

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6181 Fax: (575) 393-0720

DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-0720

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87506  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Frances Dr. MAR 23 2016  
Santa Fe, NM 87505

RECEIVED

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-00367	Pool Code 98178	Pool Name WC-025 GO1 5163211 L; San Andres
Property Code	Property Name ANDERSON RANCH UNIT	Well Number 017
OGRID No. 155471	Operator Name CAMBRIAN MANAGEMENT, LTD	Elevation 4273'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	2	16 S	32 E		1981 980	SOUTH	1984 980	EAST	LEA

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
G	14	16 S	32 E		1500	NORTH	2330	EAST	LEA
Dedicated Acres		Joint or Infill	Consolidation Code		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

Scale: 1"=2000'

NOTE:  
1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

Surface Location  
Plane Coordinate  
X = 683,712.5  
Y = 709,373.0  
Geographic Coordinate  
Lat. 32°56'55.34" N  
Long. 103°44'04.05" W

Bottom Hole Location  
Plane Coordinate  
X = 683,415.9  
Y = 700,614.2  
Geographic Coordinate  
Lat. 32°55'28.69" N  
Lon. 103°44'08.12" W

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.

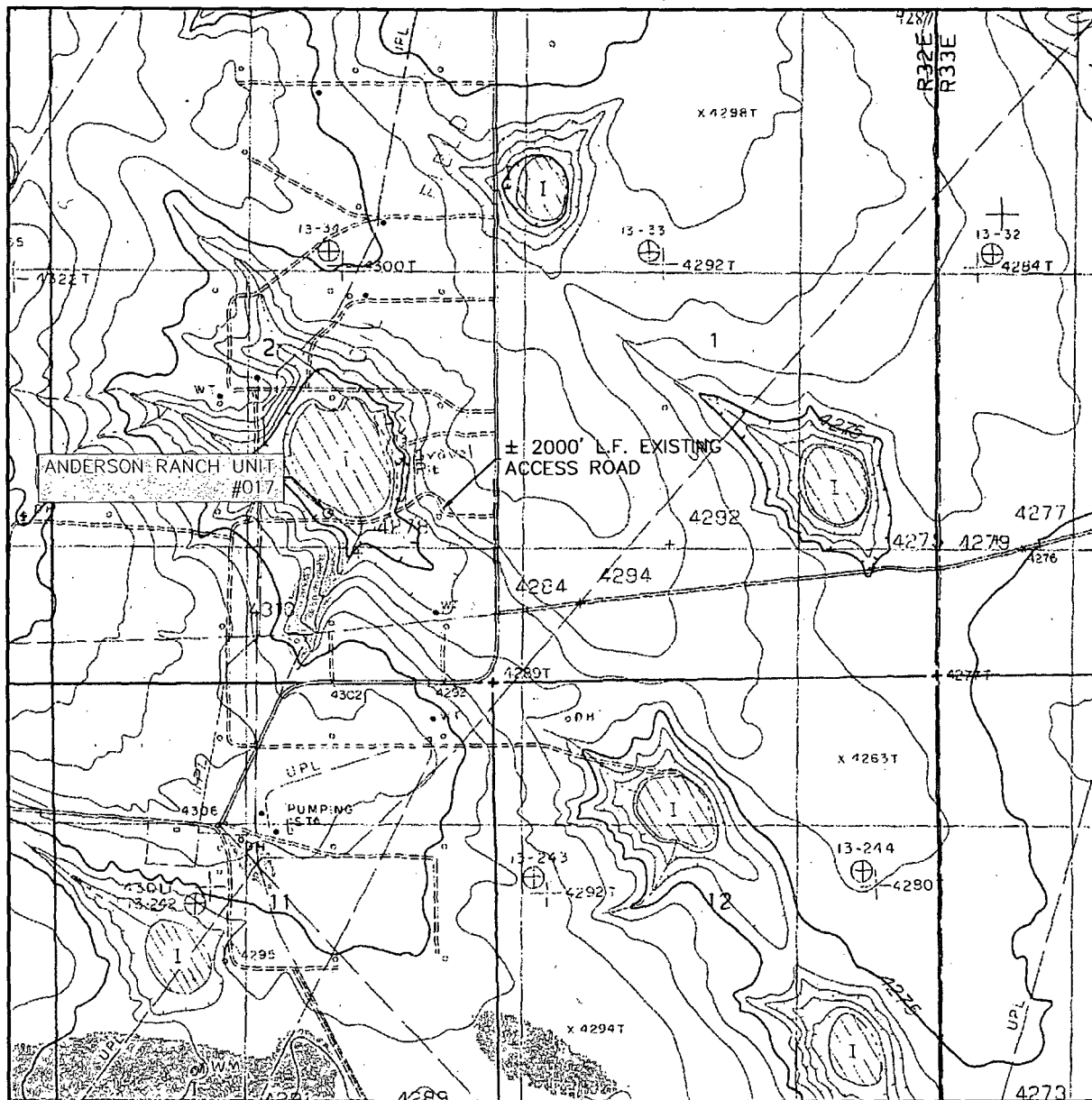
Denise Jones 3-18-16  
Signature Date  
Denise Jones  
Printed Name  
djones@cambridgemanagement.com  
E-mail Address

