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JAN 0 9 2009

Bureau of Land Management
Farmington Field Office

Form 3160-3
(September 2001)

FORM APPROVED
OMB No 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
701-06-0016

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

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

8 Lease Name and Well No.
JAECO 27-3, 17 #19

1a. Type of Work. ☒ DRILL ☐ REENTER

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

2 Name of Operator
Williams Production Company, LLC

9. API Well No.
30-039-30646

3a. Address
P O. Box 640 Aztec, NM 87410

3b Phone No. *(include area code)*
(505) 634-4208

10. Field and Pool, or Exploratory
Blanco MV/Basin Mancos/Basin DK

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*
At surface 2300' FSL & 980' FWL, sec 17, T27N, R3W
At proposed prod zone Same

11. Sec., T., R , M , or Blk and Survey or Area
L Section 17, T27N R3W

14. Distance in miles and direction from nearest town or post office*
25 miles NW from Lindrith,NM

12. County or Parish
Rio Arriba

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 980'

16. No of Acres in lease
6000 +/-

17. Spacing Unit dedicated to this well
328.14
~~320~~ (W/2)

RCVD MAR 5 '09

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft
1 mile

19. Proposed Depth
8,534'

20. BLM/BIA Bond No on file
B001576

OIL CONS. DIV.
DIST. 3

21. Elevations (Show whether DF, KDB, RT, GL, etc)
7,040' GR

22. Approximate date work will start*
March 1, 2009

23 Estimated duration
1 month

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
Larry Higgins	Larry Higgins	1-9-09

Title
Drilling COM

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Jim Mankiewicz		3/3/09

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 reverse)*

Williams Production Company, LLC, proposes to drill a vertical well to develop the Blanco Mesa Verde/Basin Dakota formation at the above described location in accordance with the attached drilling and surface use plans.

The surface is located on Jicarilla Apache Nation lands.

This location has been archaeologically surveyed by Velarde Energy

A 6,756' foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands

Approximately 150' of new road will be needed to access this well

NOTIFY AZTEC OCD 24 HRS PRIOR TO CASING & CEMENT

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

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

MAR 0 9 2009
NMOCD

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

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

Submit plat on current form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-039-30946	72319/97232/71599	BLANCO MESAVERDE/BASIN DAKOTA /BASIN MANCOS

Property Code	Property Name	Well Number
37613	JAECO-WPX 27-3 17	~~#1~~ #19

OGRID No.	Operator Name	Elevation
120782	WILLIAMS PRODUCTION COMPANY	7040

Surface Location

UL or Lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	17	27N	3W		2300	SOUTH	980	WEST	RIO ARRIBA

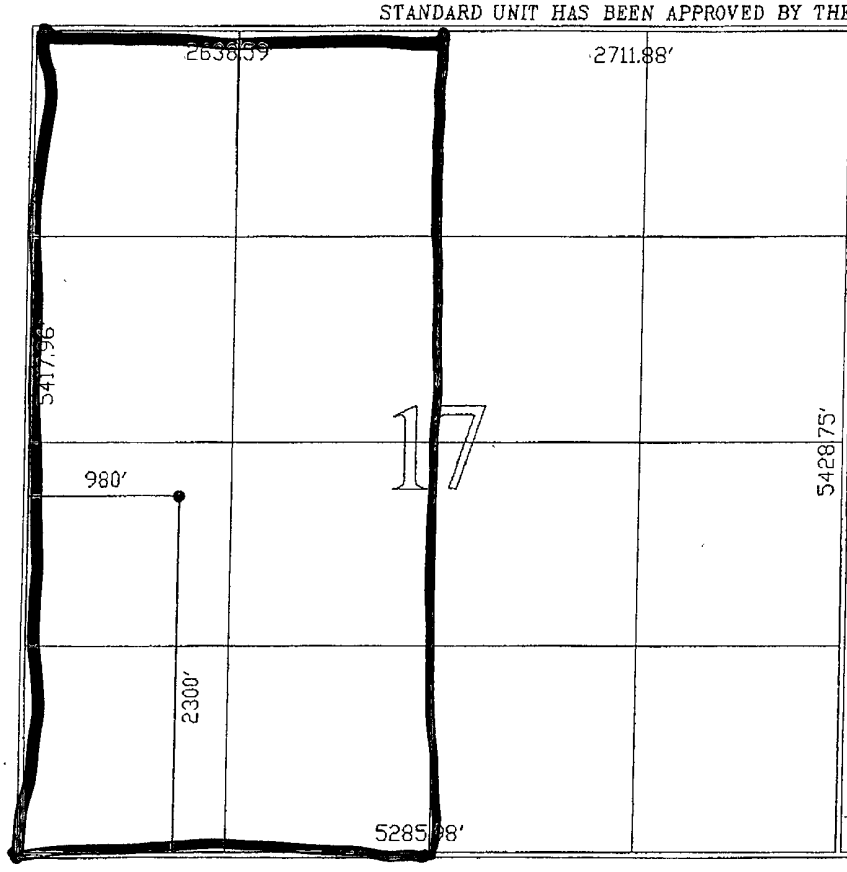
Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
~~320~~ AC. (W/2)			

328.14 MST 1/12/09

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



OPERATOR CERTIFICATION

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

Signature

Larry Higgins

Printed Name

Drlwvc Com

Title and E-mail Address

1-9-09

Date

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.

APRIL 16, 2007

Date of Survey

Signature and Seal of Professional Surveyor

NEIL C. BRUCE TULLIS
NEW MEXICO
9672
REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number 9672

RECEIVED
JAN 09 2009
Bureau of Land Management
Farmington Field Office

APD Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 9th day of January, 2009.

