RECEIVED

AUG 12 2010

Farmington Field Office
Bureau of Land Management

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires. July 31,2010

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 page 2.*

5. Lease Serial No.
Contract 458

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

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

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

8. Well Name and No.
Jicarilla 458-5 #22

2. Name of Operator
Black Hills Exploration & Production

9. API Well No.
30-039-29314

3a. Address
3200 N 1st Street Bloomfield, NM 87413

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

10. Field and Pool, or Exploratory Area
Basin Mancos

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
2230' FNL & 2175' FWL Sec. 5 T30N R3W SE/NW Unit F

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

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/ Resume)	☐ Water Shut-off
	☐ Altering Casing	☑ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **Change bottom hole**
	☑ Change Plans	☑ Plug and abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☑ Plug back	☐ 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 recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will 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 recompletion 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.)

Due to current open perforations in Jicarilla 458-05 #22, BHGR has determined that the well cannot be recompleted and fractured effectively using the existing wellbore. Therefore, BHGR plans to plug back the existing wellbore to 3866' bgs per the attached plug back procedure dated August 2, 2010. After the plug back is completed, BHGR plans to cut a window in the existing 7" casing at +/- 3500' bgs, drill a 6 1/8" directional hole to +/- 8538' TD to create a 200' departure from the original hole; the new BHL will be 2230' FNL & 1975' FWL Section 5 T30N R3W. Once TD is reached & logs are run, BHGR plans to fracture and complete the well per the procedure on the completion section of the drilling plan.

RCVD AUG 24 '10
OIL CONS. DIV.
DIST. 3

BHGR is submitting a plugback procedure, new drilling plan, C102, and NEVIS plan.

Surface disturbance will not change from the initial APD, therefore the Surface Use Plan will not be updated nor modified.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/ Typed)*

Daniel R. Manus — Title **Regulatory Technician**

Signature Daniel Manus — Date August 12, 2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Original Signed: Stephen Mason		AUG 16 2010

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. — Office

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)

NMOCD

Notify NMOCD 24 hrs prior to beginning operations

AMENDED

PLUGBACK PROCEDURE

August 2, 2010

Jicarilla 458 – 5 #22

WC Basin Mancos Revised 8/26/10

2230' FNL & 2175' FWL, Section 5, T30N, R3W, Rio Arriba County, New Mexico

API 30-039-29314/ Lat: _____ N Long: _____ W

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.

Surface Csg: 9 5/8, 36# at 301'. TOC at surface.
Intermediate Csg: 7", 23#, L-80 & J-55 at 4025'. TOC at 330'.
Prod Liner: 4 ½", 11.6#, N-80 from 3718' to 8891'.
Top of cmt at liner top by CBL.
Open Perfs: 7301-8010' overall

Proposed Work: Set cmt plugs to plug back to liner top for proposed re-entry.

Proposed Re-entry: whipstock set at +/-3700', cut window in 7" csg. Drill sidetrack hole.

PLUGBACK PROCEDURE:

1. This project requires the Operator to obtain an approved NMOCD C-144 CLEZ Closed-Loop System Permit for the use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.

3. Rods: Yes _____, No __X__, Unknown _____;
   Tubing: Yes __X__, No _____, Unknown _____, Size _2.375"_, Length _7671'_;
   Packer: Yes _____, No __X__, Unknown _____, Type _____.
   If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. Round trip a 4.5" casing scraper to 7680'.

4. **Plug #1 (Mancos/Gallup perforations: 8060' – 7251'):**

Plug #1a: perforations from 8010' to 7716'; mix and spot 40 sxs cement inside the casing from 8060' to 7520'; PUH to have the end of the tubing at 7200'; load the casing with water and attempt to circulate the well; the hydrostatic and circulating pressure will squeeze some cement into the perfs. TOH with the tubing and WOC. TIH with plugging sub and tag the cement.
Plug #1b: perforations from 7630' to 7301'; mix and spot 50 sxs cement from 7630' or from the TOC from plug #1a, up to 6950'; TOH with the tubing to 6500'; squeeze approximately 4 bbls cement into the perforations; WOC and then tag the cement.

