

NAVAJO NATION

APD

Tribal Operations on

Tribal Lands

PERMIT

ACCEPTED FOR

RECORD ONLY

Charlie,

WJ
June 9th
11/6/11

These are the APDs that I spoke to you about a few weeks back. BLM refuses to recognize the earlier adjustment on this new lease, so the Navajo Nation thru Navajo Oil & Gas (NOC) decided to proceed w/o BLM approval. They did agree to provide us w/ their approval for record purposes - let me know if you have any questions (I did accept them for the record) Others APDs like these will follow



**THE
NAVAJO
NATION**

MINERALS DEPARTMENT

Post Office Box 1910

Window Rock, Arizona 86515

Phone: (928) 871-6587 • Fax: (928) 871-7095

Ben Shelly
President

June 27, 2011

Rex Lee Jim
Vice-President

Ms. Sharon Pinto
Acting Regional Director
Navajo Region
Bureau of Indian Affairs
P.O. Box 1060
Gallup, New Mexico 87305



RECEIVED

JUN 29 2011

Farmington Field Office
Bureau of Land Management


**RE: APPROVAL OF APPLICATION FOR PERMIT TO DRILL (APD) NO. CBM11-27-14
#15, FOR THE NAVAJO NATION OIL AND GAS COMPANY (NNOGC) ON
NAVAJO NATION TRUST LAND**

Dear Ms. Pinto:

Pursuant to Resolution RDCJN-05-11 and the amended procedures for the review and approval of APDs approved by the Resources and Development Committee of the Navajo Nation Council on June 14, 2011, the Navajo Nation Minerals Department hereby approves the enclosed APD to construct, operate and maintain the "CBM 11-27-14 #15" well, pipelines and ancillary facilities submitted by NNOGC within Operating Agreement No. NO-G-1008-1773 on, over and across Navajo Nation Trust Lands, San Juan County, Navajo Nation (New Mexico), enclosed hereto as Exhibits "A" through "D". NNOGC is required to obtain a Finding of No Significant Impact from the U.S. Bureau of Indian Affairs prior to the commencement of any surface disturbing activities.

The Navajo Nation's approval of the APD to NNOGC is subject to, but not limited to, the terms and conditions contained in Exhibit "D" and the specific requirements imposed by the Navajo Nation Environmental Protection Agency and the Navajo Nation Department of Fish and Wildlife. If you have any questions, please call me at (928) 871-6587.

Sincerely,


Akhtar Zaman, Director
Minerals Department

BN/AZ/kjs
ENCLOSURE

xc: W. Mike Halona, Program Director, Navajo Land Department, DNR
Howard Draper, Project Review Office, DNR
Dave Evans, Dist. Manager, U.S. Bureau of Land Management, Farmington, NM
Wilson Groen, CEO, Navajo Nation Oil & Gas Company

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
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