Name Larry Higgins

Position Title Drilling COM

Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 634-4208

Field representative (if not above signatory) _____

E-mail larry.higgins@williams.com

Larry Higgin

Date: 1-9-09

Larry Higgins
Drlg COM
Williams Production Company, LLC

WILLIAMS PRODUCTION COMPANY

Operations Plan

(Note: This procedure will be adjusted on site based upon actual conditions)

DATE:	12/24/2008	**FIELD:**	Basin DK/Basin Mancos/ BlancoMV
WELL NAME:	JAECO-WPX 27-3 17 #19	**SURFACE:**	Jicarilla Apache
BH LOCATION:	NWSW Sec 17-27N-3W Rio Arriba, NM	**MINERALS:**	Jicarilla Apache Nation
ELEVATION:	7,040' GR	**LEASE #**	701-06-0016
MEASURED DEPTH:	**8,534'**		

I. I. **GEOLOGY:** Surface formation - San Jose

A. **FORMATION TOPS:** (KB)

Name	MD	Name	MD
Nacimiento	2,264	Menefee	5,719
Ojo Alamo	3,369	Point Lookout	6,014
Kirtland	3,544	Mancos	6,364
Fruitland	3,634	Gallup	7,059
Pictured Cliffs	3,854	Greenhorn	8,019
Lewis	4,054	Graneros	8,089
Huerfanito Bentonite	4,419	Dakota	8,154
Cliff House	5,649	Morrison	8,434
		TD	**8,534**

B. **MUD LOGGING PROGRAM:** Mud logger from surface csg to TD (5" = 100'). Mud logger will pick TD

C. **LOGGING PROGRAM:** HRI from surface casing to TD. SDL\DSN\DSEN over zones of interest.

D. **NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. **DRILLING**

A. **MUD PROGRAM:** Use a LSND mud (+/-40 Vis.) to drill 9-7/8 in. Intermediate Hole. Increase vis to +/-60 to run Casing. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer w/ 6-3/4 in. bit to drill-out 7-5/8 in. csg. to TD +/- 8,636 ft.

B. **BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

III. MATERIALS

A. CASING PROGRAM:

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	14 3/4	300	10 3/4	40.5	K-55
Intermediate	9 7/8	4,274	7 5/8	26.4	K-55
Longstring	6 3/4	8,534	5 1/2	17	N-80

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 10 3/4" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.

2. INTERMEDIATE CASING: 7 5/8" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) Turbulent centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft. **(NTL-FRA 90-1).**

3. PRODUCTION LINER / CASING: 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' bottom joint. Place marker joint above 5,400'. Place centralizers as needed across selected production intervals.

C. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. SURFACE: Slurry: 255sx (356 cu.ft.) of "Type III" + 2% $CaCl_2$ + ¼ # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.

2. INTERMEDIATE: Lead - 710 sx (1,484) cu.ft.) of "Premium Light with 8% gel and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 100 sx (139cu.ft.) of "Type III" with 1/4# cello-flake/sk, (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). **70% EXCESS IN LEAD PUMP AS WRITTEN No excess in Tail Slurry.** Total volume = 1,623 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.

3. PRODUCTION CASING: 10 bbl Gelled Water space. Cement: 210 sx (442 ft^3) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, ¼ #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft^3/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess in slurry should cover 100 ft into intermediate casing. Total volume 442ft^3. WOC 12 hours

IV. IV COMPLETION

A. CBL

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings if cement not circulated to surface..

B. PRESSURE TEST

1. Pressure test 5-1/2" casing to 6000 psi max, hold at 1500 psi for 30 minutes.

C. STIMULATION

1. Stimulate Dakota with approximately 10,000# of LiteProp 108™ sand in slick water.
2. Isolate Dakota with a RBP.
3. Perforate Mancos as determined from the open hole logs
4. Stimulate Mancos with 3 stages of approximates 117,000# 40/70 white sand and 7500# 100 mesh white sand
5. Stimulate Point Lookout with approximately 9300# of 14/30 LiteProp™ in slick water.
6. Isolate Point Lookout with a RBP.
7. Perforate the Menefee/Cliff House as determined from the open hole logs.
8. Stimulate with approximately 9300# of 14/30 LiteProp™ in slick water.
9. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. *Dakota*: Run 2-1/16", 3.25#, J-55, IJ tubing with 1/2 mule shoe on bottom , SN with pump-out plug on top of adeem joint and 5 Seal Units. Land tubing approximately 100' below top Dakota perf.

2. *Mesa Verde:* Run 2-1/16", 2.9#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforations.

FOR Gary Sizemore
Sr. Drilling Engineer

12 MULTI-POINT SURFACE USE PLAN
JAECO 27-3-17 #19

1. Existing Roads:
   All existing roads used to access the proposed location are shown on attached map (See One-Mile Radius Map - Plat #1) and shall be maintained in the same or better condition than presently found.

2. Planned Access Roads:
   A new 150-foot access road will be required for this location. The proposed access road will be upgraded, maintained, and eventually reclaimed to Jicarilla Apache Nation standards.

3. Location of Existing Wells:
   Attached map (See Plat #1) shows existing wells within a one-mile radius of the proposed well.

4. Location of Production Facilities:
   In the event of production, production facilities will be located on the drill pad. The actual placement of this equipment will be determined when the well's production characteristics can be evaluated after completion. Due to the proposed well pad being located within a grazing gathering area, the location of the production equipment will also be determined based on the needs of the grazing permittee. This will be done under the direction of the Jicarilla Apache Nation, the BIA, Jicarilla Agency, and JAECO

   Upon completion of drilling, the location and surrounding area will be cleared of all debris.

5. Water Supply:
   Water for drilling and completion operations will be hauled by truck from a private permitted water source close to the proposed location.

