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 OCT 30 RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NO-G-0402-1710

6. If Indian, Allotee or Tribe Name: NAVAJO NATION

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

8. Lease Name and Well No.: ATSE 36 E

9. API Well No.: 30-045- 34043

10. Field and Pool, or Exploratory: WC 32N20W36; Paradox oil, Leadville gas

11. Sec., T. R. M. or Blk. and Survey or Area: 36-32N-20W NMPM

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☑ Multiple Zone

2. Name of Operator: NAVAJO NATION OIL & GAS CO., INC.

3a. Address: P. O. BOX 4439, WINDOW ROCK, AZ 86515

3b. Phone No. *(include area code)*: (928) 871-4880

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface: 2199' FNL & 155' FWL
At proposed prod. zone: SAME

14. Distance in miles and direction from nearest town or post office*: 16 AIR MILES NW OF SHIPROCK, NM

12. County or Parish: SAN JUAN

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 7,479'

16. No. of acres in lease: 12,160

17. Spacing Unit dedicated to this well: 40 SWNW (Des. Creek & Is.) & ~~all Sec. 36~~ 160 NW/4 (Lead.)

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 1,664' (Atse 36 F)

19. Proposed Depth: 7,200'

20. BLM/BIA Bond No. on file: BIA RLB0006712

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 4,932' GL

22. Approximate date work will start*: 12/01/2006

23. Estimated duration: 5 WEEKS

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 [signature]	Name *(Printed/Typed)* BRIAN WOOD	Date 10/25/2006
Title CONSULTANT	PHONE: (505) 466-8120	FAX: (505) 466-9682
Approved by *(Signature)* [signature]	Name *(Printed/Typed)*	Date 6/11/07
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. 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.

**(Instructions on page 2)*

HOLD C104 FOR NSL for Leadville pool & cancellation of Leadville in ATSE 36 F

NMOCD

6-15-07 BH

RCVD JUN12'07
OIL CONS. DIV.
DIST. 3

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

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

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

Form C - 102

2006 OCT 30 AM 6 49

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-045- 34043	97614/97615	WC 32N20W36; Paradox Oil - Leadville Gas

Property Code	Property Name	Well Number
36520	ATSE	36 E

OGRID No.	Operator Name	Elevation
242841	NAVAJO NATION OIL & GAS CO., INC.	4932'