AMENDED

~~Establish circulation with water. Spot 47 sxs Class B cement with 10% salt (by weight of water, retarder) from 8060' to 7251' to fill the perforations. PUH to 7301' and reverse circulate casing clean. TOH with tubing. RIH with 4.5" wireline cement retainer and set at 7251'. TIH with tubing and sting into CR. Establish rate below CR. Sting out of CR to have the stinger 1' above CR. Mix 55 sxs Class B cement and displace to end of tubing. Sting into CR and squeeze the 47 sxs cement below CR, pressure up to maximum 600 PSI. Sting out of CR and spot 8 sxs above . Reverse circulate tubing and casing clean. PUH. *Pressure test casing to 800 PSI. If casing does not test then notify Black Hills engineer to discuss how to proceed with plug back.*~~

5. **Plug #2 (Mancos top, 6835' – 6735'):** If necessary, Spot 12 sxs Class B cement inside casing to cover the Mancos top. PUH.

6. **Plug #3 (Mesaverde top, 5956' – 5856'):** Spot 12 sxs Class B cement inside casing to cover the Mesaverde top. PUH.

7. **Plug #4 (7" casing shoe and Pictured Cliffs top, 4075' – 3866'):** Spot 20 sxs Class B cement inside casing to cover through the Pictured Cliffs top.

8. **If casing tests then POH and LD tubing. ND BOPs. NU WH. RDMOL.:**

9. **If casing does not test and the decision is made to Plug and Abandon the well then continue to Plug #4.**

P&A PROCEDURE:

10. **Plug #4 (4.5" liner top, Fruitland, Kirtland and Ojo Alamo tops, 3813' - 3296'):** Spot 100 sxs Class B cement inside casing to cover through the Ojo Alamo top. PUH.

11. **Plug #5 (Nacimiento top, 2337' – 2237'):** Spot 29 sxs Class B cement inside casing to cover the Nacimiento top. TOH with tubing.

12. **Plug #6 (9.625" casing shoe and surface, 351 - Surface)**: Perforate 3 squeeze holes at 320'. Establish circulation out bradenhead with water and circulate the BH annulus clean. RIH with tubing to 351', Mix and pump 120 sxs Class B cement from 351' to surface, circulate good cement out casing and bradenhead. TOH and LD tubing. SI well and woc.

13. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.

Black Hills Gas Resources, Inc.

Jicarilla 458-05 #22

CURRENT Wellbore Diagram

API # 30-039-29314

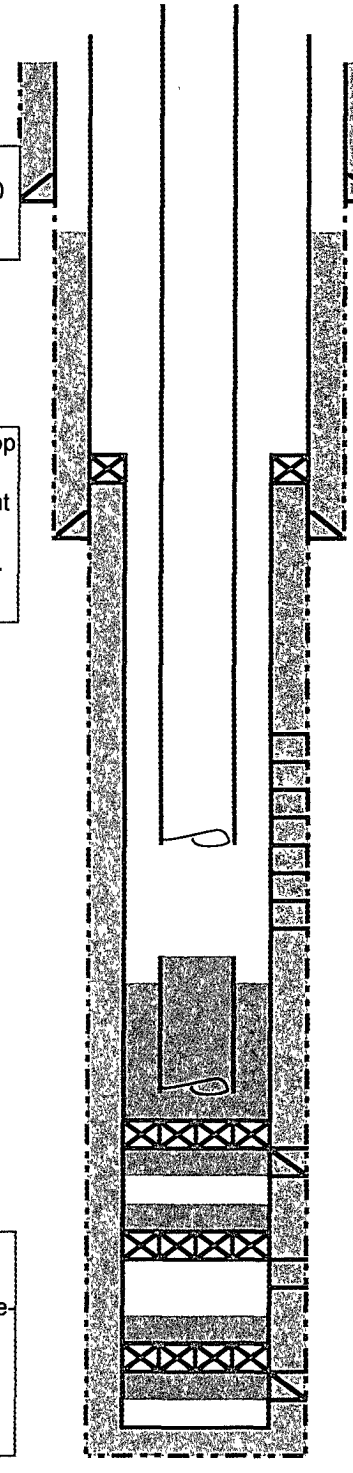
UNIT F SE NW, Sec 5, T30N, R03W Rio Arriba, NM

Spud Date 3-16-2006

7/28/2010

Elev. GL= 7271'

Elev. KB= 7284 '



Surface Csg

9 5/8" 36# @301', 165 sx cmt, TOC- 10 bbl circ to surf

Intermediate Csg

7" 23# L-80 STC (Top 30 jts), 69 jts J-55 23# set at 4025'. Cmt w/410sx, 300 sx; **TOC at 330' by CBL**

Production Liner

4 1/2" 11.6# N-80 From 3718' to 8891' KB; cmt w/ 510 sx lite-weight Type III, Circ 30 bbls cmt off liner top.