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.

March 16, 2016  
Date of Survey  
Signature & Seal of Professional Surveyor  
LINDSEY BYGAN  
NEW MEXICO  
23263  
W.O. Num. 0154  
Certificate No. Lindsay

MAR 23 2016

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BUCKEYE NW - 5'

SEC. 2 TWP. 16-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1981' FSL & 1984' FEL

ELEVATION 4273'

OPERATOR Grand Banks Energy Company

LEASE ANDERSON RANCH UNIT

U.S.G.S. TOPOGRAPHIC MAP

BUCKEYE NW



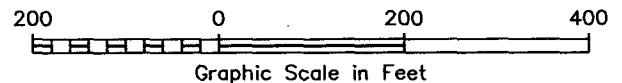
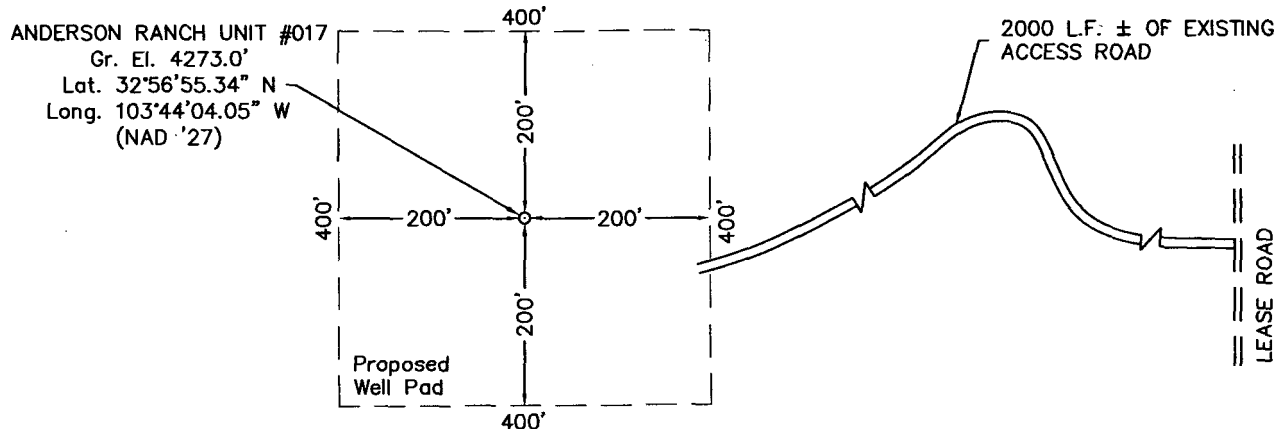
SURVEYORS - ENGINEERS - PLANNERS  
FIRM REGISTRATION NUMBER: 100682-00  
110 W. LOUISIANA AVE., SUITE 110  
MIDLAND, TEXAS 79701  
(432) 687-0865 - FAX (432) 687-0868