Surface Location

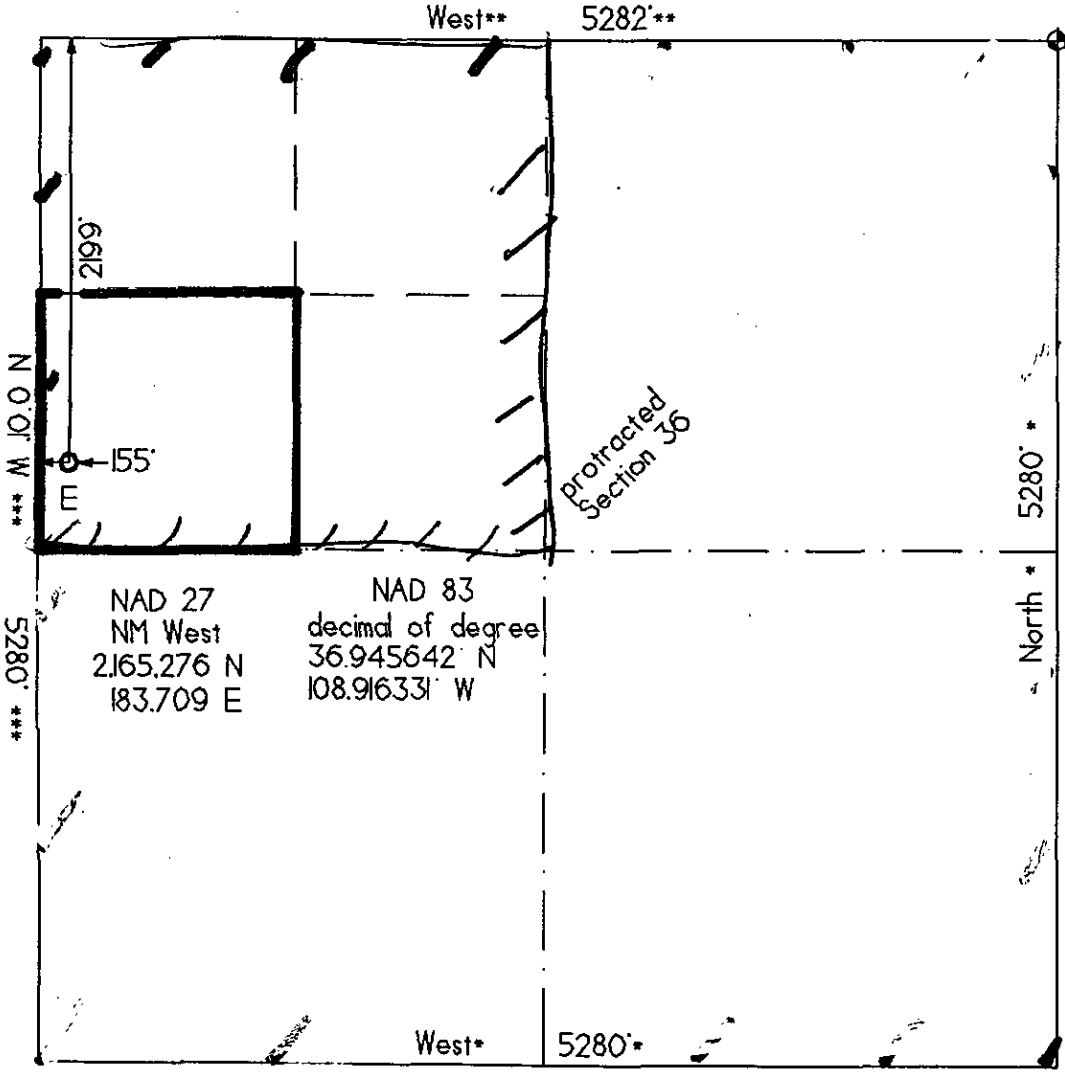
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from>	North/South	Feet from>	East/West	County
E	36	32 N.	20 W.		2199'	NORTH	155'	WEST	SAN JUAN

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	Joint ?	Consolidation	Order No.
40 & ~~160~~ 160			

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: Brian Wood

Printed Name: BRIAN WOOD

Title: CONSULTANT

Date: OCT. 24, 2006

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: 03/01/'06

Signature and Seal of Professional Surveyor:

GERALD HUDDLESTON
NEW MEXICO
6844
REGISTERED LAND SURVEYOR

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., 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-103
May 27, 2004

WELL API NO.
30-045-34043

5. Indicate Type of Lease
STATE ☐ FEE ☐

6. ~~State~~ Oil & Gas Lease No.
NO-G-0402-1710

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
ATSE

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

8. Well Number 36 E

2. Name of Operator
NAVAJO NATION OIL & GAS CO., INC.

9. OGRID Number
242841

3. Address of Operator
P. O. BOX 4439, WINDOW ROCK, AZ 86515

10. Pool name or Wildcat
WC DESERT CREEK, ISMAY, & LEADVILLE

4. Well Location
Unit Letter: E 2199' FNL & 155' FWL
Section 36 Township 32 N Range 20 W NMPM SAN JUAN County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
4,932' GL

Pit or Below-grade Tank Application ☑ or Closure ☐

Pit type: DRILLING Depth to Groundwater: >100' Distance from nearest fresh water well: 516' Distance from nearest surface water: >50'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: DRILLING PIT ☑		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any 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 ☐.**

SIGNATURE BW TITLE: CONSULTANT DATE: OCTOBER 25, 2006

Type or print name: BRIAN WOOD E-mail address: brian@permitswest.com Telephone No.: (505) 466-8120