244 jts 2 3/8" tubing
1.78" R Profile
3' 2 3/8" sub
WLREG
EOT ***7671***

Liner top at 3718'

7" csg seat at 4025'

Upper Mancos perfs: 8-16-06, 7301-7303, 7330-7332, 7355 7357, 7442-7444, 7473-7475, 7500-7502, 7560-7570, 7626-7630;

Gallup perfs: 7-21-06, 7716-7720, 7778-7780, 7850-7852, 7928-7932, 8008-8010

Tbg fish: 2 3/8" tbg fish cmt'd in hole. Top of fish at 8112'. Bottom of fish at 8420'. Cmt in tbg fish at 8112'. Cmt in tbg/csg annulus at 8151'.

Dakota A; perf 6-23-06, 8566-8572, 8606-8618. Set retainer at 8540'. Cmt sqz. TOC at 8151' (tbg fish cmt'd in hole)

Dakota B; perf 6-15-06, 8696-8701. BD, Set CIBP **6-23-06** @ 8680' 10' cement on top

Dakota C&D; perf 6-02-06, 8750-8760, 8786-8794, 8798-8806 BD, Minifrac **6-05-06**, No frac Set retainer @ 8742', cmt sqz C&D. TOC=8737'.

PBTD=8853'

TD = 8891'

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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-29314	97232	BASIN MANCOS

[4] Property Code	[5] Property Name	[6] Well Number
22858	JICARILLA 458-5	22

[7] OGRID No.	[8] Operator Name	[9] Elevation
013925	BLACK HILLS GAS RESOURCES	7271'

[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
LOT 6	5	30-N	3-W		2230	NORTH	2175	WEST	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
LOT 6	5	30-N	3-W		2230	NORTH	1975	WEST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No
160 – NW/4			

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

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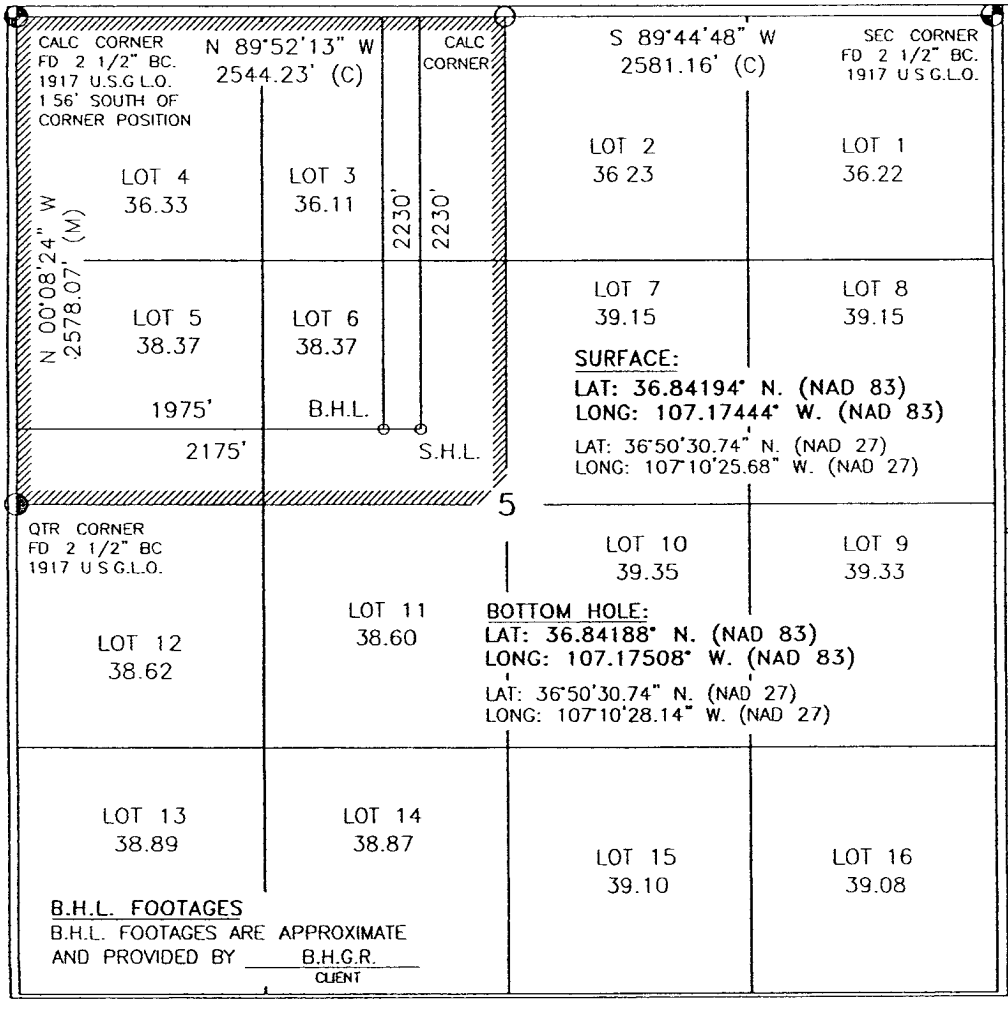

B.H.L. FOOTAGES
B.H.L. FOOTAGES ARE APPROXIMATE
AND PROVIDED BY B.H.G.R.
CLIENT

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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.