6. Source of Construction Materials:

No additional construction materials will be required to build the proposed location.

7. Methods for Handling Waste Disposal:

a. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. To protect livestock and wildlife, the reserve pit will be fenced. Three sides of the reserve pit will be fenced prior to drilling. The fourth side will be fenced upon the completion of drilling. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured and reseeded with the appropriate seed mixture. A dike will enclose any tanks.

b. All garbage and trash will be placed in a metal trash basket. It will be hauled off and dumped in an approved landfill upon completion of operations.

c. Portable toilets will be provided and maintained during drilling operations. See Location Layout, Plat #3 for location.

8. Ancillary Facilities:

Ancillary facilities are to be based on well productivity. A 6,756.40-foot $4\frac{1}{2}$" OD pipeline is anticipated for the proposed well. A Pipeline Plat included as Plat #4. The pipeline disturbance would total 6.98 acres based on a 45-foot ROW.

9. Well Site Layout:

A cross section of the drill pad with approximate cuts, fills, and pad orientation is attached as Well Pad Cut and Fill, Plat #2. The Location Layout, Plat #3 depicts the drilling equipment and rig orientation.

10. Plans for Restoration of Surface:

The proposed JAECO 27-3-17 #19 well pad is located within a livestock gathering area, where livestock are funneled form rangeland to the existing

corrals located southeast of the proposed well pad area. Two livestock fences are located within the proposed well pad area and will be relocated to accommodate the needs of the grazing permittee. This will be done under the direction of the Jicarilla Apache Nation, the BIA, Jicarilla Agency, and JAECO.

The proposed well pad would be 215 feet (north to south) by 250 feet (east to west). A 50-foot construction buffer zone would surround the proposed well pad. Total acreage of new disturbance for the proposed well pad and construction buffer zone would be 2.53 acres. When the well is abandoned, the location and access road will be cleaned and restored to the original topographical contours as much as possible. The area will be reseeded with the appropriate Jicarilla Apache Nation seed mixture. A cattleguard and/or gate may be needed, based on the relocation of the existing fences.

The top 6" of soil material will be stripped and stockpiled on either side of the reserve pit and used for future reclamation.

Cut and fill slopes would be 3:1 or less.

Any brush removed from the location would be used in reclamation

Drainage would be diverted around the well pad, and appropriate culverts would be installed where necessary in the proposed access road.

Areas not used for well production will be contoured and seeded with the appropriate Jicarilla Apache Nation specified seed mixture.

Production equipment will be painted the color designated by the Jicarilla Apache Nation. Appropriate below-grade tank will be used for production.

11. Surface Ownership:

The surface ownership of the proposed well pad and well-tie pipeline is the Jicarilla Apache Nation.

12. Other Information:

The JAECO 27-3-17 #19 well pad is located within a major unnamed side canyon of Companero Canyon. The existing and surrounding vegetation is a canyon bottom, brushland/grassland community. Vegetation includes big sagebrush, rabbitbrush, broom snakeweed, cheatgrass, crested wheatgrass, western wheatgrass, galleta, blue grama, and sand dropseed. Russian thistle is present in the disturbed areas.

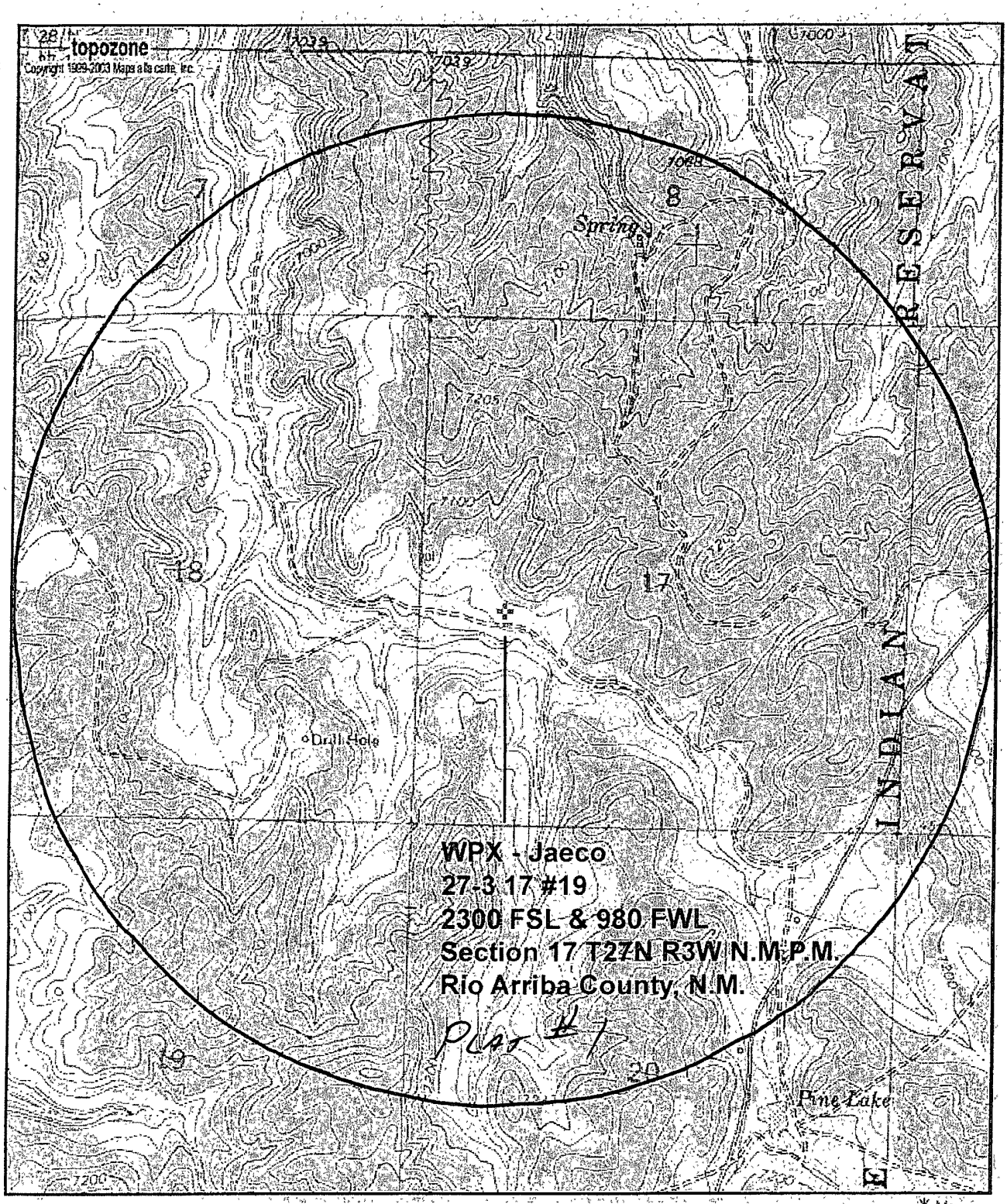
There are no residents within a one-mile radius of the proposed well.