For State Use Only

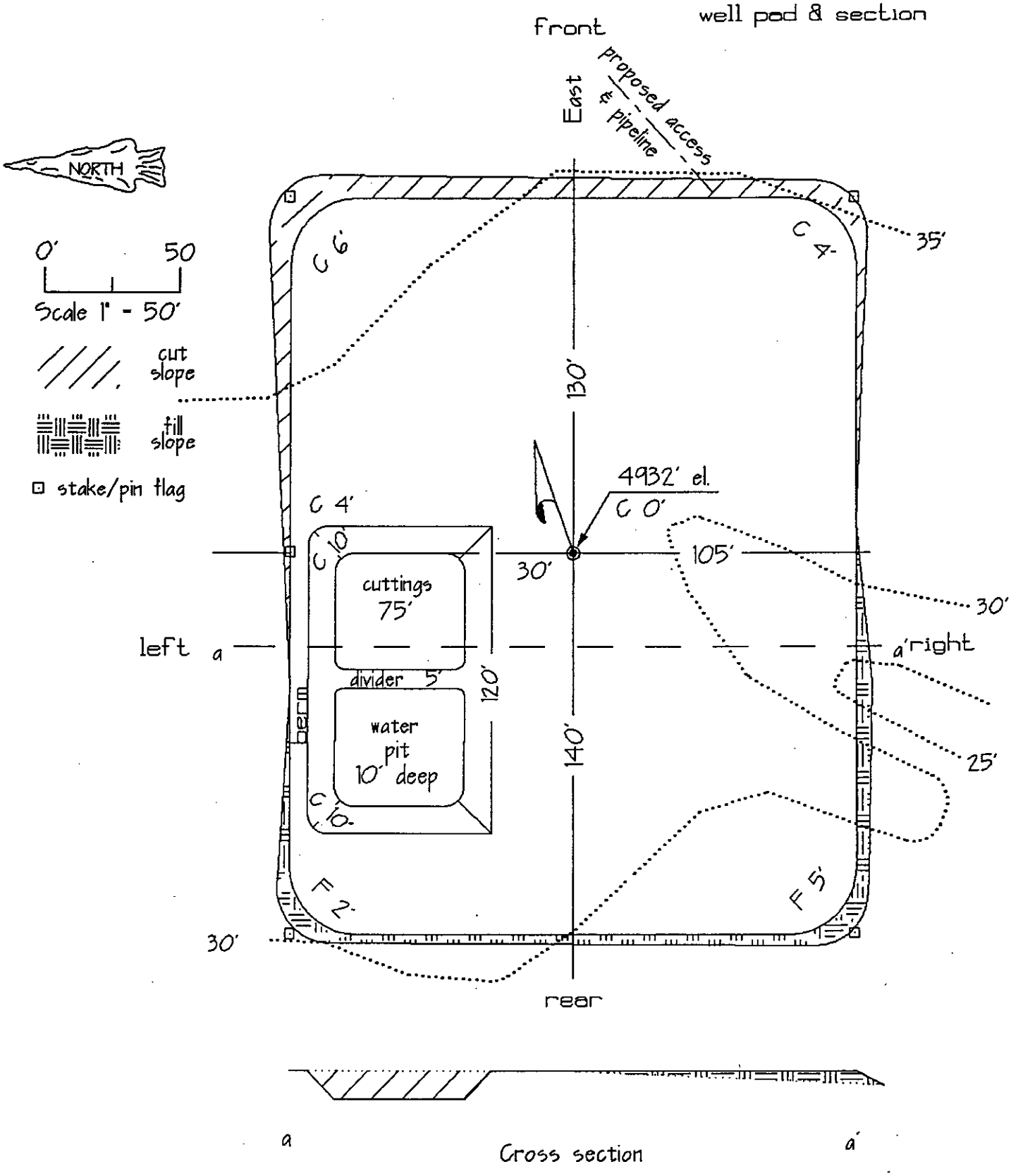
APPROVED BY: Deputy Oil & Gas Inspector, District #3 TITLE DATE JUN 15 2007

Conditions of Approval (if any):

36 E

Atse

well pad & section



Navajo Nation Oil & Gas Co., Inc.
Atse 36 E
2199' FNL & 155' FWL
Sec. 36, T. 32 N., R. 20 W.
San Juan County, New Mexico