Signature 8/12/10
Date

Daniel Manus
Printed Name

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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 knowledge & belief

AUGUST 6, 2010
Date of Survey

Signature and Seal of Professional Surveyor

ROY A. RUSH
NEW MEXICO
8894
REGISTERED PROFESSIONAL LAND SURVEYOR
06 10

8894
Certificate Number

Black Hills Gas Resources

Jicarilla 458-5 #22
Surface Location: 2230' FNL 2175' FWL (SE/NW) Unit F
Bottom Hole Location: 2230' FNL 1975' FWL (SE/NW) Unit F
Section 5 T30N R3W
Rio Arriba County, New Mexico
Contract 458

DRILLING PROGRAM
(Per Rule 320)

The 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 includes an onsite meeting which was held on July 1, 2004 as determined by the Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA and Jicarilla Oil & Gas Administration (JOGA), and at which time the specific concerns of Mallon Oil Company (Mallon), BLM, BIA and JOGA were discussed.

The initial on-site meeting for the original location was held during the summer of 2004, at this time the site was called the Jicarilla 458-5 #22, and the APD was approved May 5, 2005. BHGR is proposing to sidetrack 200' from the original bottom hole of 2,230' FNL & 2175', and giving a new bottom hole of 2230' FNL 1975' FWL

SURFACE FORMATION – San Jose

GROUND ELEVATION – 7,271'

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

Formations	MD	VD	
San Jose	Surface	Surface	Sandstone, shales & siltstones
Nacimiento	2,286'	2,286'	Sandstone, shales & siltstones
Ojo Alamo	3,195'	3,195'	Sandstone, shales & siltstones
Kirtland	3,343'	3,343'	Sandstone, shales & siltstones
Fruitland	3760'	3,759'	Sandstone, shales & siltstones
Pictured Cliffs	3913'	3,912'	Sandstone, shales & siltstones
Lewis	4395'	4394'	Sandstone, shales & siltstones
Cliffhouse	5893'	5,885'	Sandstone, shales & siltstones
Menefee	6133'	6125'	Sandstone, shales & siltstones
Point Lookout	6308'	6,300'	Sandstone, shales & siltstones
Mancos	6832'	6,824'	Sandstone, shales & siltstones
Gallup	7661'	7,653'	Sandstone, shales & siltstones
Greenhorn	8346'	8,338'	Sandstone, shales & siltstones
Graneros	8395'	8,387'	Sandstone, shales & siltstones
Dakota	8533'	8,525'	Sandstone, shales & siltstones

TOTAL DEPTH	**8,538'**	**Measured Depth (MD)**
	8,530'	**True Vertical Depth (TVD)**

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

San Jose	Surface	Gas, water, sand, shale
Nacimiento	2,286'	Gas, water, sand, shale
Ojo Alamo	3,195'	Gas, water, sand, shale
Kirtland	3,343'	Gas, water, sand, shale
Fruitland	3,760'	Gas, water, sand, shale
Pictured Cliffs	3,913'	Gas, water, sand, shale
Lewis	4395'	Gas, water, sand, shale
Cliffhouse	5,893'	Gas, water, sand, shale
Menefee	6133'	Gas, water, sand, shale
Point Lookout	6,308'	Gas, water, sand, shale
Mancos	6,832'	Gas, water, sand, shale
Gallup	7,661'	Gas, water, sand, shale
Green Horn	8,346'	Gas, water, sand, shale
Graneros	8,395'	Gas, water, sand, shale
Dakota	8,533'	Gas, water, sand, shale

DIRECTIONAL DRILLING PROGRAM
Kick-Off Point is estimated to be ± 3,500' TVD

CASING PROGRAM

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0'- 301'	12-¼"	9-⅝"	J-55 36# ST&C	Existing cement to surface
0'- 4,025'	8-¾"	7"	L-80 / J-55 23# LT&C	Existing cement to surface
3,500' - TD	6-⅛"	4-½"	N-80 11.6# LT&C	515 sks of 50/50 Poz Premium, 5#/sk gilsonit, .25#/sk Poly-E-Flake and .8% Halad®- 9 *

* Actual cement volume to be determined by caliper log.