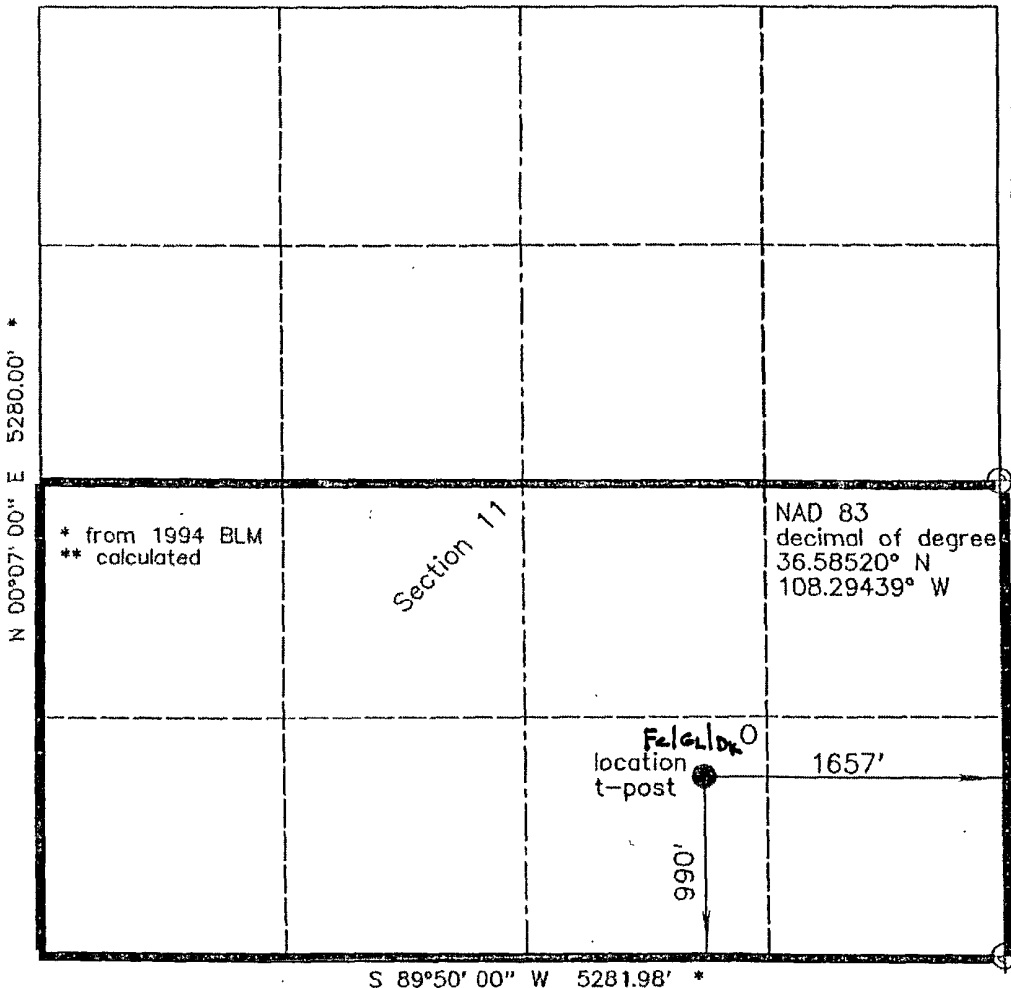
APA Number 30-045- 35295		Pool Code 71629	Pool Name BASIN FRUITLAND COAL (GAS)
Property Code 38715	Property Name CBM 11-27-14		Well Number 15
OGRID No. 242841	Operator Name NAVAJO NATION OIL & GAS CO., INC		Elevation 5965'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from	North/South	Feet from	East/West	County
0	11	27 N.	14 W.		990'	SOUTH	1657'	EAST	SAN JUAN

Bottom Hole Location If Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from	North/South	Feet from	East/West	County
Dedication 320		Joint ?		Consolidation		Order No.			

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

S 89°50' 00" W 5283.96' *



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 bottom hole location or has the right to drill this well at this location pursuant to a contract with an owner of a mineral interest or working interest, or to a voluntary pool agreement or a compulsory pooling order heretofore entered by the division.	
Date	11-9-10
Signature	<i>Brian Wood</i>
Printed Name	Brian Wood
SURVEYOR CERTIFICATION	
I hereby certify that the well location 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.	
Date of survey: rev 09/10/' 10	
Signature and seal of Professional Surveyor	
<i>Gerald L. Wood</i>	
Certificate Number 6844	

HBP: 8/17/2020
NOs: C-144
MP: 6/28/2011
SMA: BIA
PA: N/A Form 3160-3
BOND: N/A (August 2007)
Trans. #: Non-Refundable Filing

Lessee(s): Navajo Nation O/G Co.

