mexico.

12. County or parish: Rio Arriba

13. State: New Mexico

15 Distance from proposed location to nearest property of lease line, ft. (Also nearest Drig, unit line, if any)	16. No of acres in lease	17 Spacing Unit dedicated to this well
Unit= n/a Lease= ±2,300'	2560.00	~~320~~ 167.31 NE/4

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OIL CONS. DIV.
DIST. 3

18. Distance from proposed location to nearest well, drilling, completed or applied for, on this lease, ft.	19. Proposed depth	20 BLM/BIA Bond No. on file
± 1,300' Jicarilla 458-8 6	4,000' TVD	NMB000230

21 Elevations (Show whether DF, KDB, RT, GL, etc)	22. Approximate date work will start *	23 Estimated duration
7,151 ' GR	June 5, 2006	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 location is on National Forest System 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	Name *(Printed/Typed)*	Date
Kathy L Schneebeck	Kathy L. Schneebeck, 303-820-4480	May 3, 2006

Title: Permit Agent for Black Hills Gas Resources, Inc.

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Manuel Gomez		8/30/07
Title: AFM	Office: FFO	

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. Section1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOCD 9-6-07

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

2006 MAY 4 AM 9 04

RECEIVED

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies
RCVD AUG 31 '07
☐ AMENDED REPORT
OIL CONS. DIV.
DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-29894	72400	East Blanco / Pictured Cliffs

[4] Property Code	[5] Property Name	[6] Well Number
22182	JICARILLA 458-08	13

[7] OGRID No.	[8] Operator Name	[9] Elevation
013925	BLACK HILLS GAS RESOURCES	7151

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	8	30-N	3-W	2	1000	NORTH	2300	EAST	RIO ARRIBA

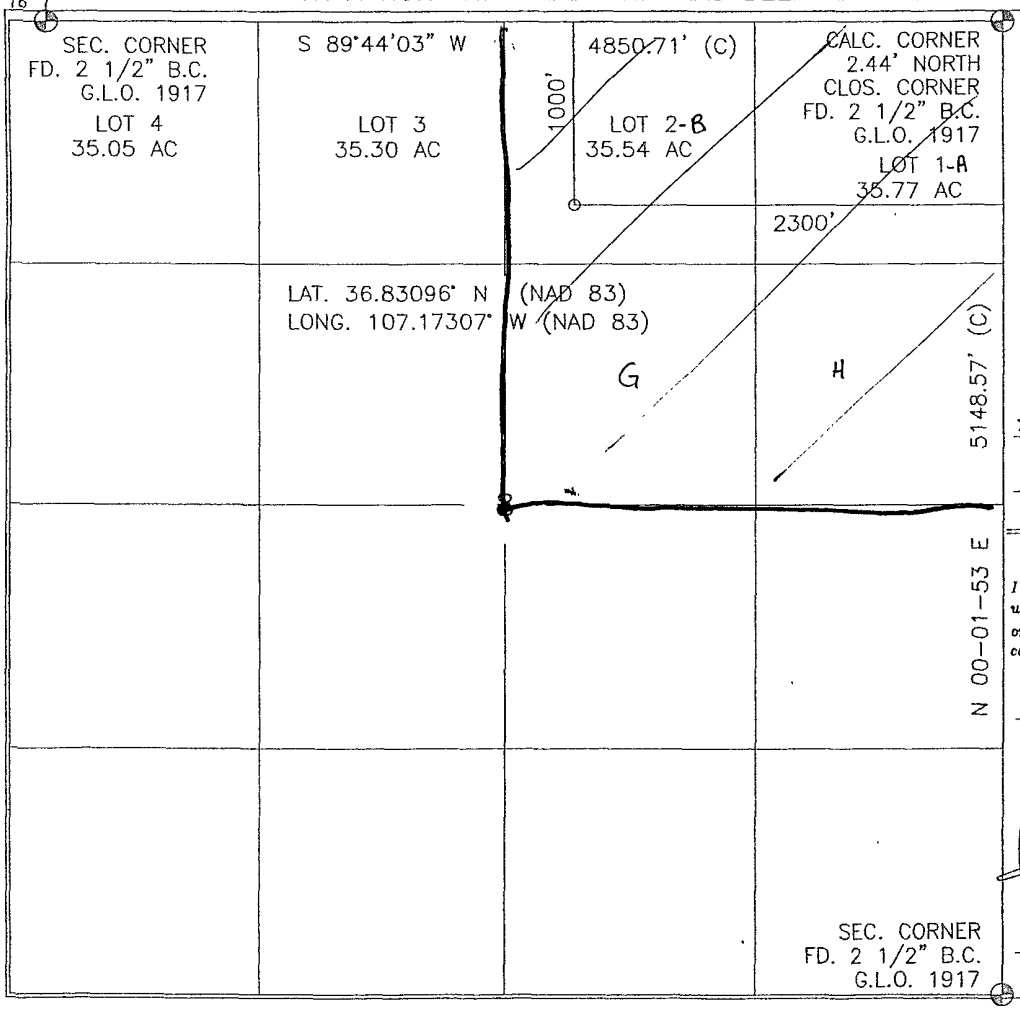
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
~~160~~ 161.31 acres - NE/4			R-12707-infill

