

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.

Jicarilla Apache Contract #61

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.

Indian I #06

9. API Well No.

30-039-29977

10. Field and Pool, or Exploratory

Blanco MV

11. Sec., T., R., M., or Blk. and Survey or Area

E Section 26, T28N R3W

12. County or Parish

Rio Arriba

13. State

NM

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

3a. Address

P.O. Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

(505) 634-4208

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 2320' FNL & 435' FWL

At proposed prod. zone same

14. Distance in miles and direction from nearest town or post office*

16 miles from Lindrith, NM

15. Distance from proposed*

location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 435'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320 (W/2)

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 63000'

19. Proposed Depth

6532'

20. BLM/BIA Bond No. on file

B001576

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

7173' GR

22. Approximate date work will start*

August 1, 2006

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

Title

Larry Higgins

6-23-06

Drilling COM

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

AFM FEO

2/1/2011

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 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 5331.5 foot pipeline tie would be required for this location and it is also located on Jicarilla Apache Nation Lands.

4500' new access road will be needed to access this well.

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

FEB 14 2011

NMOCD

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

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 October 12, 2005
Submit to Appropriate Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

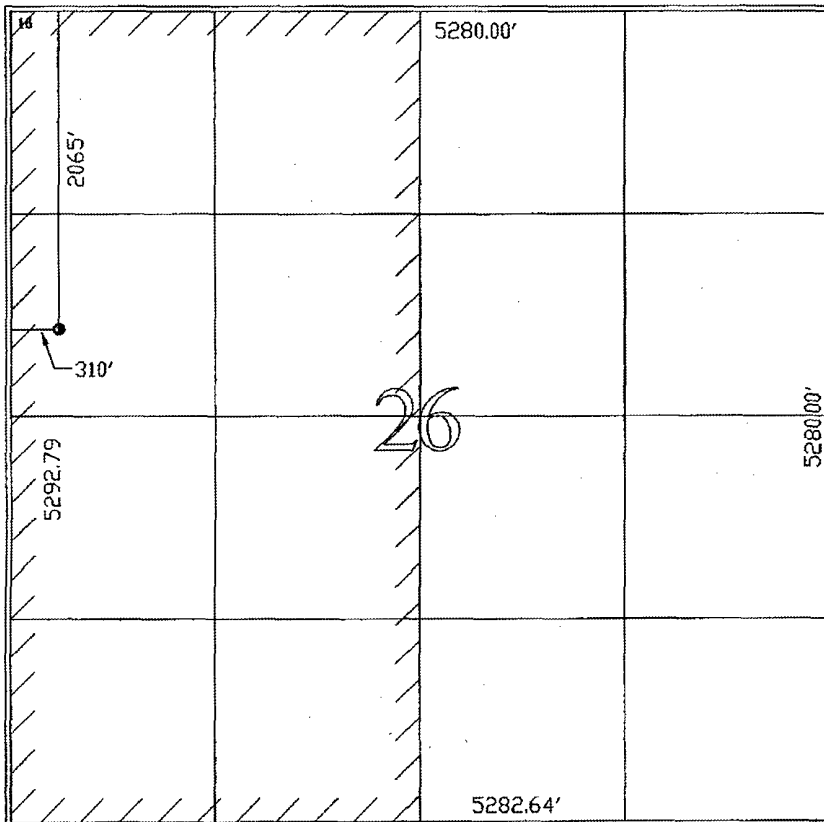
WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30039-29977		2 Pool Code 72319		3 Pool Name BLANCO MESAVERDE	
4 Property Code 17031		5 Property Name INDIAN I			6 Well Number 6
7 OGRID No. 120782		8 Operator Name WILLIAMS PRODUCTION COMPANY			9 Elevation 7181

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
E	26	28N	3W		2065	NORTH	310	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
12 Dedicated Acres 320 AC. W/2		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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.

	<p>17 OPERATOR CERTIFICATION</p> <p>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 undivided 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.</p> <p><i>Larry Higgins</i> 2-10-11 Signature Date <i>LARRY HIGGINS</i> Printed Name</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>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 the same is true and correct to the best of my belief.</p> <p>APRIL 2 2007 Date of Survey Signature and Seal of Professional Surveyor <i>[Signature]</i> Certificate Number 19672 REGISTERED PROFESSIONAL SURVEYOR</p>

RCVD FEB 11 '11
OIL CONS. DIV.
DIST. 3



WILLIAMS PRODUCTION COMPANY

Operations Plan

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

DATE: 6/12/2006 **FIELD:** Blanco MV
WELL NAME: Indian I #6 **SURFACE:** ~~BOFA~~ BIA
BH LOCATION: SWNW Sec 26-28N-3W **MINERALS:** Jicarilla #61
Rio Arriba, NM
ELEVATION: 7,173' GR **LEASE #** Jicarilla #61
MEASURED DEPTH: 6,532'

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS: (KB)

Name	MD	Name	MD
Ojo Alamo	3,407	Cliff House	5,737
Kirtland	3,517	Menefee	5,807
Fruitland	3,517	Point Lookout	6,082
Picture Cliffs	3,762	Mancos	6,392
Lewis	4,022	TD	6,532