RECEIVED

JUN 27 2011

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NO-G-1008-1773
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name NAVAJO NATION
2. Name of Operator NAVAJO NATION OIL & GAS COMPANY		7. If Unit or CA Agreement, Name and No.
3a. Address 1675 BROADWAY, SUITE 1100 DENVER, CO 80202		8. Lease Name and Well No CBM 11-27-14 #15
3b. Phone No. (include area code) 303 534 8300		9. API Well No. 30-045- 35295
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 990' FSL & 1657' FEL. SWSE At proposed prod. zone SAME		10. Field and Pool, or Exploratory BASIN FRUIT. COAL, WC GALL, & DK
14. Distance in miles and direction from nearest town or post office* 10 AIR MILES SSW OF FARMINGTON, NM		11. Sec., T. R. M. or Blk. and Survey or Area SWSE 11-27N-14W NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 6,937'	16. No. of acres in lease 150,000	12. County or Parish SAN JUAN
17. Spacing Unit dedicated to this well S2 (Fruit. Coal & Dakota) and SWSE (Gallup) RCVD JUL 18 '11	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,927'	13. State NM
19. Proposed Depth 6,000'	20. BLM/BIA Bond No. on file RLB0006712	OIL CONS. DIV. DIST. 3
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,965' UNGRADED	22. Approximate date work will start* 02/01/2011	23. Estimated duration 1 MONTH

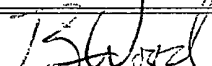
This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

24. Attachments

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

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must 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 BLM.


25. Signature 	Name (Printed/Typed) BRIAN WOOD (505 466-8120)	Date 11/09/2010
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Title
CONSULTANT

(FAX 505 466-9682)

ACCEPTED FOR RECORD

Approved by (Signature)	Name (Printed/Typed)	Date JUL 06 2011
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Title	Office FARMINGTON FIELD OFFICE BY 
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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 within its jurisdiction.

(Continued on page 2)

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

AUG 22 2011

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOC FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

TRIBAL OPERATION
ON TRIBAL LAND

EXHIBIT "A"

State of New Mexico
Energy, Minerals & Mining Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
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

APA Number 30-045- 35295	Pool Code 97870	Pool Name WC27N14W11; GALLUP OIL
Property Code 38715	Property Name CBM 11-27-14	Well Number 15
OGRID No. 242841	Operator Name NAVAJO NATION OIL & GAS CO., INC	Elevation 5965'

Surface Location

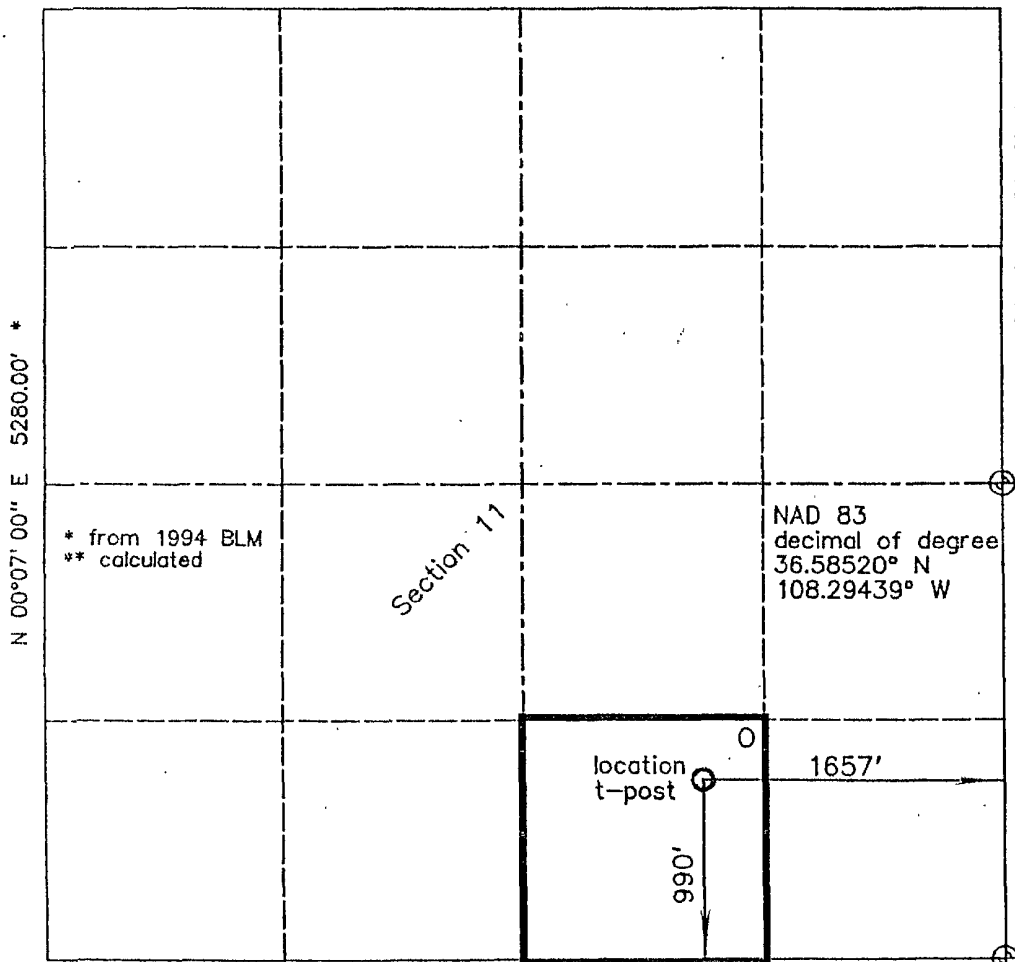
UL or Lot 0	Sec. 11	Twp. 27 N.	Rge. 14 W.	Lot Idn.	Feet from 990'	North/South SOUTH	Feet from 1657'	East/West EAST	County SAN JUAN
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Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from	North/South	Feet from	East/West	County
Dedication 40	Joint ?	Consolidation	Order No.						