Drilling Program

1. FORMATION TOPS

The estimated tops of important geologic markers are:

Formation Name	GL Depth	KB Depth	Elevation
Mancos Shale	0'	15'	+4,932'
Dakota Sandstone	445'	460'	+4,487'
Morrison Burro Canyon	513'	528'	+4,419'
Chinle Shale	2,430'	2,445'	+2,502'
DeChelly	3,390'	3,405'	+1,542'
Organ Rock	3,655'	3,670'	+1,277'
Cutler Formation	4,089'	4,104'	+843'
Honaker Trail	5,125'	5,140'	-193'
Paradox	5,589'	5,604'	-657'
Ismay	5,925'	5,940'	-993'
Desert Creek	6,100'	6,115'	-1,150'
Akah	6,260'	6,275'	-1,328'
Barker Creek	6,409'	6,424'	-1,477'
Pinkerton Trail	6,665'	6,680'	-1,726'
Molas	6,908'	6,923'	-1,962'
Leadville	6,964'	6,979'	-2,030'
Total Depth (TD)	7,200'	7,215'	-2,268'

2. NOTABLE ZONES

Desert Creek and Ismay oil production is the primary goal. Leadville gas production is the secondary goal. Oil and gas shows which appear to the well site 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.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 3,000 psi model is on PAGE 3. An 8-5/8" x 11" 3,000 psi double ram BOP system with a choke manifold and mud cross will be tested to 300 psi and then to 3,000 psi. Upper and lower Kelly cocks with valve handle and subs to fit all drill string connections which are in use will be available on the rig floor.

Tests will be run when:

1) installed
2) anytime a pressure seal is broken (test only affected equipment)
3) at least once every 20 days
4) blind & pipe rams will be activated each trip, but no more than daily

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested before drilling surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated daily to ensure good mechanical working order and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs. Maximum expected bottom hole pressure will be ≈3,000 psi.

4. CASING & CEMENT

Hole Size	O. D.	Pounds/Foot	Grade	Age	Connections	Depth Set
12-1/4"	8-5/8"	24	K-55	New	S T & C	500'
7-7/8"	5-1/2"	15.5	K-55	New	S T & C	7,200'

Surface casing will be cemented to the surface with ≈371 sacks (≈427 cubic feet) Class G with 2% $CaCl_2$ + 1/4 pound per sack cello flake. Weight = 15.8 pounds per gallon. Yield = 1.15 cubic feet per sack. Volume calculated at 10% excess over annular volume.

A stage collar will be set at ≈3,500'. Weight on cement at least four hours between stages.

First stage of the production casing will be cemented from TD to ≈3,500'. Lead with ≈285 sacks (≈527 cubic feet) Class G 65:35 poz with 6% gel + 1/4 pound per sack cello flake. Weight = 12.7 pounds per gallon. Yield = 1.85 cubic feet per sack. Tail with ≈250 sacks (≈287 cubic feet) Class G cement with 2% $CaCl_2$. Weight = 15.8 pounds per gallon. Yield = 1.15 cubic feet per sack. Total first stage cement = 814 cubic feet (≥25% excess in open hole).

Second stage will be cemented from ≈3,500' to the surface. Lead with ≈355 sacks (≈657 cubic feet) Class G 65:35 poz with 6% gel + 1/4 pound per sack cello flake. Weight = 12.7 pounds per gallon. yield = 1.85 cubic feet per sack. Tail with ≈100 sacks (≈115 cubic feet) Class G with 2% $CaCl_2$. Weight = 15.8 pounds per gallon. Yield = 1.15 cubic feet per sack. Total second stage cement = 772 cubic feet (≥25% excess in open hole).

5. MUD PROGRAM

Fresh water, gel, lime, and native solids with a weight of 8.3 pounds per gallon will be used from the surface to ≈3,000'. Gel/lime sweeps will be used as necessary for hole cleaning.

A low solids, non-dispersed polymer system will be used from ≈3,000' to TD. Weight = 8.6 to 9.5 pounds per gallon. Gel/lime sweeps will be used as needed to clean the hole. Fluid loss will be maintained at 15 - 20 cc. Fluid loss will be reduced to ≤15 cc before coring, logging or drill stem tests.

