

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

**SUBMIT IN TRIPLICATE** - Other Instructions on reverse side.

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
**Black Hills Gas Resources**

3a. Address **3200 N 1st Street PO Box 249 Bloomfield, NM 87413** 3b. Phone No. (include area code) **505-634-1111 ext 28**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2,097' FSL & 615" FWL NW/SW Section 9 T29N R2W Unit L**

5. Lease Serial No.  
**IMDA 701-98-0013, Tract 4**

6. If Indian, Allottee, or Tribe Name  
**Jicarilla Apache Tribe**

7. If Unit or CA. Agreement Name and/or No.

8. Well Name and No.  
**Jicarilla 29-02-09 #1**

9. API Well No.  
**30-039-26094**

10. Field and Pool, or Exploratory Area  
**East Blanco Pictured Cliffs**

11. County or Parish, State  
**Rio Arriba, New Mexico**

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

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

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

**Black Hills would like to initiate a same zone workover as follows: MIRU workover rig. TOH with rods, pump and tbg. Perf additional San Jose at about 1177-1179, 1190-1192; 1196-1198, 1200-1202, 1211-1213, 1219-1222' with 2spf, and 1324-1330' with 4spf, 50 holes total. Est BHP 150 psi. Break down and ball off perfs 1177-1222' with about 630 gal 7 1/2% HCL and 39 RCN ball sealers. Frac San Jose perfs 1177-1222' with about 64,500# 16/30 PolarProp in 75Q N2 slick foam. Land 2 3/8" production tbg at about 1610'. Run 3/4" rods and 1 1/2" RWAC pump. Release workover rig.**

RCVD JAN 5 '10

OIL CONS. DIV.

DIST. 3

CONDITIONS OF APPROVAL  
Adhere to previously issued stipulations.

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

Name (Printed/ Typed)

**Daniel Manus**

Title **Regulatory Technician**

Signature

Date

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

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 any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOC

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this

form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13* - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or

present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

## NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c); and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3 - 2, 3162.3 - 3, 3162.3 - 4.

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency -sponsored information collection unless it displays a currently valid OMB control number.

## BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau information Collection Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240

**Jicarilla 29-02-09 #1**  
**CURRENT Wellbore Diagram**  
 API # 30-039-26094  
 UNIT L NW SW Sec 9, T29N, R02W Rio Arriba, NM  
 Spud Date: 2-04-1999

12/17/2009

**SURF CSG**

8 5/8" 24# @553'  
 KB, TOC surf

**PROD CASING**

5 1/2" 15.5# K-55  
 @3861'. Cmt; STG  
 1, 135 sx 50/50 poz,  
 circulate cement to  
 pit, STG 2, 250 sx  
 65/35 poz + 350 sx  
 50/50 poz. Circ  
 cement to pit.

KB= 13

**TUBING DETAIL**

TBG Hanger	0.55
52 JTS 2 3/8 TBG	1601.57
2 3/8 STD SN	1.1
2 3/8 XO 2 7/8	0.56
2 7/8 PERF'D PUP JT	4.01
JT 2 7/8 TBG	30.01
JT 2 7/8 TBG	28.88
2 7/8 BP	0.5
EOT	1680
1 1/4" x 22' polish rod	
4', 4', 6' ponies Rod sub	
57 3/4" rods	
6 - 1 1/2" K-bars	
2 x 1 1/2 x 18 RWAC pump 18'	
w/ 20' MS dip tube w/ 2 - 1/4 x 6" slots 20'	

San Jose Perfs: 1296-1311, 1324-1336, 1349-1366'  
 (GR/CCL) = 1302-1317, 1330-1342, 1355-1372 (EL), 4SPF.  
 Perf only, no stimulation.