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Kathy L. Schneebeck — May 3, 2006
Signature — Date

Kathy L. Schneebeck
Printed Name

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 19, 2005
Date of Survey

Signature and Seal of Professional Surveyor:

JOHN A. VUKONICH
NEW MEXICO
14831
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 14831

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 30, 2005

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Black Hills Gas Resources, Inc. Telephone: 505-634-1111 e-mail address: lbenally@bhep.com
Address: P.O. Box 249, Bloomfield, NM 87413
Facility or well name. Jicarilla 458-08 13 API #: 30-039-29894 U/L or Qtr/Qtr NW NE – Lot 2 Sec 8 T 30N R 3W
County: Rio Arriba Latitude 36.83096 Longitude 107 17307 NAD: 1927 ☐ 1983 ☒ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☒

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 15 mil Clay ☐ Pit Volume ±17,811 bbl	Volume: ____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	10 points

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

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OIL CONS. DIV.
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: 05/03/06
Printed Name/Title Kathy L. Schneebeck – Permit Agent for Black Hills Gas Resources, Inc. Signature Kathy L. Schneebeck

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title Deputy Oil & Gas Inspector, District #3 Signature _____ Date: SEP 06 2007

Black Hills Gas Resources, Inc.
Jicarilla 458-08 13
1,000' FNL 2,300' FEL (NW/4 NE/4) – Lot 2
Sec. 8 T30N R3W
Rio Arriba County, New Mexico
Lease: Contract 458

DRILLING PROGRAM

This Application for Permit to Drill (APD) was initiated under the NOS process as stated in Onshore Order No. 1 and supporting Bureau of Land Management (BLM) documents. This NOS process included an onsite meeting, which was held on February 15, 2006, as determined by Bureau of Indian Affairs (BIA) and Jicarilla Oil and Gas Administration (JOGA), and at which time the specific concerns of Black Hills Gas Resources, Inc. (Black Hills), BIA and JOGA were discussed.

SURFACE FORMATION – San Jose

GROUND ELEVATION – 7,151'

ESTIMATED FORMATION TOPS - (Water, oil, gas and/or other mineral-bearing formations)

San Jose	Surface	Sandstone, shales & siltstones
Nacimiento	2,004'	Sandstone, shales & siltstones
Ojo Alamo	3,145'	Sandstone, shales & siltstones
Kirkland	3,362'	Sandstone, shales & siltstones
Fruitland Coal	3,617'	Sandstone, shales & siltstones
Pictured Cliffs	3,711'	Sandstone, shales & siltstones
Lewis	3,809'	Sandstone, shales & siltstones
TOTAL DEPTH	4,000'	

Estimated depths of anticipated fresh water, oil, or gas:

Tertiary		
San Jose	surface	Gas
Nacimiento	2,004'	Gas
Ojo Alamo	3,145'	Gas
Fruitland Coal	3,617'	Gas
Pictured Cliffs	3,711'	Gas

CASING PROGRAM

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0' – 300'	12-1/4"	9-5/8"	J-55 36# ST&C New	To surface (±305 sxs Class B)
0' – T.D.	8-3/4"	7"	N-80 23# LT&C New	TD to surface (±792 sxs lite or 65:35 poz and ±166 sxs 50:50 poz)*

* Actual cement volume to be determined by caliper log.

Yields: Class B yield = 1.18 ft^3/sx
65:35 Poz yield = 1.62 ft^3/sx
50:50 Poz yield = 1.26 ft^3/sx

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and protected.