- B. MUD LOGGING PROGRAM:** Mudlogger on location at 3,300' to intermediate casing TD and intermediate casing to TD.
- C. LOGGING PROGRAM:** High Resolution Induction/ GR and Density/ Neutron log from surface casing to intermediate casing and intermediate shoe to TD. Onsite geologist will pick Density/ Neutron log intervals on both logging runs.
- 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:** Clear water with benex to 7" casing point. Convert to a LSND mud to log and run pipe. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses. Use air w/Air Hammer from 7 in. csg.to TD.
- 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	12 1/4	300	9 5/8	36	K-55
Intermediate	8 3/4	4,257	7	20	K-55
Liner	6 1/4	4,157 6,532	4 1/2	10.5	J-55

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
2. INTERMEDIATE CASING: 7" 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 CASING: 4-1/2" & 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.

IV. CEMENTING:

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

1. SURFACE: Slurry: 150sx (205 cu.ft.) of "Type III" + 2% CaCl₂ + 1/4 # 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 - 545 sx (1,140 cu.ft.) of "Premium Light" with 8% gel, 1% CaCl₂ and 1/4# cello-flake/sk (Yield = 2.09 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 50 sx (70cu.ft.) of "Type III" with 1/4# cello-flake/sk (Yield = 1.4 cu.ft./sk, Weight = 14.5#/gal.). Use **100% excess in Lead Slurry** to circulate to surface. **No excess in Tail Slurry**. Total volume = 1,210 cu.ft. Bump Plug to 1,500 psi. Notify engineering if cement is not circulated to surface.
3. PRODUCTION LINER: 10 bbl Gelled Water space. Lead: 50sx (130ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE. (Yield = 2.59 cu.ft./sk, Weight = 11.6 #/gal.). Tail: 100 sx (215 ft³) of Premium Light HS + 1% FL-52 + .2% CD-32, 0.1% R-3, 3 #/sk CSE, 1/4 #/sk cello flake and 4% Phenoseal. (Yield = 2.15 ft³/sk, Weight = 12.3 #/gal.). Displace cement at a minimum of 8 BPM. The 20% excess in lead and tail should cover 100 ft into intermediate casing. Total volume 305 ft³. WOC 12 hours

V. 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 is not circulated to surface.

B. PRESSURE TEST

1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

1. Perforate the Point Lookout as determined from the open hole logs.
2. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
3. Isolate Point Lookout with a CIBP.
4. Perforate the Menefee/Cliff House as determined from the open hole logs.
5. Stimulate with approximately 9,300# of 14/30 LiteProp™ sand in slick water.
6. Test each zone before removing bridge plugs.

D. RUNNING TUBING

1. Mesa Verde: Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

Larry Higgins
FOR Gary Sizemore
Sr. Drilling Engineer

Well Control Equipment Schematic for 2M Service

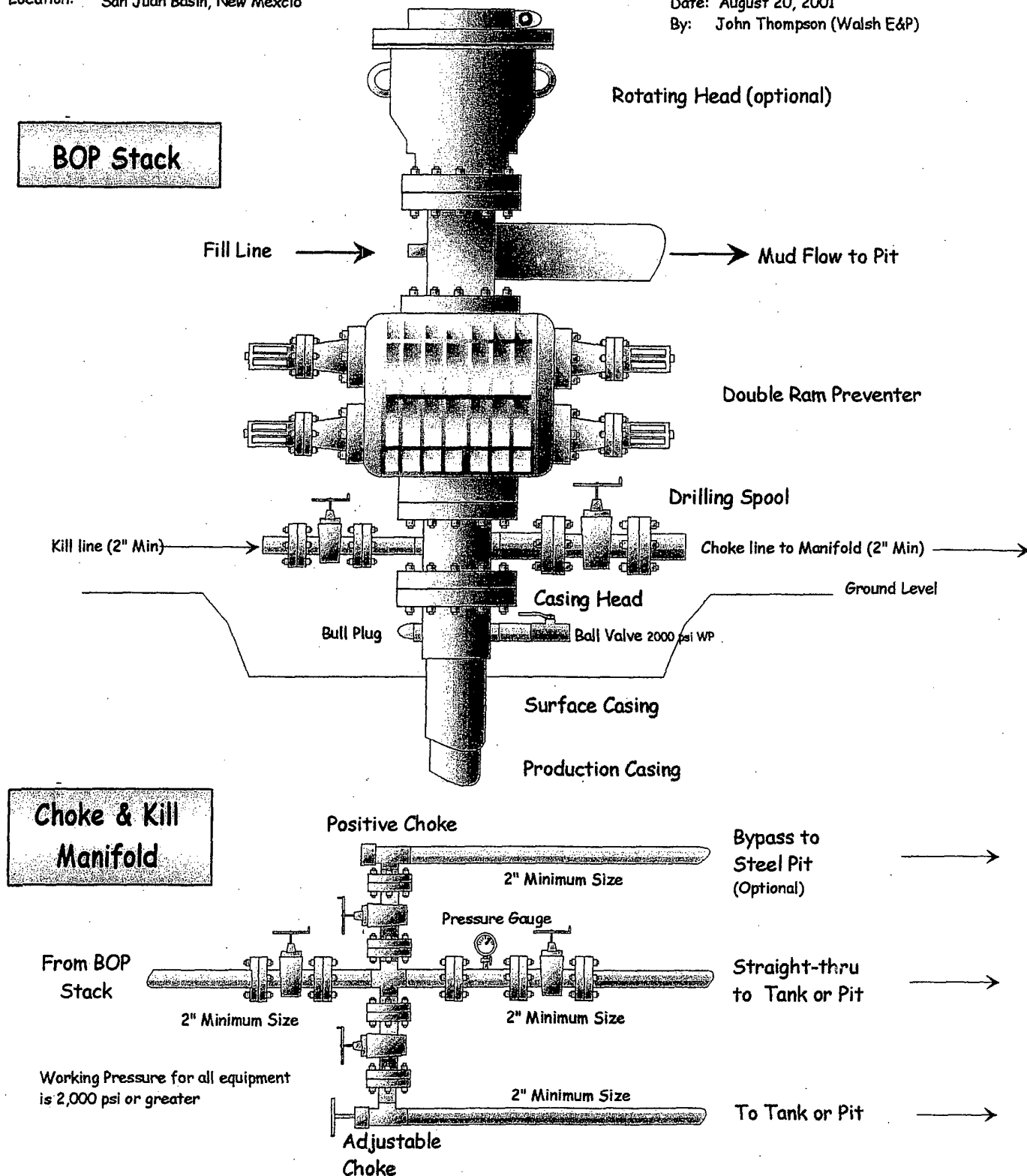
Attachment to Drilling Technical Program