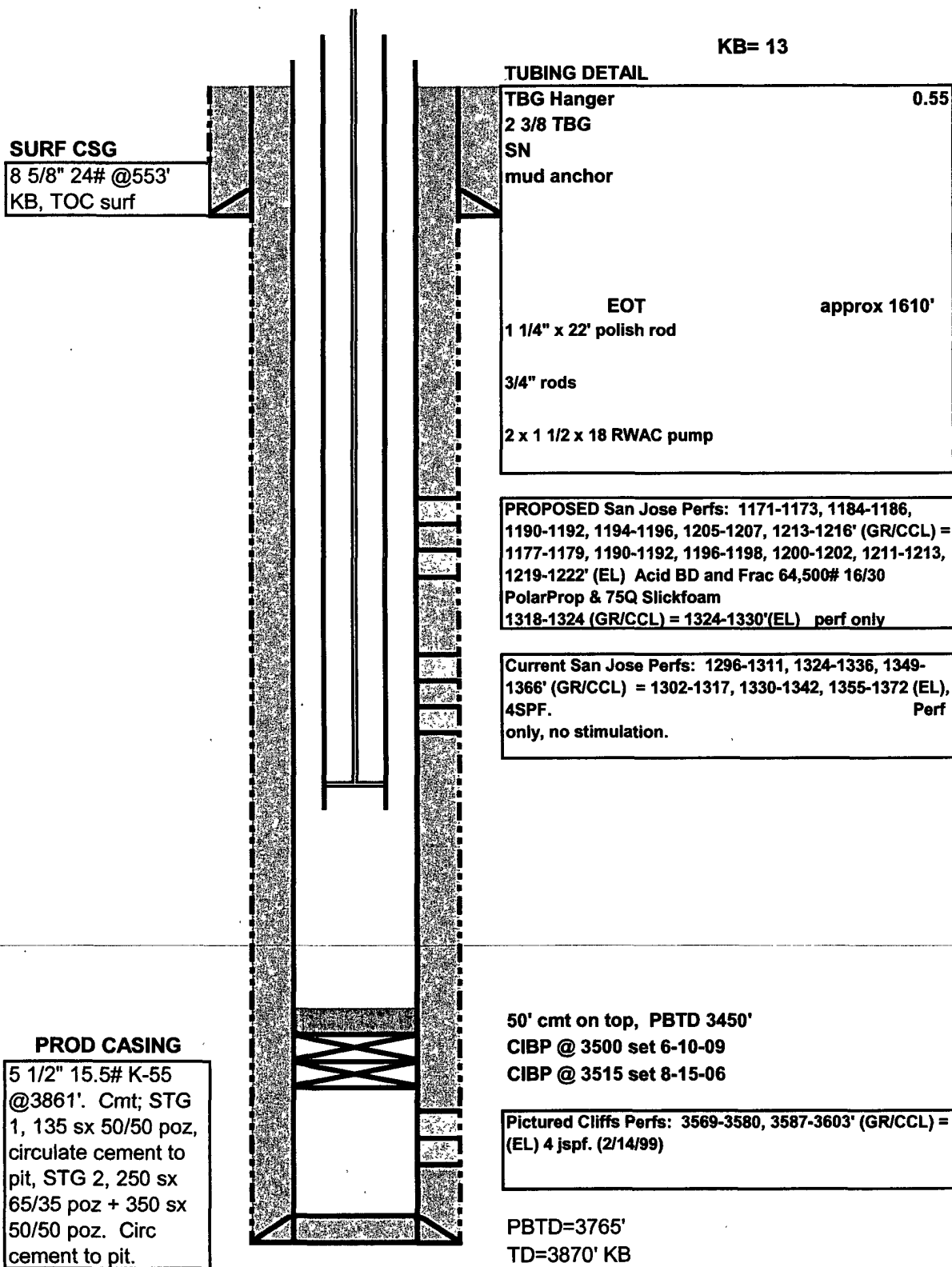
50' cmt on top, PBTB 3450'  
 CIBP @ 3500 set 6-10-09  
 CIBP @ 3515 set 8-15-06

Pictured Cliffs Perfs: 3569-3580, 3587-3603' (GR/CCL) =  
 (EL) 4 jsf. (2/14/99)

PBTB=3765'  
 TD=3870' KB

**Jicarilla 29-02-09 #1**  
**PROPOSED Wellbore Diagram**  
 API # 30-039-26094  
**UNIT L NW SW Sec 9, T29N, R02W Rio Arriba, NM**  
**Spud Date: 2-04-1999**

12/17/2009



KB= 13

**SURF CSG**

8 5/8" 24# @553'  
 KB, TOC surf

**TUBING DETAIL**

TBG Hanger 0.55  
 2 3/8 TBG  
 SN  
 mud anchor

EOT approx 1610'  
 1 1/4" x 22' polish rod  
 3/4" rods  
 2 x 1 1/2 x 18 RWAC pump

**PROPOSED San Jose Perfs:** 1171-1173, 1184-1186, 1190-1192, 1194-1196, 1205-1207, 1213-1216' (GR/CCL) = 1177-1179, 1190-1192, 1196-1198, 1200-1202, 1211-1213, 1219-1222' (EL) Acid BD and Frac 64,500# 16/30 PolarProp & 75Q Slickfoam  
 1318-1324 (GR/CCL) = 1324-1330'(EL) perf only

**Current San Jose Perfs:** 1296-1311, 1324-1336, 1349-1366' (GR/CCL) = 1302-1317, 1330-1342, 1355-1372 (EL), 4SPF. Perf only, no stimulation.