# SECTION 2, TOWNSHIP 16 SOUTH, RANGE 32 EAST, N.M.P.M.

LEA COUNTY

NEW MEXICO

2016-0154-A



## DRIVING DIRECTIONS

FROM THE INTERSECTION OF U.S. HIGHWAY 82 AND HIGHWAY 18 IN LOVINGTON, NEW MEXICO, GO WEST AND SOUTHWEST ON U.S. HIGHWAY 82 16.8 MILES TO A LEASE ROAD ON THE NORTH (RIGHT) SIDE OF THE ROAD, THEN GO NORTHWEST AND WEST ON LEASE ROAD 7.0 MILES, THEN GO NORTH (RIGHT) 0.3 MILE TO A POINT APPROXIMATELY 0.4 MILE EAST OF THE PROPOSED LOCATION.

Grand Banks Energy Company

ANDERSON RANCH UNIT #017

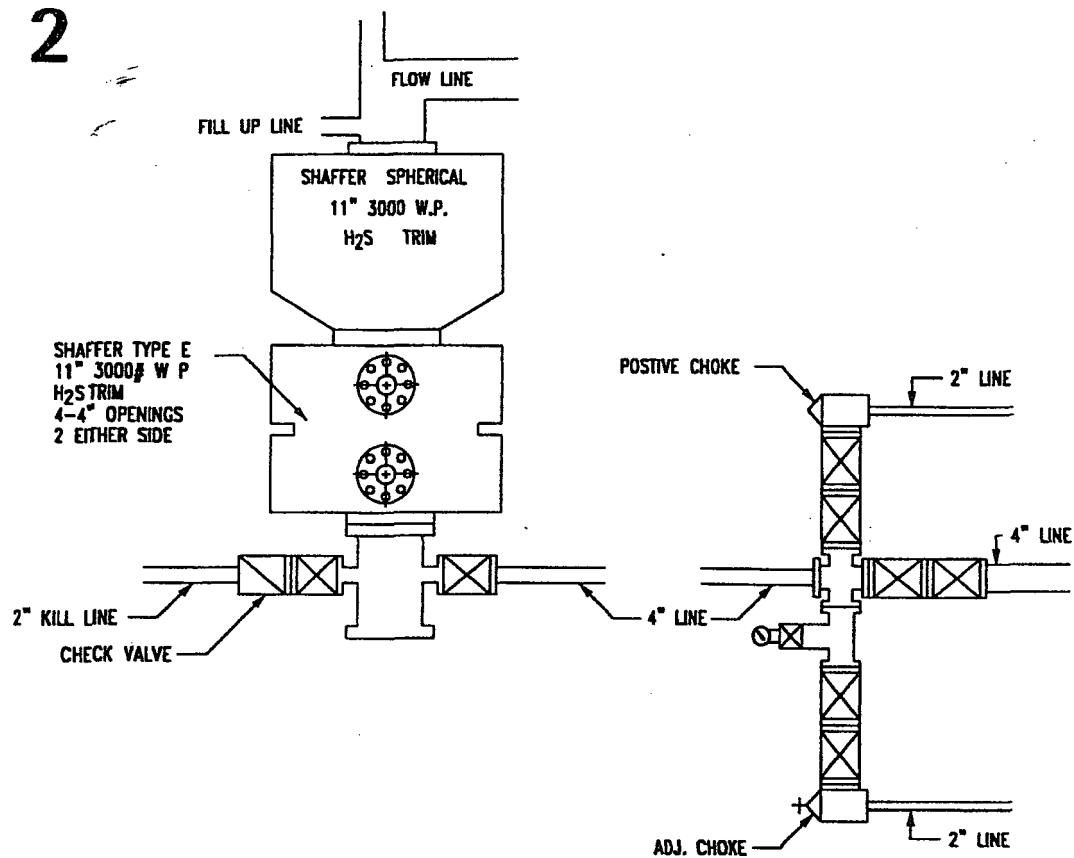
Located 1981' FSL & 1984' FEL, Section 2  
Township 16 South, Range 32 East, N.M.P.M.  
Lea County, New Mexico