PRESSURE CONTROL

BOPs 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 1,000 psi. Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 1,000 psi. All casing strings will be pressure tested to 0.22 psi/ft. or 1,000 psi, whichever is greater, not to exceed 70% of internal yield.

BOP to be either double gate rams or an annular preventor as per Onshore Order No. 2.

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 2M 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

0'	300'	Fresh water – M.W. 8.5 ppg, Vis 30-33
300'	TD	Fresh water - Low solids non-dispersed M.W. 8.5 – 9.2 ppg Vis – 28 – 50 sec W.L. 15cc or less

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite.

AUXILIARY EQUIPMENT

A) A Kelly cock will be kept in the drill string at all times
B) Inside BOP or stab-in valve (available on rig floor)
C) Mud monitoring will be visually observed

LOGGING, CORING, TESTING PROGRAM

A)	Logging:	DIL- CNL-FDC-GR - TD - BSC (GR to surface) Sonic (BSC to TD)
B)	Coring:	None
C)	Testing:	Possible DST – None anticipated. Drill stem tests may be run on shows of interest

ABNORMAL CONDITIONS

A)	Pressures:	No abnormal conditions are anticipated Bottom hole pressure gradient – 0.31 psi/ft
B)	Temperatures:	No abnormal conditions are anticipated
C)	H_2S:	See attached H_2S plan in the event H_2S is encountered.
D)	Estimated bottomhole pressure:	1,240 psi

ANTICIPATED START DATE

June 5, 2006

COMPLETION

The location pad will be of sufficient size to accommodate all completion activities and equipment. A string of 2-3/8" J-55 4.7#/ft tubing will be run for a flowing string. A Sundry Notice will be submitted with a revised completion program if warranted.

Hydrogen Sulfide Drilling Operations Plan

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H_2S Safety Equipment and Systems

Note: All H_2S safety equipment and systems, if necessary, will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S.

A. Well control equipment:

1. Choke manifold with a minimum of one remote choke.
2. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

B. Protective equipment for essential personnel:

1. Mark II Surviveair 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

C. H_2S detection and monitoring equipment:

1. Two portable H_2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S levels of 10 ppm are reached.

D. Visual warning systems:

1. Wind direction indicators as shown on well site diagram.

2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate. See example attached.

E. Mud program:

1. The mud program has been designed to minimize the volume of H_2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

F. Metallurgy:

1. All drill strings, casings, tubing, wellhead, blowout preventors, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H_2S service.

2. All elastomers used for packing and seals shall be H_2S trim.

G. Communication:

1. Cellular telephone communications in company vehicles.

H. Well testing:

1. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H_2S environment will use the closed chamber method of testing.