The proposed well pad will not impact any floodplains, riparian, springs, or stock ponds. There are no ephemeral washes that will be impacted.

The proposed well site has been surveyed by Velarde Energy Services. Copies of this report have been sent to the Bureau of Indian Affairs, Jicarilla Agency and the Jicarilla Apache Nation.

13. Lessee's or Operator's Representative:

Larry Higgins
Drilling COM
Aztec, NM 87410
Phone: (505) 320-4312



0 0.3 0.6 0.9 1.2 1.5 km

0 0.1 0.2 0.3 0.4 0.5 mi

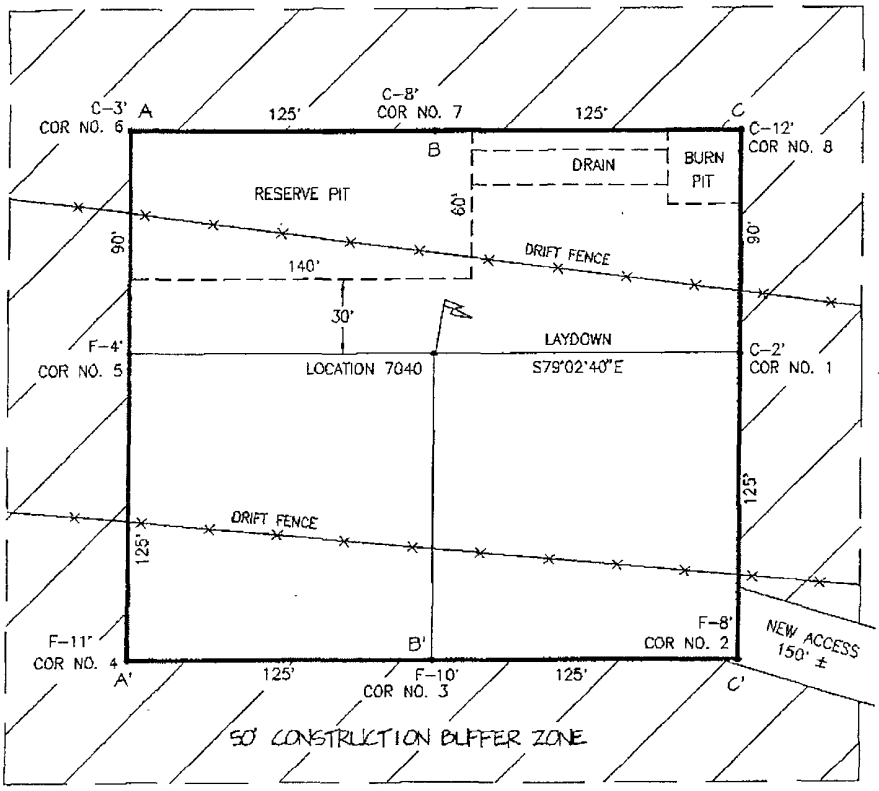
36° 34' 21"N, 107° 10' 26"W (NAD83/WGS84)

USGS Pine Lake (NM) Quadrangle

Projection is UTM Zone 13 NAD83 Datum

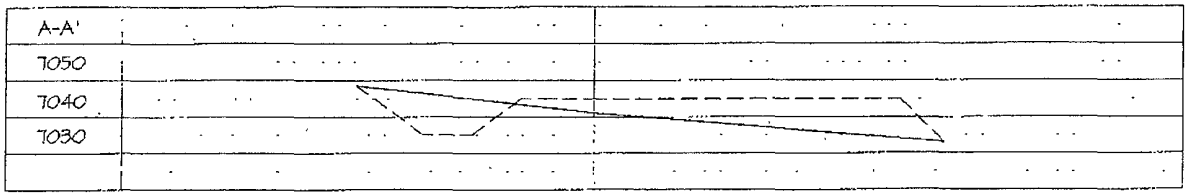
M=10.664
G=-1.296

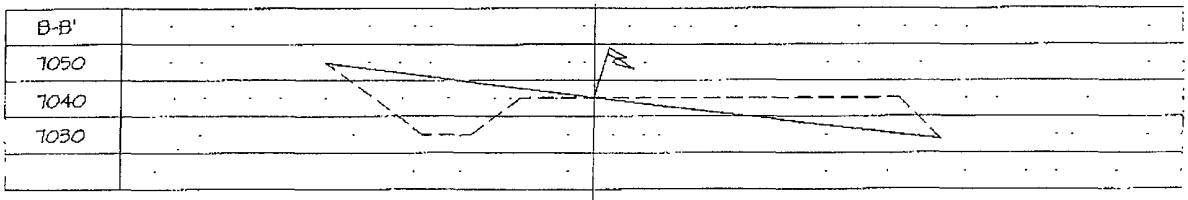
JAECO–WPX
27–3 17 #19
2300 FSL & 980 FWL
SECTION 17 T27N R3W NMPM
RIO ARRIBA COUNTY, N.M.
ELEVATION: 7040