Drawn By: SC	Date: March 21, 2016
Scale: 1" = 200'	Field Book: 599 / 76-78
Revision Date:	Quadrangle: Buckeye NW
W.O. No: 2016-0154	Dwg. No.: 2016-0154-A

**WEST COMPANY**  
Land Surveyors • Civil Engineers

SURVEYORS - ENGINEERS - PLANNERS  
FIRM REGISTRATION NUMBER: 100682-00  
110 W. LOUISIANA AVE., SUITE 110  
MIDLAND, TEXAS 79701  
(432) 687-0865 - FAX (432) 687-0868

# RIG 2

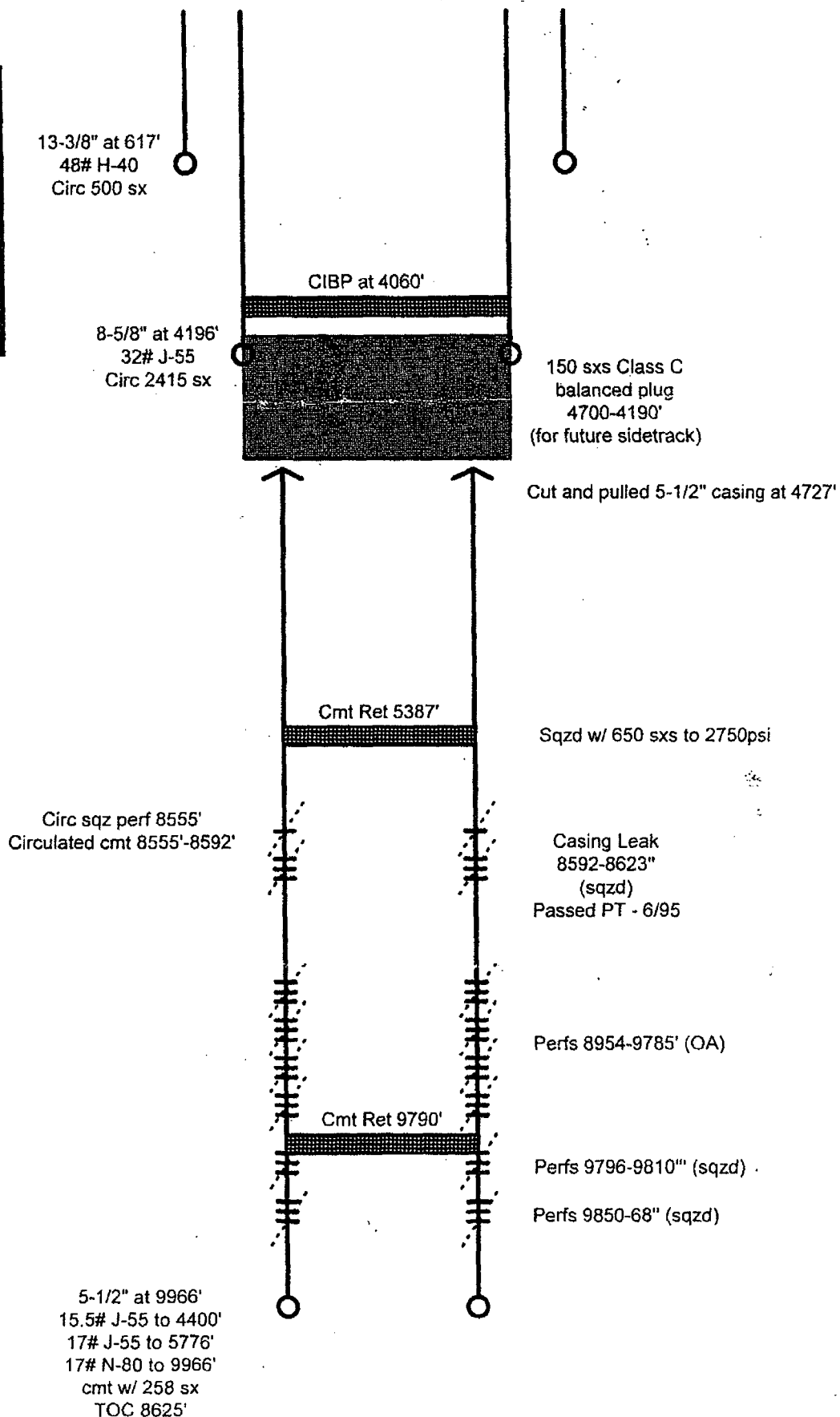


**Wellbore Schematic  
ARU #17**

Configuration after TA  
in April 2001

**Future Plans:**

**Sidetrack well  
to deeper  
horizon**



Existing wellbore

March 08, 2016



**Cambrian Management Ltd**  
415 W. Wall St, #900  
Midland, TX 79701

**HOBBS OCD**

**MAR 23 2016**

**RECEIVED**

Anderson Ranch Unit #17  