WELL PAD DIAGRAM

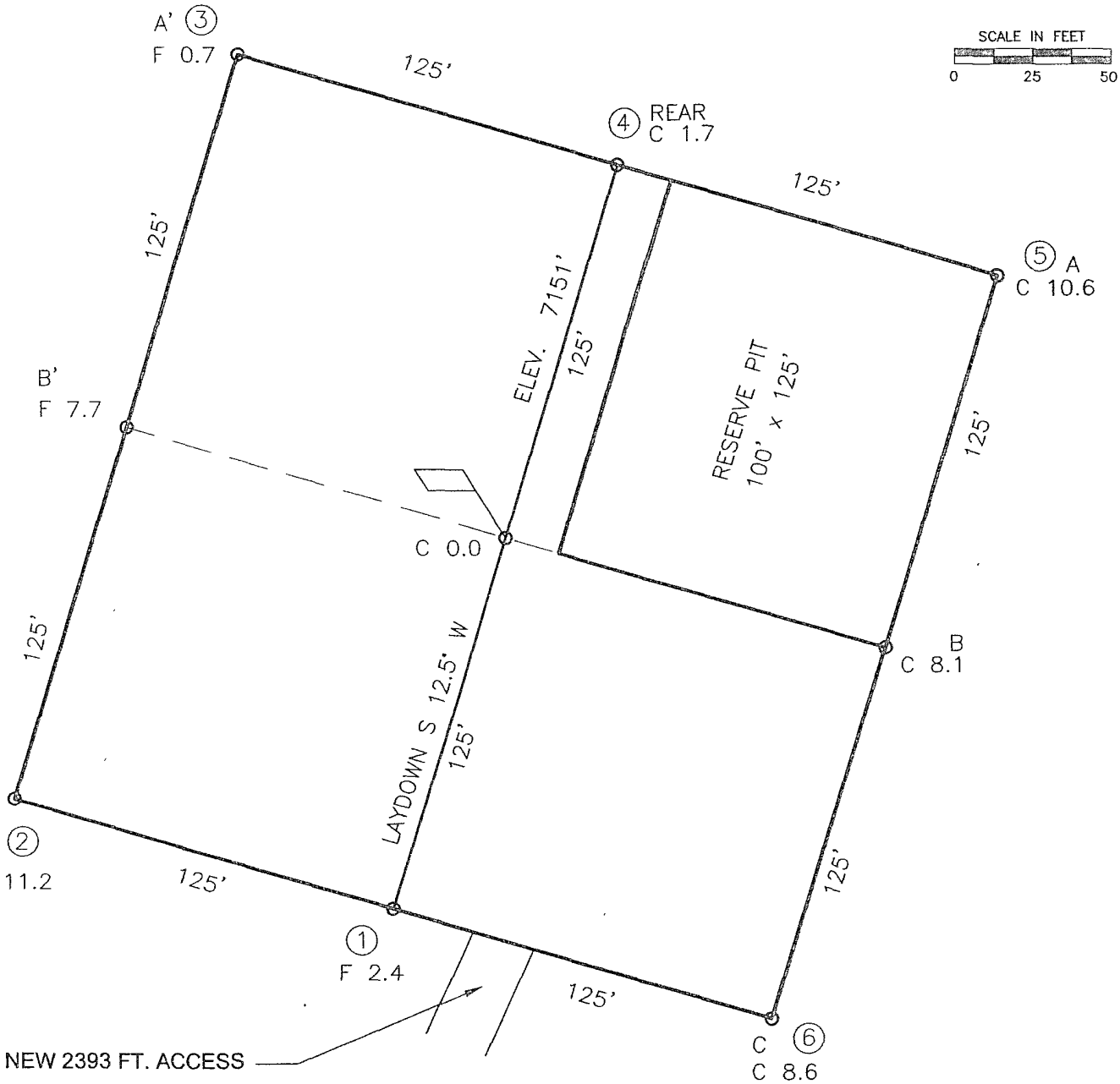
COMPANY: BLACK HILLS GAS RESOURCES

LEASE: JICARILLA 458-08 No. 13 a.k.a. JICARILLA 30-03-08 No. 13

FOOTAGE: 1000 FNL 2300 FEL

SEC.: 8 TWN: 30-N RNG: 3-W NMPM

ELEVATION: 7151'



SCALE IN FEET

0 25 50

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

REVISION:	DATE:	REVISED BY:
CHANGE NAME	04/21/06	A.G.

Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. Box 15068 • Farmington, NM 87401
Phone (505) 326-1772 • Fax (505) 326-6019
NEW MEXICO L.S. 14831