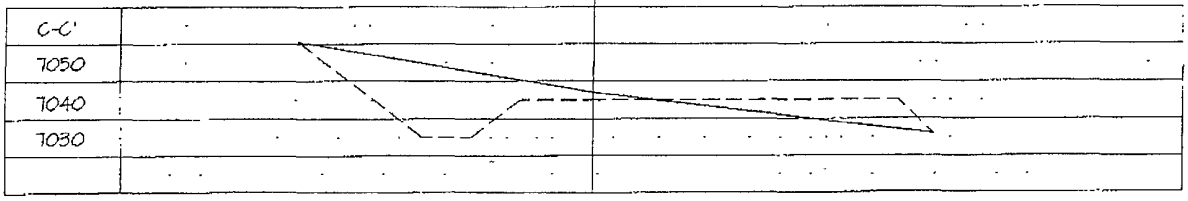


LATITUDE: 36°34'21" N
LONGITUDE: 107°10'26" W
WGS 84'
VERT. DATUM: NAD 1927

PLAT #2

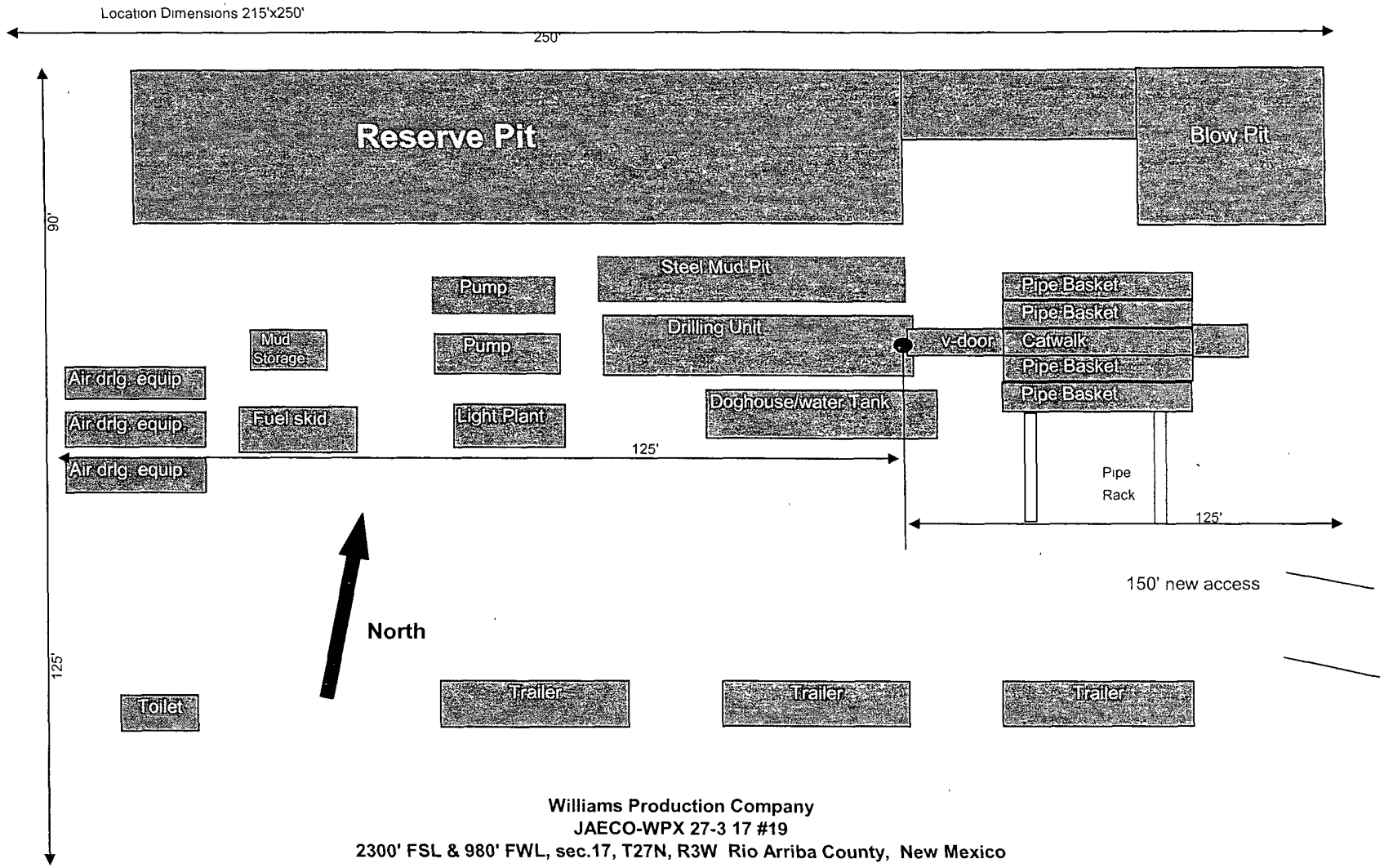




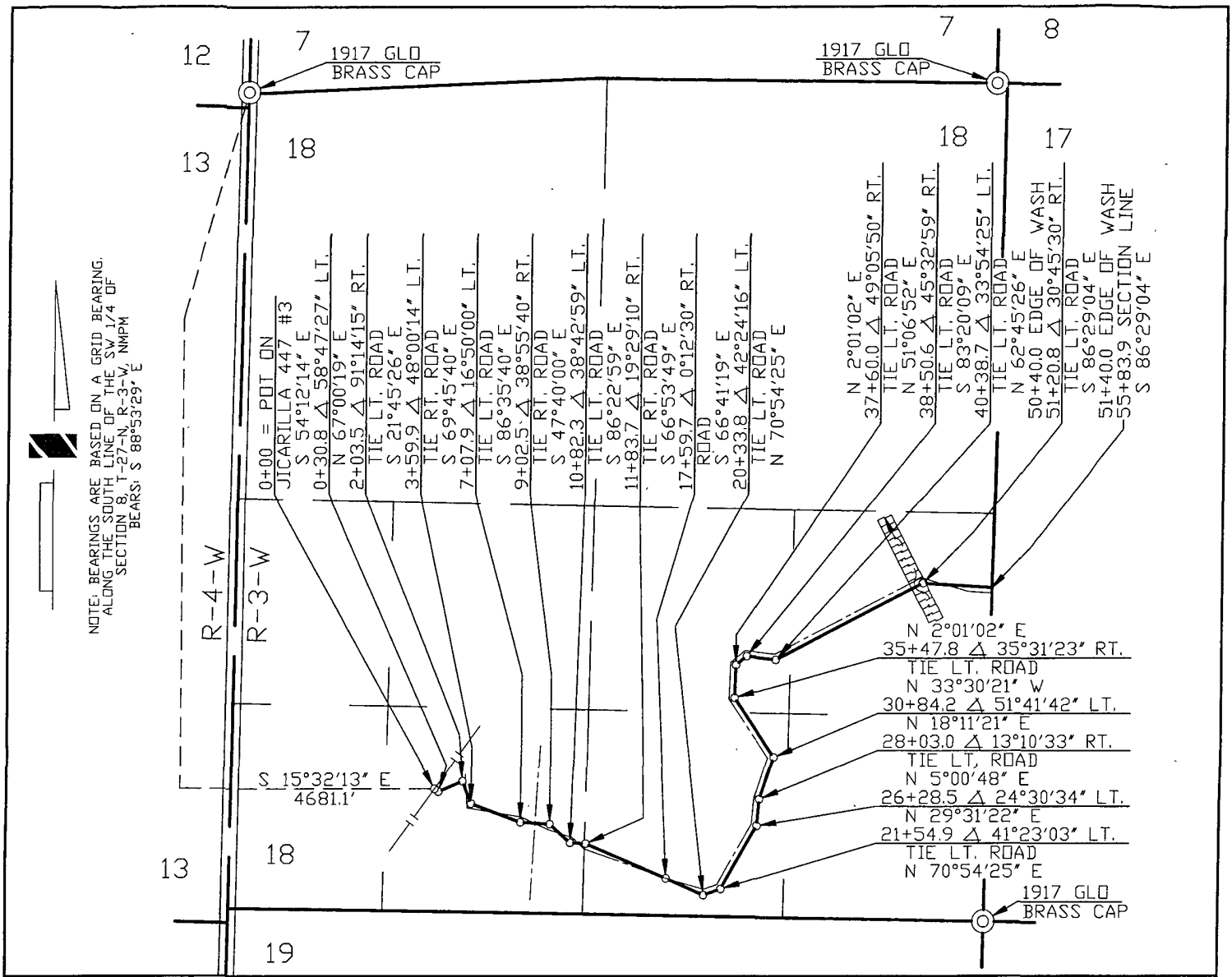


FILENAME: PINELAKE	SHEET 2 OF 3	High Country Surveys	DRAWN BY: CRT	CHECKED BY: CBT

Plat #3 Location Diagram



Williams Production Company
JAECO-WPX 27-3 17 #19
2300' FSL & 980' FWL, sec.17, T27N, R3W Rio Arriba County, New Mexico



PIPE DATA

PLAT #4

OWNERSHIP

SUBDIVISION	OWNER	FEET	MILES	ACRES	RODS
0+00 TO 55+83.9	JICARILLA APACHE	5583.9	1.058	5.768	338.418

REVISION

NO.	DATE	BY	DESCRIPTION	W.O.NO.	CHK.	APP.
1	11/03/08	CB	ISSUED FOR REVIEW		PB	

NO.	DATE	BY	DESCRIPTION	W.O.NO.	CHK.	APP.

INFO		DRAFTING	BY	DATE
R/W #:	N/A	DRAWN BY	CB	11/03/08
METER #:		CHECKED BY	PB	11/04/08
SURVEYED:	04/26/07	APPROVED BY		
		ENGINEER	BY	DATE
		DESIGNED BY		
		PROJ. APPROVED		