Lea County, NM  
API Number: 0

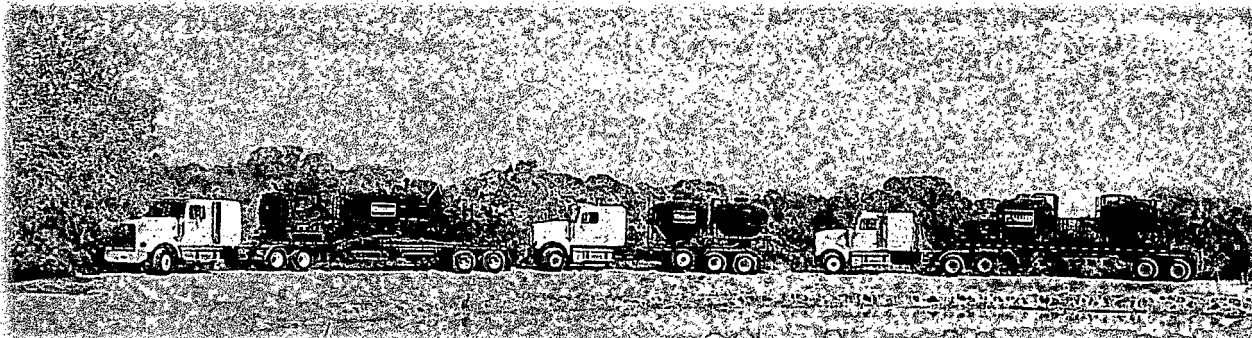
## **Cementing Proposal 5.5" Production**

**Prepared For:** Dallas Frazier  
Email: [dfrazier@cambrianmgmt.com](mailto:dfrazier@cambrianmgmt.com)

**Service Point:** Midland, TX

**Operations Manager:** Josh Leininger  
Business Phone: 432-563-4440  
Mobile Phone: 432-466-9018  
email: [josh.leininger@alliedservices.com](mailto:josh.leininger@alliedservices.com)

**Sales & Technology Manger:** Jared Booker  
Business Phone: 432-563-4440  
Mobile Phone: 432-301-1553  
email: [jared.booker@alliedservices.com](mailto:jared.booker@alliedservices.com)



**THANK YOU FOR YOUR BUSINESS!**

Operator Name: Cambrian Management Ltd  
 Well Name: Anderson Ranch Unit #17  
 March 08, 2018