A two person mud logging unit will be on site from ≈4,000' to TD. Cuttings will be collected every ≈30' to the top of the Paradox or ≈5,500'. After that point, cuttings will be collected every ≈10' to TD.

6. CORES, LOGS, & TESTS

A conventional core may be cut in the Desert Creek or at strong shows. Side wall cores may also be cut. GR - Sonic and DLL-Micro-SFL log suites will be run from TD to the surface. FDC-CNL logs will be run from TD to ≈4,000'. No drill stem tests are currently planned.

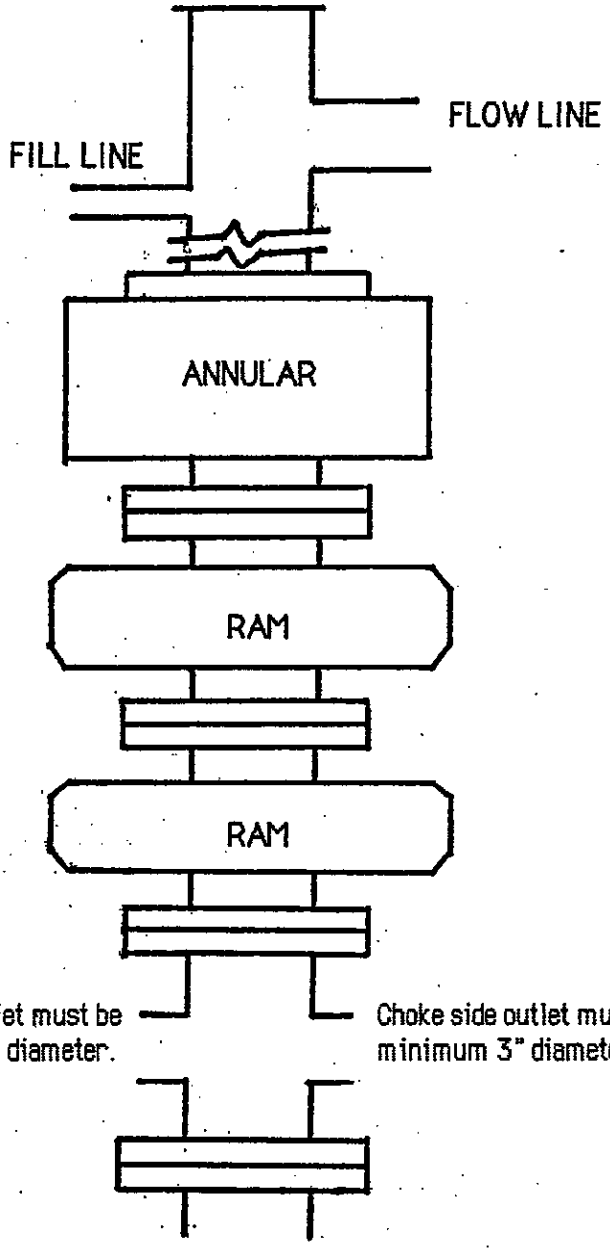
7. DOWN HOLE CONDITIONS

No abnormal temperatures or abnormal pressures are expected. No hydrogen sulfide is expected.

8. OTHER INFORMATION

The anticipated spud date is December 1, 2006. It is expected it will take 3 weeks to drill and 2 weeks to complete the well.

Well was previously known as the Atse #2.



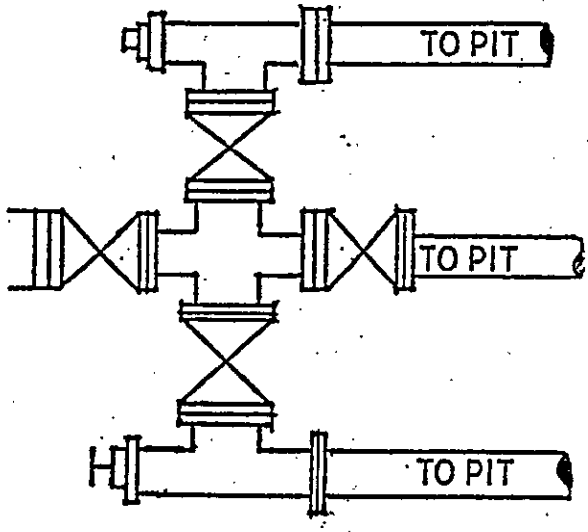
Kill side outlet must be minimum 2" diameter.