STATE: NEW MEXICO
COUNTY: RIO ARRIBA

WILLIAMS FOUR CORNERS, LLC Williams
ONE OF THE WILLIAMS COMPANIES

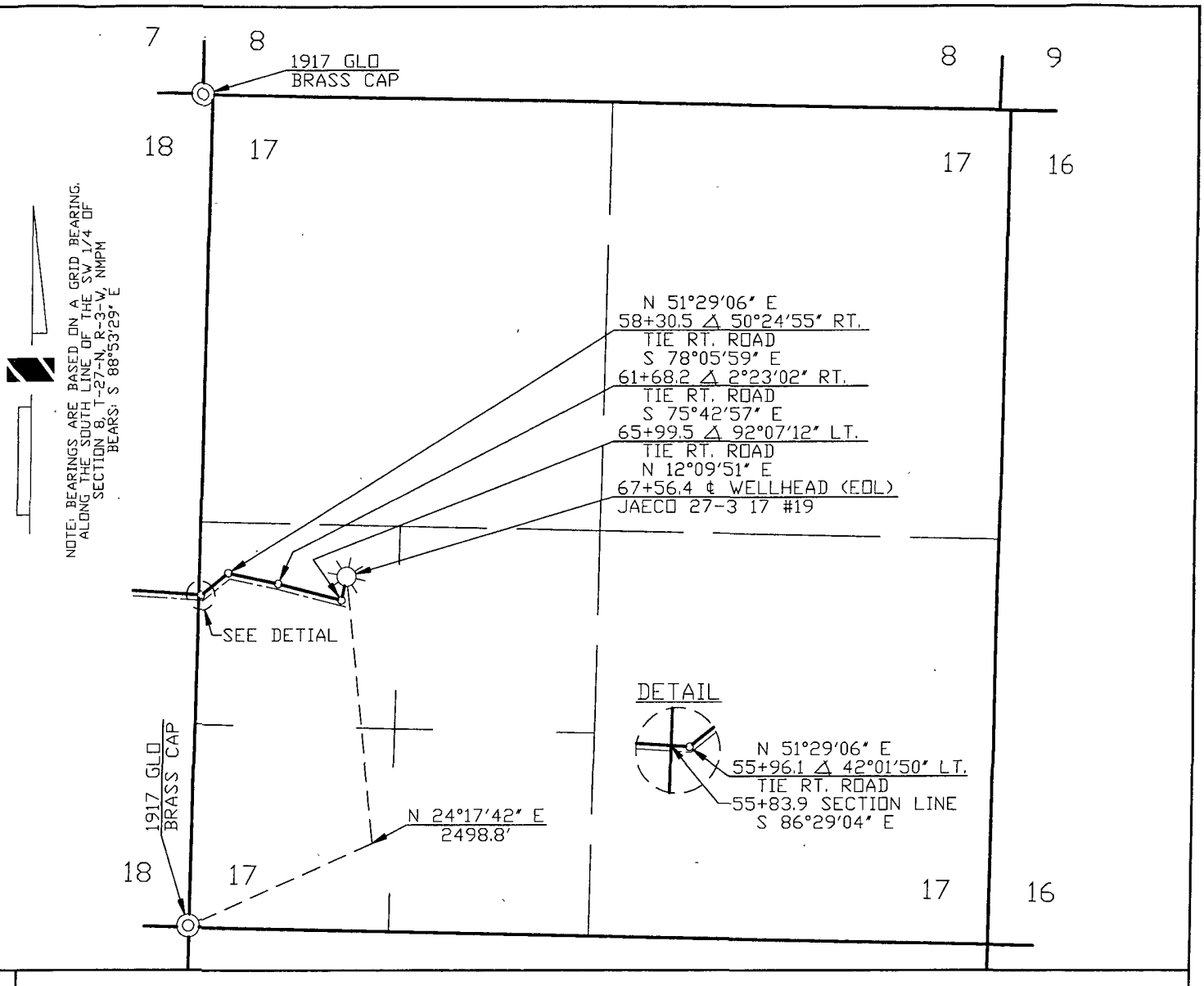
SAN JUAN GATHERING SYSTEM
JAECO - JAECO 27-3 17 #19
0+00 = POT ON JICARILLA 447 #3
(REF DWG. 77S765.0-18-1)
SEC. 18, T-27-N, R-3-W, NMPM

SCALE: 1" = 1000'
W.O. NO.

DWG NO. 77S765.0-36-1

SHEET 1 OF 2 | REV 1

T:\DS\MAPPING\DRAWINGS\SANJUAN\765\00\77S7650-36-1_R01.DWG 11/04/2008 3:30PM PAULB



PLAT #4

PIPE DATA

OWNERSHIP

SUBDIVISION	OWNER	FEET	MILES	ACRES	RODS	
55+83.9 TO 67+56.4	JICARILLA APACHE	1172.5	0.222	1.211	71.061	

REVISION

NO.	DATE	BY	DESCRIPTION	W.O.NO.	CHK.	APP.	NO.	DATE	BY	DESCRIPTION	W.O.NO.	CHK.	APP.
1	11/03/08	CB	ISSUED FOR REVIEW		PB								

INFO		DRAFTING	BY	DATE
R/W #:	N/A	DRAWN BY	CB	11/03/08
METER #:		CHECKED BY	PB	11/04/08
SURVEYED:	04/26/07	APPROVED BY		
		ENGINEER	BY	DATE
		DESIGNED BY		
		PROJ. APPROVED		

STATE: NEW MEXICO
COUNTY: RIO ARRIBA

WILLIAMS FOUR CORNERS, LLC Williams
ONE OF THE WILLIAMS COMPANIES

SAN JUAN GATHERING SYSTEM
JAECO - JAECO 27-3 17 #19
0+00 = POT ON JICARILLA 447 #3
(REF DWG. 77S765.0-18-1)
SEC. 17, T-27-N, R-3-W, NMPM

SCALE: 1" = 1000'
W.O. NO.