## Job Information

## 5.5" Production

Open Hole 4060 to 13220 ft. MD  
 Inner Diameter 7 7/8 in.  
 20% Excess from 13220 ft to 4060 ft 1904.4 ft<sup>3</sup>  
 10% Excess from 4060 ft to 0 ft 791.5 ft<sup>3</sup>  
 Shoe Joint 5.0 ft<sup>3</sup>

Previous Casing 0 to 4060 ft. MD  
 Outer Diameter 8 5/8 in.  
 Inner Diameter 7.921 in.  
 Linear Weight 32.00 lbs/ft  
 Casing Grade J-55

Casing 0 to 13220 ft. MD  
 Outer Diameter 5 1/2 in.  
 Inner Diameter 4.78 in.  
 Linear Weight 20.00 lbs/ft  
 Casing Grade L-80

## Pump Schedule

## 5.5" Production

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)	Downhole Volume (bbl)	Water Required (bbl.)
Spacer 1	Mud Clean	9.50	5	40.0	40.0
Lead 1	ALLIED HIGH-YIELD - CLASS C	11.80	5	140.5	106.7
Tail 1	ALLIED 50/50 POZ BLEND - CLASS C	14.40	5	339.0	200.6
Displacement 1	Fresh Water	8.33	5	291.0	291.0

### TOTALS

810.5

638.3

Estimated pump time @ 4 bpm

3.38

hrs

Estimated pump time @ 8 bpm

1.69

hrs

Operator Name: Cambrian Management Ltd  
 Well Name: Anderson Ranch Unit #17  
 March 08, 2016



<b>Fluids Design</b>	<b>5.5"</b>	<b>Production</b>
<b>Spacer 1</b> Mud Clean		Fluid Density: 9.50 lb/gal Fluid Volume: 40.0 bbls
<b>Lead 1</b> ALLIED HIGH-YIELD - CLASS C		
<b>Base Slurry</b> 50:50 Class C : Poz Blend, 10% Gel, 5 lb/sk Salt		
0.4% BWOC Fluid Loss Additive - Low Density Slurries	Slurry Density:	11.80 lb/gal
0.2% BWOC Retarder - Low Temperature	Slurry Yield:	2.39 ft <sup>3</sup> /sk
	Mixing Water	13.58 gal/sk
<b>Top of Cement Calculated to be Circulated to Surface</b>	Total sacks	330 sks
<b>Volume of Cement Based Off 10% Excess of Previous Casing</b>	Total barrels	140.5 bbls
<b>Tail 1</b> ALLIED 50/50 POZ BLEND - CLASS C		
<b>Base Slurry</b> 50:50 Class C : Poz Blend, 2% Gel		
0.4% BWOC Fluid Loss Additive - Mod Temp	Slurry Density:	14.40 lb/gal
0.2% BWOC Retarder - Low Temperature	Slurry Yield:	1.22 ft <sup>3</sup> /sk
	Mixing Water	5.38 gal/sk
<b>Top of Cement Calculated to be 4,060 ft</b>	Total sacks	1565 sks
<b>Volume of Cement Based Off 20% Excess of Gauge Hole</b>	Total barrels	339.0 bbls
<b>Displacement 1</b> Fresh Water	Fluid Density:	8.33 lb/gal
	Fluid Volume:	291.0 bbls



Operator Name: Cambrian Management Ltd.  
 Well Name: Anderson Ranch Unit #17  
 March 08, 2016



## Cost Estimate

5.5"