Yields: Production: 50:50 poz Premium yield = 1.44 ft^3/sx (mixed at 13.0 lb/gal)

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 1,500 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

3,500	-	6,150	Fresh water- Low solids non-dispersed M.W. 8.5 – 9.2 ppg Vis – 28 – 50 sec W.L. 6 - 10cc or less
6,150′	-	TD	Air & N2 unit – Deliver ±1800 SCFM (Air) @ 1700psi & 35 gpm fluid. Drill with compressed nitrogen.

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: None

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:	None anticipated.
D)	Estimated bottom hole pressure:	1,837 psi

ANTICIPATED START DATE

September, 2010

COMPLETION

The well pad will be of sufficient size to accommodate all recompletion activities and equipment. BHGR plans to recomplete the well as follows: Perforate Greenhorn (stage 1). Acidize with 15% HCL, frac with 100 mesh sand & 40/70 sand in a slick water frac. Set CBP above perfs. Perforate Gallup (stage 2). Acidize with 15% HCL, frac with 100 mesh sand & 40/70 sand in a slick water frac. Set CBP above perfs. Perforate Gallup (stage 3). Acidize with 15% HCL, frac with 100 mesh sand & 40/70 sand in a slick water frac. Set CBP above perfs. Perforate Gallup (stage 4). Acidize with 15% HCL, frac with 100 mesh sand & 40/70 sand in a slick water frac. Set CBP above perfs. Perforate Mancos (stage 5). Acidize with 15% HCL, frac with 100 mesh sand & 40/70 sand in a slick water frac. Set CBP above perfs. MIRU SU. Drill out CBPs. Land 2 3/8" production tubing. Release SU. (Perforation intervals and frac volumes will be determined once new wellbore is logged.) A sundry notice will be submitted with a revised completion program if warranted.

NEVIS
ENERGY SERVICES INC.
1805 Brittmoore Rd
Houston, Texas 77043
1-800-909-9819
www.nevisenergy.com

Job Number: 1010xxx
Company: Black Hills E&P
Lease/Well: 458-5 #22
Location:
Rig Name:
RKB:
G.L. or M.S.L.: SL - 2230 FNL & 2175' FWL

State/Country:
Declination:
Grid:
File name: Y:\JOBDAT~1\BLACKH~1\2010\458-5#~1\458522.SVY
Date/Time: 09-Aug-10 / 14:10
Curve Name: 458-5 #22 plan 8-09-10