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

S 89°50' 00" W 5283.96' *



** 2639.16' E 2639.39" N 00°08' 39" E 2640.85' N 00°07' 56" E 2640.85'

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 bottom hole location or has the right to drill this well at this location pursuant to a contract with an owner of a mineral interest or working interest, or to a voluntary pool agreement or a compulsory pooling order heretofore entered by the division.	
Date	11-9-10
Signature	<i>Brian Wood</i>
Printed Name	Brian Wood
SURVEYOR CERTIFICATION	
I hereby certify that the well location 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.	
Date of survey	rev 09/10/' 10
Signature and seal of Professional Surveyor	<i>Gerald D. Wood</i>
Certificate Number 6844	

S 89°50' 00" W 5281.98' *

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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Revised October 12, 2005
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-045- 35295	Pool Code 71599	Pool Name BASIN DAKOTA
Property Code 38715	Property Name CBM 11-27-14	Well Number 15
OCRID No. 242841	Operator Name NAVAJO NATION OIL & GAS CO., INC	Elevation 5965'

Surface Location

UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from	North/South	Feet from	East/West	County
0	11	27 N.	14 W.		990'	SOUTH	1657'	EAST	SAN JUAN

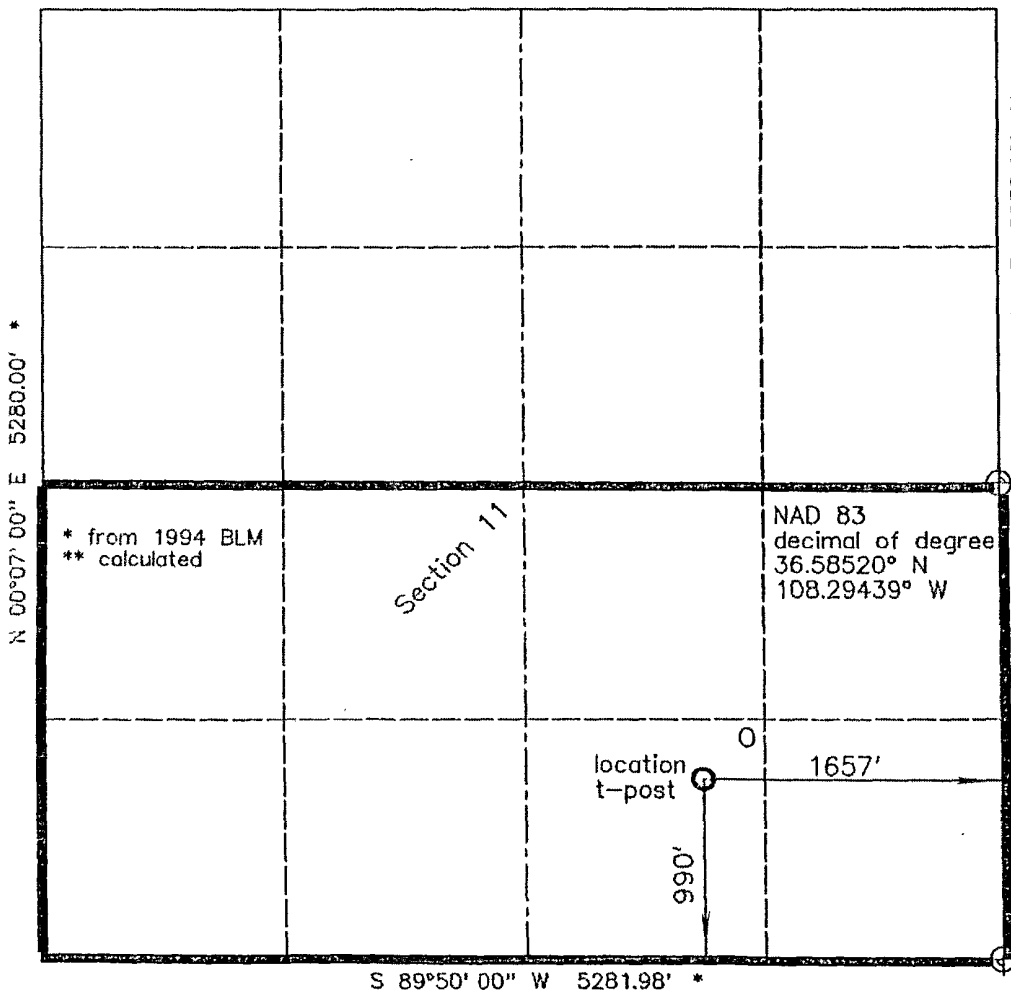
Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from	North/South	Feet from	East/West	County

Dedication 320	Joint ?	Consolidation	Order No.
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S 89°50' 00" W 5283.96' *