Choke side outlet must be minimum 3" diameter.

Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

TYPICAL BOP STACK & CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold.



Upper kelly cock will have handle available.
Safety valve and subs will fit all drill string connections in use.
All BOPE connections subjected to well pressure will be flanged, welded, or clamped.

PERMITS WEST, INC.
PROVIDING PERMITS for the ENERGY INDUSTRY

HYDROGEN SULFIDE CONTINGENCY PLAN

NAVAJO NATION OIL & GAS CO., INC.
LEASE NO-G-0402-1710
ATSE 36 E
36-32N-20W
SAN JUAN COUNTY, NM

Company Operation Manager

1. The Company Operation Manager will be responsible for notifying and maintaining contact with company managers and supervisory personnel.

2. Maintain communication with the location supervisor to proceed with any other assistance that might be required.

3. Travel to well location is appropriate.

4. Assist location supervisor with all other notifications-both company and regulatory.

Well Specialist (Location Supervisor)

1. The location supervisor will confirm that all personnel on location at any time are trained in Hydrogen Sulfide Safety Awareness, are clean shaven and are familiar with safety equipment on-site and have personal Hydrogen Sulfide monitor for their protection.

2. Ensure that all safety and emergency procedures are observed by all personnel.

3. Make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.

4. Conduct weekly hydrogen sulfide emergency mock drill.

5. Should extreme danger condition exist, the location supervisor will:
   a. Assess the situation and advise all personnel by appropriate means of communication.
   b. Be responsible for determining that the extreme danger condition is warranted and the red flag shall be posted at location entrance.
   c. Go to safe briefing area and give clear instructions relative to hazard on location, and actions for personnel to follow.
   d. Notify company and regulatory groups of current situation as outlined in company protocol. Follow appropriate emergency procedures for emergency services notification.
   e. Proceed to rig floor and supervise operations with rig supervisor. Take action to control and reduce the hydrogen sulfide hazard.
   f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a muster station free hydrogen sulfide.
   g. Be responsible for authorizing evacuation of persons/residents in area surrounding the drilling location.

Rig Supervisor-Tool Pusher

1. If the Location Supervisor is unable to perform his/her duties, and the alternate representative is also unable or unavailable to perform his/her duties, the rig supervisor-tool pusher will assume command of well site operations and all responsibilities listed above for rig personnel.

2.Ensure that all rig personnel are properly trained to work in Hydrogen Sulfide environment and fully understand the purpose of hydrogen sulfide monitors and alarms, and the action to take when alarms visual/audible initiate. Ensure that all crew members that all crew personnel understand the buddy system, safe briefing areas, muster stations, emergency evacuation procedures and individual duties.

3. Should an extreme danger operational condition arise, the rig supervisor-tool pusher shall assist the Location Supervisor by:

a. Proceeding to the rig floor and assist in supervising rig operations.
b. Ensure that only essential personnel remain in the hazardous areas.
c. Ensure that all personnel that remain in hazardous area, wear supplied air breathing equipment until notified all is **"CLEAR"** of any toxic gases.
d. Assign rig crew member or other service representative to block entrance to location. No unauthorized personnel will be allowed entry to location.
e. Help to determine hazardous "danger zones" on location using portable detection equipment.
f. Position electric fans to move gas in any high concentration areas with Continuous monitoring of the area.

SAFETY CONSULTANT

1. During NORMAL operations (no hydrogen sulfide present), the safety consultant will be responsible for the following:

a. Ensure that all well site safety equipment is in place and operational.
b. Ensure that all well site personnel are familiar with location safety layout and operation of all safety equipment.
c. Ensure that all well site personnel are adequately trained in Hydrogen Sulfide Safety Awareness and are cleaned shaven.
c. Assist location supervisor with weekly hydrogen sulfide emergency mock drill.