458-5 #22 plan 8-09-10

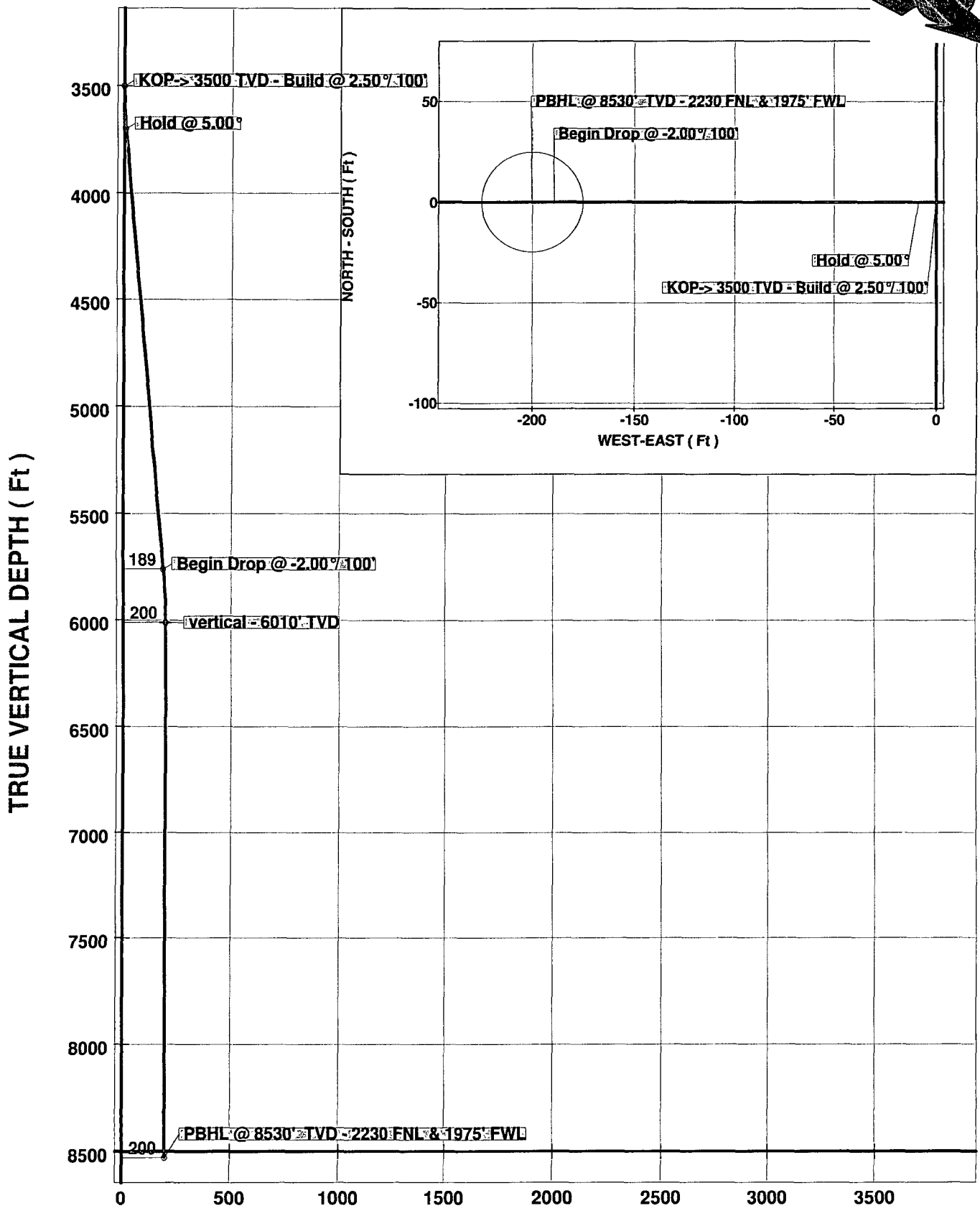
WINSERVE PROPOSAL REPORT
Minimum Curvature Method
Vertical Section Plane 270.00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
KOP-> 3500 TVD Begin Build @ 2.50°/ 100', 270.00° Azimuth									
3500.00	.00	.00	3500.00	.00	.00	.00	.00	.00	.00
3530.00	.75	270.00	3530.00	.00	-.20	.20	.20	270.00	2.50
3560.00	1.50	270.00	3559.99	.00	-.79	.79	.79	270.00	2.50
3590.00	2.25	270.00	3589.98	.00	-1.77	1.77	1.77	270.00	2.50
3620.00	3.00	270.00	3619.95	.00	-3.14	3.14	3.14	270.00	2.50
3650.00	3.75	270.00	3649.89	.00	-4.91	4.91	4.91	270.00	2.50
3680.00	4.50	270.00	3679.82	.00	-7.06	7.06	7.06	270.00	2.50
Begin Hold @ 5.00°, 270.00° Azm									
3700.11	5.00	270.00	3699.86	.00	-8.73	8.73	8.73	270.00	2.50
3800.11	5.00	270.00	3799.48	.00	-17.45	17.45	17.45	270.00	.00
3900.11	5.00	270.00	3899.10	.00	-26.17	26.17	26.17	270.00	.00
4000.11	5.00	270.00	3998.71	.00	-34.89	34.89	34.89	270.00	.00
4100.11	5.00	270.00	4098.33	.00	-43.61	43.61	43.61	270.00	.00
4200.11	5.00	270.00	4197.95	.00	-52.33	52.33	52.33	270.00	.00
4300.11	5.00	270.00	4297.57	.00	-61.05	61.05	61.05	270.00	.00
4400.11	5.00	270.00	4397.19	.00	-69.77	69.77	69.77	270.00	.00
4500.11	5.00	270.00	4496.81	.00	-78.49	78.49	78.49	270.00	.00
4600.11	5.00	270.00	4596.43	.00	-87.21	87.21	87.21	270.00	.00
4700.11	5.00	270.00	4696.05	.00	-95.93	95.93	95.93	270.00	.00
4800.11	5.00	270.00	4795.67	.00	-104.66	104.66	104.66	270.00	.00
4900.11	5.00	270.00	4895.29	.00	-113.38	113.38	113.38	270.00	.00
5000.11	5.00	270.00	4994.90	.00	-122.10	122.10	122.10	270.00	.00
5100.11	5.00	270.00	5094.52	.00	-130.82	130.82	130.82	270.00	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
5200.11	5.00	270.00	5194.14	.00	-139.54	139.54	139.54	270.00	.00
5300.11	5.00	270.00	5293.76	.00	-148.26	148.26	148.26	270.00	.00
5400.11	5.00	270.00	5393.38	.00	-156.98	156.98	156.98	270.00	.00
5500.11	5.00	270.00	5493.00	.00	-165.70	165.70	165.70	270.00	.00
5600.11	5.00	270.00	5592.62	.00	-174.42	174.42	174.42	270.00	.00
5700.11	5.00	270.00	5692.24	.00	-183.14	183.14	183.14	270.00	.00
Begin Drop @ -2.00°/ 100'									
5768.31	5.00	270.00	5760.18	.00	-189.09	189.09	189.09	270.00	.00
5798.31	4.40	270.00	5790.08	.00	-191.55	191.55	191.55	270.00	2.00
5828.31	3.80	270.00	5820.00	.00	-193.69	193.69	193.69	270.00	2.00