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 released mineral interest in the land including the bottom hole location or has the right to drill this well at this location pursuant to a contract with an owner of a mineral interest or working interest, or to a voluntary pool agreement or a compulsory pooling order heretofore entered by the division.	
Date	11-9-10
Signature	<i>B. Wood</i>
Printed Name	Brian Wood
SURVEYOR CERTIFICATION	
I hereby certify that the well location 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.	
Date of survey: rev 09/10/' 10	
Signature and seal of Professional Surveyor	
<i>Gerald D. Neidhardt</i>	
Certificate Number 6844	

Drilling Program /

1. FORMATION TOPS

The estimated tops of important geologic markers are:

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Kirtland Shale	0'	12'	+5,965'
Fruitland Formation	940'	952'	+5,025'
Pictured Cliffs Sandstone	1,490'	1,502'	+4,475'
Lewis Shale	2,065'	2,077'	+3,900'
Mesa Verde Sandstone	2,115'	2,127'	+3,850'
Point Lookout Sandstone	3,865'	3,877'	+2,100'
Mancos Shale	4,015'	4,027'	+1,950'
Upper Gallup Sandstone	4,940'	4,952'	+1,025'
Lower Gallup Sandstone	5,140'	5,152'	+825'
Sanostee	5,415'	5,427'	+550'
Dakota Sandstone	5,815'	5,827'	+150'
Morrison Formation	5,990'	6,002'	-25'
Total Depth (TD)	6,000'	6,012'	-35'

2. NOTABLE ZONES

Fruitland coal gas is the primary goal. Gallup and Dakota are the secondary goals. Oil and gas shows which appear to the well geologist to be commercial will be tested. All fresh water and prospectively valuable minerals will be recorded by depth and protected with casing and cement. Water could be found in the Fruitland, Pictured Cliffs, Point Lookout, Gallup, and Dakota formations.