2. When an operational condition is classified as extreme danger, the safety consultant will be responsible for the following:

a. Account for all well site personnel.
b. Assess any injuries and direct first aid measure.

c. Ensure that all safety and monitoring equipment is functioning properly and available.
d. Monitor the safety of well site personnel.
e. Maintain a close communication with the location supervisor.
f. Be prepared to assist location supervisor with support of rig crew or other personnel using supplied air breathing equipment.
g. Be prepared to assist location supervisor with emergency procedures.
h. Be prepared to assist with evacuation of any area residents or other personnel working in the immediate area.

All Personnel

1. Always be alert for possible Hydrogen Sulfide visual/audible alarms.

2. Be familiar with location of Safe Briefing Areas and Muster Stations.

3. Be familiar with location of and operation of all air supplied breathing equipment.

4. Familiarize yourself with nearest escape routes for safe evacuation

5. Be aware of prevailing wind direction, any changes in wind direction, or absence of wind by checking the wind socks placed around location, and be aware of uphill direction.

6. If hydrogen sulfide lights and/or siren initiates **"STAY CALM"** don escape breathing systems and follow directions of person in charge and proceed to briefing area/muster station. Do not initiate rescue until directed by person in charge.

7. Essential personnel shall don Self-Contained Breathing Apparatus (SCBA) and work using the **"BUDDY SYSTEM"** will rescue any victims and work to control Hydrogen Sulfide Release.

8. Non-essential personnel shall evacuate to the appropriate safe briefing area using escape breathing systems. Wait there for further instructions from person in charge.

HYDROGEN SULFIDE SAFETY EQUIPMENT

QUANITY	DESCRIPTION
1	Safety trailer with cascade system consisting of (8) 347 cu.ft. compressed air tanks with high-pressure regulators. certificate available.
1	1000 ft. low pressure airline hose with Hanson locking fittings, rigged-up with manifolds to supply breathing air to the personnel on the rig floor, substructure, derrick, shale shaker area, and mud mixing areas.
6	Self-contained breathing apparatus (SCBA)
6	Emergency Escape Breathing Apparatus (EEBA)
1	4-channel continuous electronic hydrogen sulfide monitor with visual/audible alarm. Span and set at 10-15 ppm by a certified technician and calibration sheet available as well as sticker on unit.
1	Gastec and/or detcon detection pump unit with tubes to test for hydrogen sulfide and sulfur dioxide.
1	First aid kit
1	Backboard with straps and headblocks, C-collar and tape
2	Windsocks with poles
1	Well condition sign with 3 flag system
2	Safe briefing area/muster station signs
1	Fire blanket
2	20# fire extinguishers
1	LEL/O2 handheld monitor calibration sheet available as well as sticker on unit.
1	Eyewash station
1	Microsheild/resesitation pocket mask/bag-valve mask with O2 inlet
2	Tanks oxygen with tubing and adult nasal cannulas, adult non-rebreathers.
1	Local emergency phone numbers for police/fire/ems with township and range, longitude and latitude posted inside the trailer on the wall in plain view.
1	Bloodborne pathogen kit

Hydrogen Sulfide Contingency Plan Information Sheet

Location Name:	ATSE 36 E (aka, atse # 2)
Rig Name and Number:	
Company Phone Number (location):	(928) 871-4880
Location Supervisor:	Wilson Groen
Rig Supervisor/Tool Pusher:	
Safety Consultant:	
Township and Range:	2199 FN & 155 FW 36-32N-20W,SJ,NM
Longitude and Latitude:	36.945642°N & 108.916331°W

List of Company Emergency Contact Numbers

Contacts	**Company and Title**	**Work Phone**	**Home Phone**	**Cell Phone**
Wilson Groen	President	928-871-4912	928-871-4912	505-879-6483

Check List

List of Emergency Numbers:	
Daily Weather Report:	
Radius of Exposure:	
Topography of Area:	Badlands
List Of Residents and Business within a Two Mile Radius:	House NNE less than 2 miles from location