Exhibit #1 Typical BOP setup

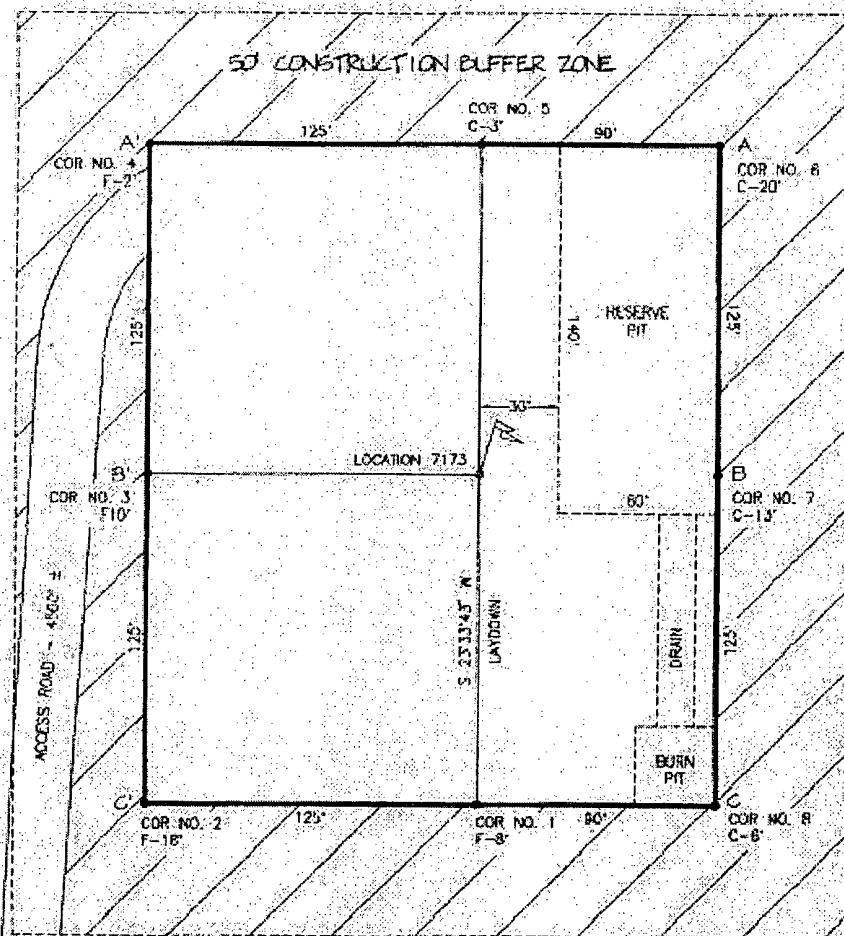
Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)



WILLIAMS PRODUCTION COMPANY
 INDIAN 1 #6
 2320 FNL & 435 FWL
 SECTION 26 T28N R3W NMPM
 RIO ARriba COUNTY, NEW MEXICO
 ELEVATION: 7173



LATITUDE: 36°36'42" N
 LONGITUDE: 107°07'39" W
 WGS 84
 VERT DATUM: NAD 1927

A-A'	
7163	
7173	
7163	

D-B'	
7163	
7173	
7163	

C-C'	
7163	
7173	
7163	
7153	