5858.31	3.20	270.00	5849.94	.00	-195.53	195.53	195.53	270.00	2.00
5888.31	2.60	270.00	5879.91	.00	-197.04	197.04	197.04	270.00	2.00
5918.31	2.00	270.00	5909.88	.00	-198.25	198.25	198.25	270.00	2.00
5948.31	1.40	270.00	5939.87	.00	-199.14	199.14	199.14	270.00	2.00
5978.31	.80	270.00	5969.86	.00	-199.72	199.72	199.72	270.00	2.00
6008.31	.20	270.00	5999.86	.00	-199.98	199.98	199.98	270.00	2.00
vertical - 6010' TVD									
6018.45	.00	270.00	6010.00	.00	-200.00	200.00	200.00	270.00	2.00
6100.00	.00	270.00	6091.55	.00	-200.00	200.00	200.00	270.00	.00
6200.00	.00	270.00	6191.55	.00	-200.00	200.00	200.00	270.00	.00
6300.00	.00	270.00	6291.55	.00	-200.00	200.00	200.00	270.00	.00
6400.00	.00	270.00	6391.55	.00	-200.00	200.00	200.00	270.00	.00
6500.00	.00	270.00	6491.55	.00	-200.00	200.00	200.00	270.00	.00
6600.00	.00	270.00	6591.55	.00	-200.00	200.00	200.00	270.00	.00
6700.00	.00	270.00	6691.55	.00	-200.00	200.00	200.00	270.00	.00
6800.00	.00	270.00	6791.55	.00	-200.00	200.00	200.00	270.00	.00
6900.00	.00	270.00	6891.55	.00	-200.00	200.00	200.00	270.00	.00
7000.00	.00	270.00	6991.55	.00	-200.00	200.00	200.00	270.00	.00
7100.00	.00	270.00	7091.55	.00	-200.00	200.00	200.00	270.00	.00
7200.00	.00	270.00	7191.55	.00	-200.00	200.00	200.00	270.00	.00
7300.00	.00	270.00	7291.55	.00	-200.00	200.00	200.00	270.00	.00
7400.00	.00	270.00	7391.55	.00	-200.00	200.00	200.00	270.00	.00
7500.00	.00	270.00	7491.55	.00	-200.00	200.00	200.00	270.00	.00
7600.00	.00	270.00	7591.55	.00	-200.00	200.00	200.00	270.00	.00
7700.00	.00	270.00	7691.55	.00	-200.00	200.00	200.00	270.00	.00
7800.00	.00	270.00	7791.55	.00	-200.00	200.00	200.00	270.00	.00
7900.00	.00	270.00	7891.55	.00	-200.00	200.00	200.00	270.00	.00
8000.00	.00	270.00	7991.55	.00	-200.00	200.00	200.00	270.00	.00
8100.00	.00	270.00	8091.55	.00	-200.00	200.00	200.00	270.00	.00
8200.00	.00	270.00	8191.55	.00	-200.00	200.00	200.00	270.00	.00
8300.00	.00	270.00	8291.55	.00	-200.00	200.00	200.00	270.00	.00
8400.00	.00	270.00	8391.55	.00	-200.00	200.00	200.00	270.00	.00
8408.45	.00	270.00	8400.00	.00	-200.00	200.00	200.00	270.00	.00
8508.45	.00	270.00	8500.00	.00	-200.00	200.00	200.00	270.00	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
PBHL @ 8530' TVD - 2230 FNL & 1975' FWL									
8538.45	.00	270.00	8530.00	.00	-200.00	200.00	200.00	270.00	.00