DRAWN BY: B.L.	CADFILE: MN443PLB
ROW#: MN443	DATE: 04/17/05

WELL PAD CROSS-SECTIONAL DIAGRAM

COMPANY: BLACK HILLS GAS RESOURCES

LEASE: JICARILLA 458-08 No. 13 a.k.a. JICARILLA 30-03-08 No. 13

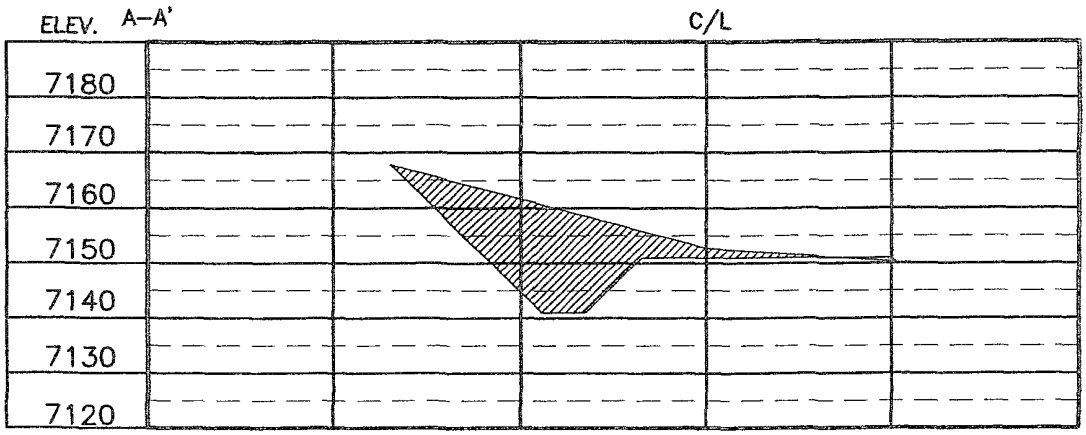
FOOTAGE: 1000 FNL, 2300 FEL

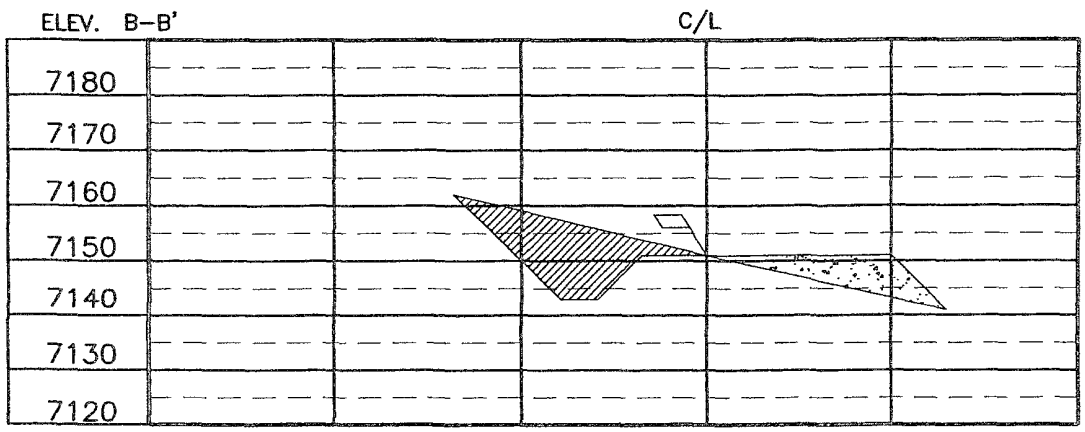
SEC.: 8, TWN: 30-N, RNG: 3-W, NMPM

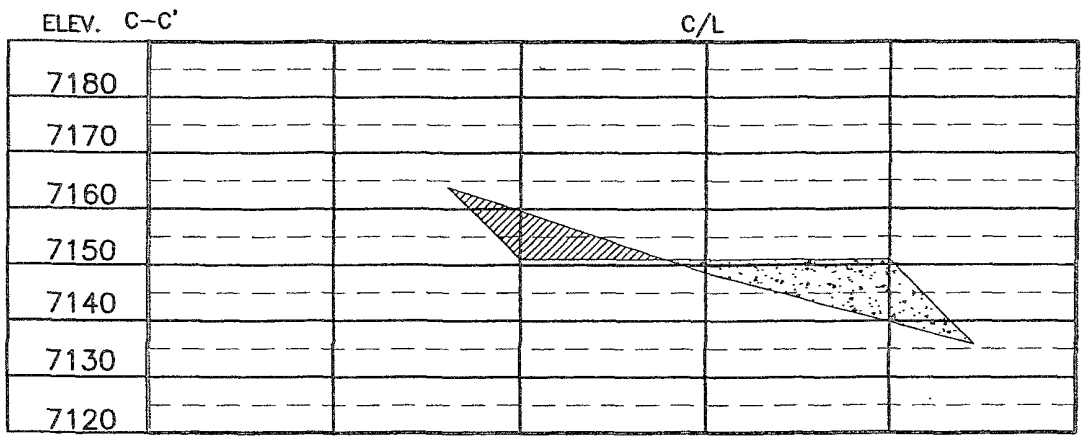
ELEVATION: 7151'

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.







REF. DWG. MN443PL8 WELL PAD DIAGRAM

REVISION: CHANGE NAME DATE: 04/21/06 REVISED BY: A.G.

Daggett Enterprises, Inc.
Surveying and Oil Field Services
P. O. Box 15068 • Farmington, NM 87401
Phone (505) 326-1772 • Fax (505) 326-6019
NEW MEXICO L.S. 14831

DRAWN BY: B.L. ROWE: MN443 CADFILE: MN443CF8 DATE: 04/17/05

2-M SYSTEM

Black Hills Gas Resources, Inc.

ANNULAR PREVENTOR MAY BE SUBSTITUTED FOR DOUBLE GATE PREVENTORS
BOP PRESSURE TEST TO 1,000 PSI