3. PRESSURE CONTROL

Navajo Nation Oil & Gas Company
CBM 11-27-14 #15
990' FSL & 1657' FEL
Sec. 11, T. 27 N., R. 14 W.
San Juan County, New Mexico

PAGE 3

A double ram type $\geq 2,000$ psi working pressure BOP with a rotating head system will be used. See the next page for details on the typical BOP equipment. All ram type preventers and related equipment will be hydraulically tested to $\approx 1,500$ psi at nipple-up and after any use under pressure. A typical diagram is attached.

The blind rams will be hydraulically activated and checked for operational readiness each time the pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold. All will be rated to $\geq 2,000$ psi.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Age</u>	<u>Coupling</u>	<u>Depth Set</u>
12-1/4"	8-5/8"	24#	J-55	New	ST & C	350'
7-7/8"	4-1/2"	10.5#	J-55	New	LT & C	6,000'

Surface casing will be cemented to the surface with 245 sacks (289 cubic feet) Class B with 3% CaCl_2 . Yield = 1.18 cubic feet per sack. Slurry weight = 15.6 pounds per gallon. Excess = 100%. W.O.C.=12 hours. Pressure test the surface casing to $\approx 1,500$ psi for 30 minutes. A notched collar and 3 centralizers will be used on the bottom 3 collars.

Production casing will be cemented to the surface. A DV tool will be set at $\approx 3,000'$. Hole will first be circulated with $\geq 150\%$ hole volume of mud and ≈ 30 barrels of fresh water. Total cement volume = 2,284 cubic feet ($\approx 65\%$ excess). A 4-1/2" cement guide shoe and self filling float collar will be used. Place the float one joint above the shoe. Place 10 centralizers spaced every other joint above the shoe, 2 turbolizers on the collar below the DV tool, and 2 turbolizers above the DV tool. Place 5 turbolizers every third joint from the top of the well.

Navajo Nation Oil & Gas Company
CBM 11-27-14 #15
990' FSL & 1657' FEL
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San Juan County, New Mexico

PAGE 4

First Stage: Lead with 570 sacks (1,003 cubic feet) Class B 65/35 poz with 6% gel + 1% CaCl_2 + 4% phenoseal + 1/4 pound per sack cello flake. Yield = 1.76 cubic feet per sack. Slurry weight = 12.8 pounds per gallon.

First Stage: Tail with 100 sacks (146 cubic feet) Class B 50/50 poz with 0.15% dispersant + 1% CaCl_2 + 1/4 pound per sack cello flake. Yield = 1.46 cubic feet per sack. Slurry weight = 13.0 pounds per gallon.

Second Stage: Precede cement with ≈ 20 barrels of water. Cement with ≈ 645 sacks (1,135 cubic feet) Class B 65/35 poz with 6% gel + 1% CaCl_2 + 1/4 pound per sack cello flake. Yield = 1.76 cubic feet per sack. Slurry weight = 12.8 pounds per gallon.

5. MUD PROGRAM

The surface hole will be drilled with a fresh water mud. The production hole will be drilled with a fresh water polymer. Weighting materials will be drill solids or, if conditions dictate, barite. Maximum expected mud weight = 9.5 pounds per gallon.

6. CORES, LOGS, & TESTS

No cores or drill stem tests are currently planned. FDC/CNL/GR/SP and DIL logs will be run from the base of the surface casing to TD.

7. DOWN HOLE CONDITIONS

No abnormal temperatures, abnormal pressures, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be $\approx 2,598$ psi.