Job Number: 1010xxx
Company: Black Hills E&P
Lease/Well: 458-5 #22



NEVIS
ENERGY SERVICES INC
1806 Brittmoore Rd
Houston Texas 77043
1-800-809-9619
www.nevisenergy.com

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
1235 LA PLATA HIGHWAY
FARMINGTON, NEW MEXICO 87401

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: 22 Jicarilla 458-05

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 599-8907.

3. The following modifications to your plugging program are to be made:

a) Place the Mesaverde plug from 6091' – 5991'.

b) Place the 7" Casing Shoe/Pictured Cliffs plug from 4075' – 3848'.

c) Place the Nacimiento plug from 2165' – 2065'.

d) You are required to have H2S monitoring equipment and personnel on location during plugging operations.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

PLUGBACK PROCEDURE

August 2, 2010

Jicarilla 458 – 5 #22
WC Basin Mancos
2230' FNL & 2175' FWL, Section 5, T30N, R3W, Rio Arriba County, New Mexico
API 30-039-29314/ Lat: _____ N Long: _____ W

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.

Surface Csg: 9 5/8, 36# at 301'. TOC at surface.
Intermediate Csg: 7", 23#, L-80 & J-55 at 4025'. TOC at 330'.
Prod Liner: 4 ½", 11.6#, N-80 from 3718' to 8891'.
Top of cmt at liner top by CBL.
Open Perfs: 7301-8010' overall

Proposed Work: Set cmt plugs to plug back to liner top for proposed re-entry.

Proposed Re-entry: whipstock set at +/-3700', cut window in 7" csg. Drill sidetrack hole.

PLUGBACK PROCEDURE:

1. This project requires the Operator to obtain an approved NMOCD C-144 CLEZ Closed-Loop System Permit for the use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.

3. Rods: Yes _____, No __X__, Unknown _____;
Tubing: Yes __X__, No _____, Unknown _____, Size _2.375"_, Length _7671'_;
Packer: Yes _____, No __X__, Unknown _____, Type _____.
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. Round trip a 4.5" casing scraper to 7680'.

4. **Plug #1 (Mancos/Gallup perforations: 8060' – 7251'):** Establish circulation with water. Spot 47 sxs Class B cement with 10% salt (by weight of water, retarder) from 8060' to 7251' to fill the perforations. PUH to 7301' and reverse circulate casing clean. TOH with tubing. RIH with 4.5" wireline cement retainer and set at 7251'. TIH with tubing and sting into CR. Establish rate below CR. Sting out of CR to have the stinger 1' above CR. Mix 55 sxs Class B cement and displace to end of tubing. Sting into CR and squeeze the 47 sxs cement below CR, pressure up to maximum 800 PSI. Sting out of CR and spot 8 sxs above . Reverse circulate tubing and casing clean. PUH. *Pressure test casing to 800 PSI. If casing does not test then notify Black Hills engineer to discuss how to proceed with plug back.*

5. **Plug #2 (Mancos top, 6835' – 6735'):** Spot 12 sxs Class B cement inside casing to cover the Mancos top. PUH.

6091 5991'

6. **Plug #3 (Mesaverde top, ~~5956~~' – ~~5856~~'):** Spot 12 sxs Class B cement inside casing to cover the Mesaverde top. PUH.

3947

7. **Plug #4 (7" casing shoe and Pictured Cliffs top, 4075' – ~~3866~~'):** Spot ~~20~~ sxs Class B cement inside casing to cover through the Pictured Cliffs top.

8. **If casing tests then POH and LD tubing. ND BOPs. NU WH. RDMOL.:**

9. **If casing does not test and the decision is made to Plug and Abandon the well then continue to Plug #4.**

P&A PROCEDURE:

10. **Plug #4 (4.5" liner top, Fruitland, Kirtland and Ojo Alamo tops, 3813' - 3296'):** Spot 100 sxs Class B cement inside casing to cover through the Ojo Alamo top. PUH.

2165 2065

11. **Plug #5 (Nacimiento top, ~~2337~~' – ~~2237~~'):** Spot 29 sxs Class B cement inside casing to cover the Nacimiento top. TOH with tubing.

12. **Plug #6 (9.625" casing shoe and surface, 351 - Surface)**: Perforate 3 squeeze holes at 320'. Establish circulation out bradenhead with water and circulate the BH annulus clean. RIH with tubing to 351', Mix and pump 120 sxs Class B cement from 351' to surface, circulate good cement out casing and bradenhead. TOH and LD tubing. SI well and woc.

13. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.