DWG NO. 77S765.0-36-2

SHEET 2 OF 2 | REV 1

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Well Control Equipment Schematic for 2M Service

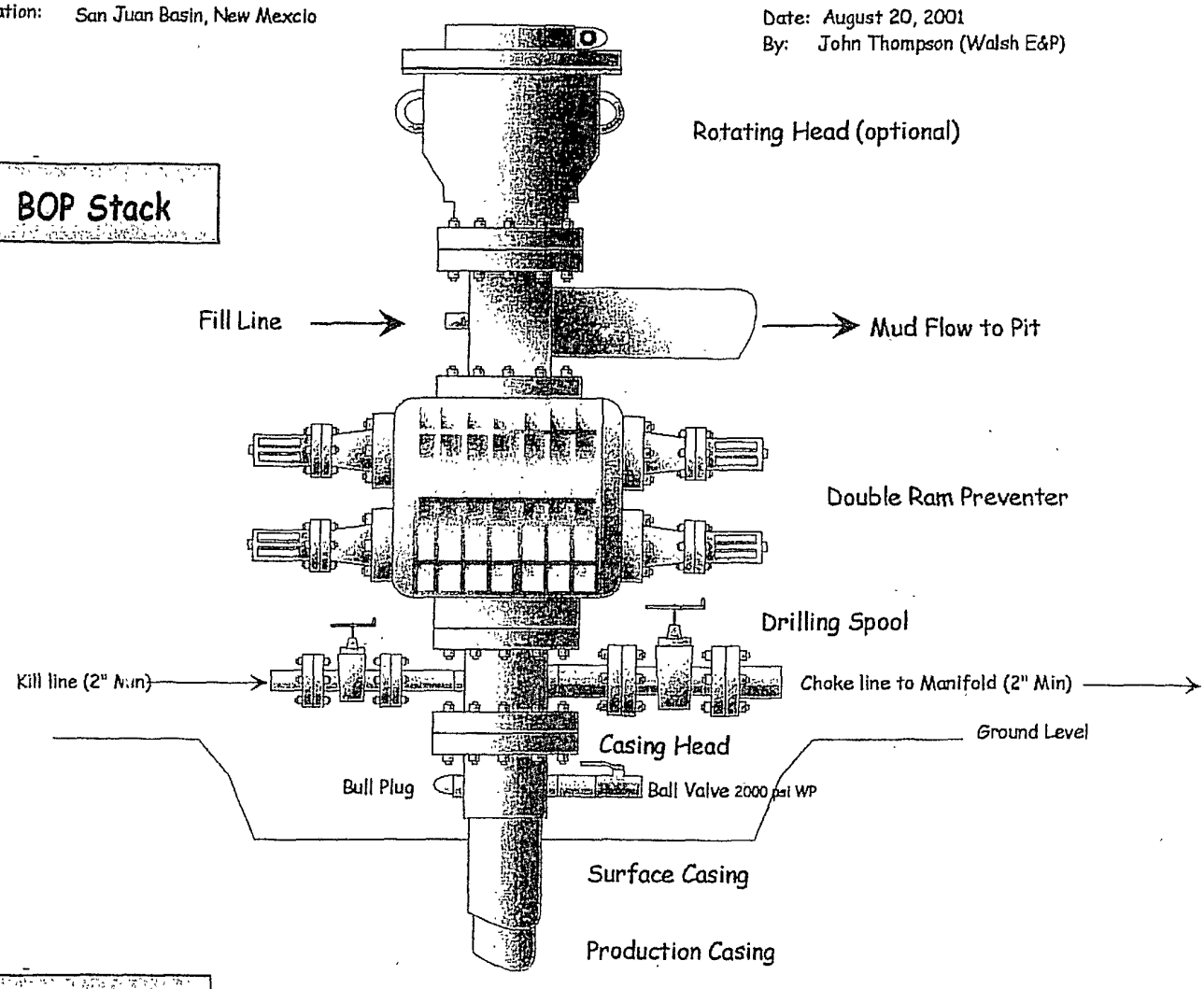
Attachment to Drilling Technical Program

Exhibit #1
Typical BOP setup

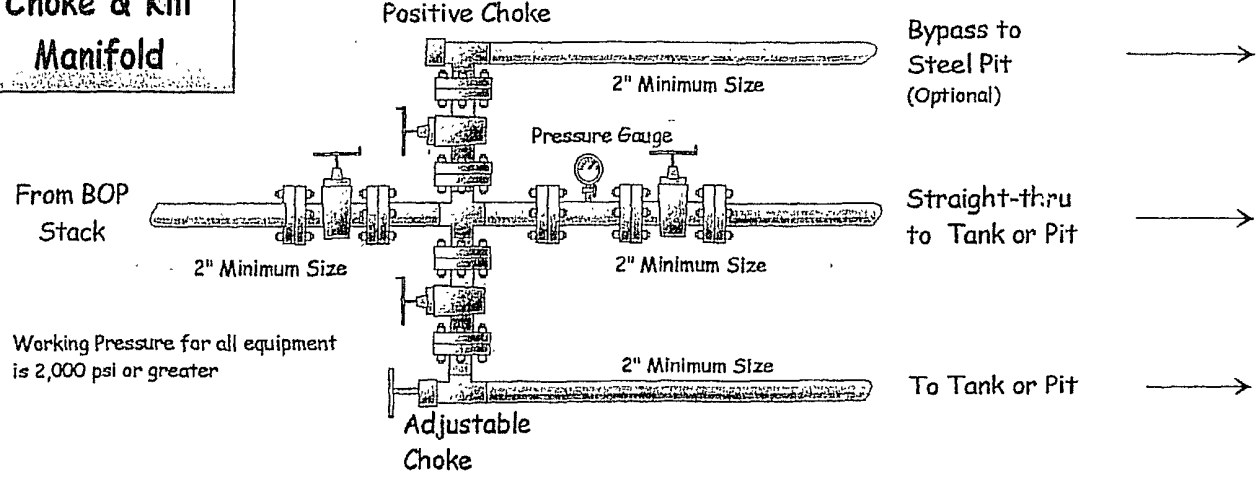
Location: San Juan Basin, New Mexclo

Date: August 20, 2001
By: John Thompson (Walsh E&P)

BOP Stack



Choke & Kill Manifold



Working Pressure for all equipment is 2,000 psi or greater