**PROD CASING**

5 1/2" 15.5# K-55 @3861'. Cmt; STG 1, 135 sx 50/50 poz, circulate cement to pit, STG 2, 250 sx 65/35 poz + 350 sx 50/50 poz. Circ cement to pit.

50' cmt on top, PBTD 3450'  
 CIBP @ 3500 set 6-10-09  
 CIBP @ 3515 set 8-15-06

**Pictured Cliffs Perfs:** 3569-3580, 3587-3603' (GR/CCL) = (EL) 4 jspf. (2/14/99)

PBTD=3765'  
 TD=3870' KB

# COMPANY: MALLON OIL COMPANY

WELL: JICARILLA 29-02-09 #1

FIELD: LAJARA CANYON

COUNTY: RIO ARRIBA STATE: NEW MEXICO

COUNTY: RIO ARRIBA  
Field: LAJARA CANYON  
Location: 2097' FSL & 615' FWL  
Well: JICARILLA 29-02-09 #1  
Company: MALLON OIL COMPANY

## ARRAY INDUCTION with Linear Correlation

2097' FSL & 615' FWL  
NW SW  
Permanent Datum: GROUND LEVEL  
Log Measured From: KELLY BUSHING  
Drilling Measured From: KELLY BUSHING  
Elev.: 7308 F  
K.B. 7321 F  
G.L. 7308 F  
D.F. 7320 F  
13.0 F above Perm. Datum

API Serial No. N/A  
SECTION 9  
TOWNSHIP 29N  
RANGE 2W

Logging Date	8-FEB-1999
Run Number	ONE
Depth Driller	3870 F
Schlumberger Depth	3863 F
Bottom Log Interval	3855 F
Top Log Interval	150 F
Casing Driller Size @ Depth	8.625 IN @ 553 F
Casing Schlumberger	548 F
Bit Size	7.875 IN
Type Fluid In Hole	LSND
Density	9.2 LB/G
Viscosity	85 S
Fluid Loss	PH 9
Source Of Sample	ATH MEASURED
RM @ Measured Temperature	3.050 OHMM @ 85 DEGF
RMF @ Measured Temperature	2.280 OHMM @ 85 DEGF
RMC @ Measured Temperature	CALCULATED @
Source RMF	RMC
RM @ MRT	2.050 @ 100 1.533 @ 100
Maximum Recorded Temperatures	100 DEGF
Circulation Stopped	8-FEB-1999 10:30
Logger On Bottom	8-FEB-1999 15:26
Unit Number	3020
Location	FARMINGTON, NM
Recorded By	JEFF GILL
Witnessed By	RICHARD KING

## Integrated Hole/Cement Volume Summary

Hole Volume = 1643.76 F3

Cement Volume = 1096.43 F3 (assuming 5.50 IN casing O.D.)

Computed from 0.0 FT to 0.0 FT using data channel(s) HCAL

## OP System Version: 7C0-713

MBM

HILTB-CTS  
HOLEV

RPCA-998  
RPCA-998

RWA

RPCA-998

## PIP SUMMARY

- Integrated Hole Volume Minor Pip Every 10 F3
- Integrated Hole Volume Major Pip Every 100 F3
- Integrated Cement Volume Minor Pip Every 10 F3
- Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

SP (SP) (MV)	40
Caliper (HCAL) (IN)	16
Gamma Ray (GR) (GAPI)	200
RWA (RWA) (OHMM)	10

AIT-H 60 Inch Investigation Conductivity (AHTCO60) (MM/M)	0
AIT-H 90 Inch Investigation (AHT90) (OHMM)	100
AIT-H 60 Inch Investigation (AHT60) (OHMM)	100
AIT-H 20 Inch Investigation (AHT20) (OHMM)	100
Tension (TENS) (LBF)	1000

MAIN PASS 5 = 100

TENS  
STIA

JIC 29-02-09 #1  
2-8-99  
INDUCTION

AHTC060

1200

AHT20

AHT20

100

1300

PROPOSED PERFS  
1177-1179', 1190-1192'  
1196-1198', 1200-1202'  
1211-1213', 1219-1222'

PROPOSED PERFS  
1324-1330'

CURRENT PERFS

1302-1317'  
1330-1342'  
1355-1372'