Navajo Nation Oil & Gas Company
CBM 11-27-14 #15
990' FSL & 1657' FEL
Sec. 11, T. 27 N., R. 14 W.
San Juan County, New Mexico

PAGE 5

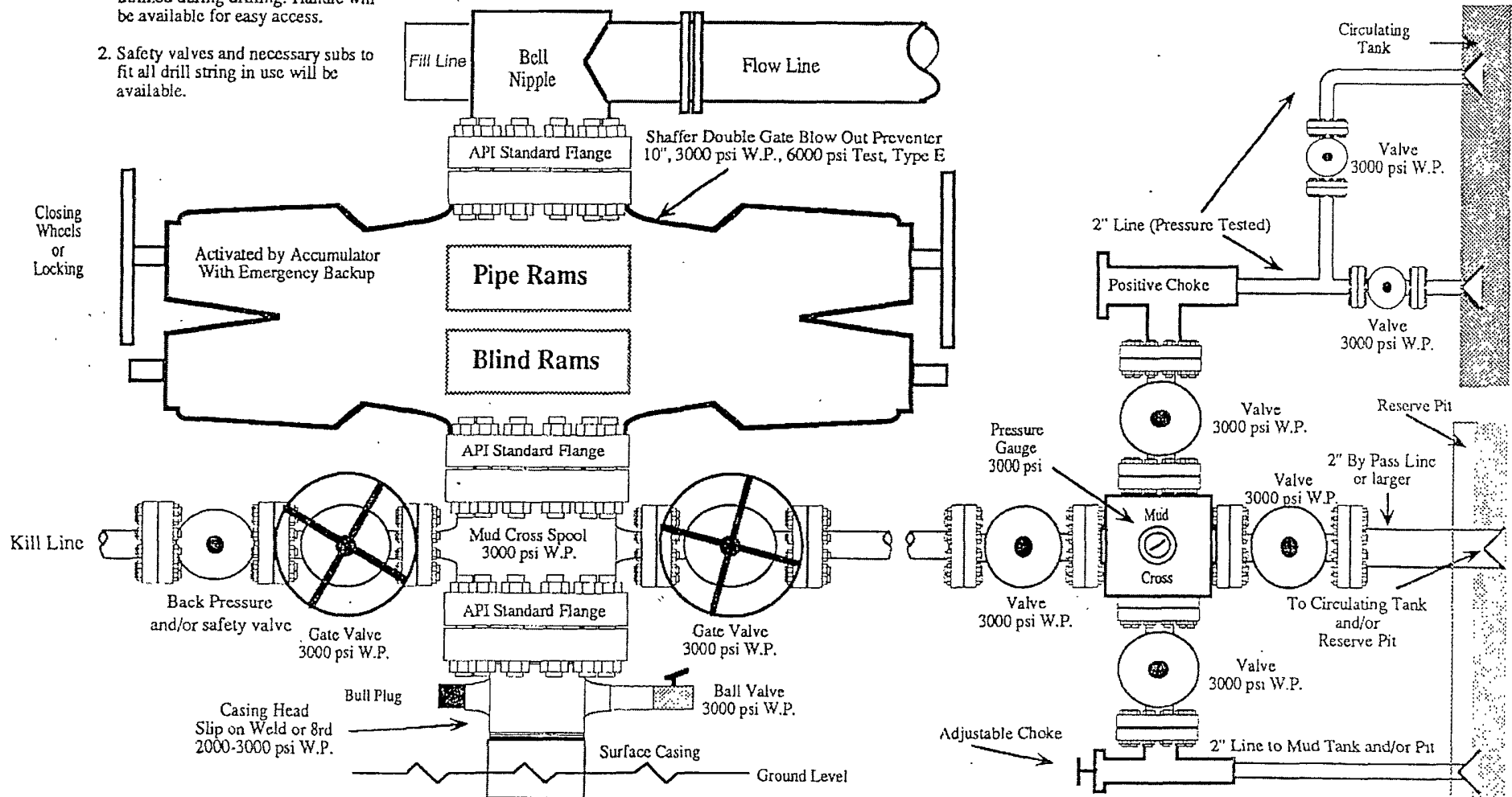
8. OTHER INFORMATION

The anticipated spud date is February 1, 2011. It is expected it will take \approx 10 days to drill and \approx 2 weeks to complete the well.

2,000 PSI BOP SYSTEM

Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary subs to fit all drill string in use will be available.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

PERMITS WEST, INC.

PROVIDING PERMITS for LAND USERS

37Verano Loop, Santa Fe, New Mexico 87508

(505) 166-8120