## Production

Services	Qty	UoM	Unit Price	Total Price
Casing Pump Charge 13000' to 14000'	1.00	Min. 8 hr	\$3,249.90	\$3,249.90
Data Acquisition	1.00	per job	\$304.92	\$304.92
Cementing Head Rental with Manifold - Low Pressure	1.00	per day	\$138.60	\$138.60
Field Bin Rental, per five day period or fraction	2.00	per day	\$162.00	\$324.00
Bulk Materials Service Charge	2037.46	per cu. ft.	\$0.50	\$1,008.54
Ton Mileage (per ton per mile basis, from nearest operating location)	6269.49	ton-mile	\$0.50	\$3,103.40
Light Vehicle Mileage, round trip from nearest operating location	150.00	per mile	\$0.94	\$141.21
Heavy Vehicle Mileage, round trip from nearest operating location	450.00	per mile	\$1.39	\$623.70
Subtotal:				\$8,894.27

Equipment Sales	Qty	UoM	Unit Price	Total Price
Top Rubber Plug	1.00	each	\$154.70	\$154.70
Subtotal:				\$154.70

Materials	Qty	UoM	Unit Price	Total Price
Mud Clean	40.00	per bbl	\$11.15	\$446.12
ALLIED HIGH-YIELD - CLASS C	330.00	per sack	\$7.99	\$2,635.91
CFL-330	111.00	per lb	\$5.98	\$663.91
CR-100	56.00	per lb	\$1.45	\$81.08
ALLIED 50/50 POZ BLEND - CLASS C	1565.00	per sack	\$6.42	\$10,047.46
CFL-300	526.00	per lb	\$6.55	\$3,442.93
CR-100	263.00	per lb	\$1.45	\$380.77
Defoamer - Liquid	20.00	per gal	\$16.88	\$337.59
Subtotal:				\$18,035.77

**TOTAL EXCLUDING ADDITIONAL ITEMS: \$27,084.74**

Additional Items	Qty	UoM	Unit Price	Total Price
Additional hours, in excess of set hours	1.00	per hour	\$ 632.50	\$ 632.50
Derrick Charge	1.00	per event	\$ 143.55	\$ 143.55
Subtotal:				\$ 776.05

The data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The prices contained in this proposal are estimates and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties. This quotation is based on being awarded the work on a first call basis and may be subject to change for second or third call. This quotation is valid for thirty (30) days after listed proposal date, and may be subject to change if the work is performed more than thirty (30) days after the listed proposal date.

#### **TERMS and CONDITIONS**

Allied Oil and Gas Services' performance of services and sale of materials is expressly conditioned upon the applicability of the **Terms and Conditions listed on the service ticket provided at the job site.** The Terms and Conditions include, among other things, an indemnity in favor of Allied Oil and Gas Services from Customer for damage to the well bore, reservoir damage, loss of the hole, blowouts and loss of control of the well, even if caused by the negligence or other fault of Allied Oil and Gas Services. The Terms and Conditions also limit the warranties provided by Allied Oil and Gas Services and the remedies to which Customer may be entitled in the event of a breach of warranty by Allied Oil and Gas Services. For these reasons, we strongly recommend that you carefully review a copy of the Terms and Conditions.

By requesting that Allied Oil and Gas Services perform the services described herein, Customer acknowledges that such Terms and Conditions are applicable to the services. Further, by requesting the services, Customer warrants that its representative on the well location or other service site will be fully authorized to acknowledge such Terms and Conditions by executing a service ticket or other document presented by Allied Oil and Gas Services containing such Terms and Conditions.

In the event that Customer and Allied Oil and Gas Services have executed a Master Services Agreement covering the work to be performed, such Master Services Agreement shall govern in place of the Terms and Conditions.

MAR 23 2016

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ARU #17  
Lea Co, NM

## Plan Data for Anderson Ranch Unit #17

Plan Point Information:									
Dogleg Severity Unit: %/100.00ft				Position offsets from Slot centre					
MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
0.00	0.00	0.00	-0.00	-0.00	-0.00	709472.70	724893.34	0.00	0.00
4045.00	0.00	0.00	4045.00	-0.00	-0.00	709472.70	724893.34	0.00	0.00
4060.00	3.00	217.00	4059.99	-0.31	-0.24	709472.38	724893.10	0.32	20.00
4065.00	3.00	217.00	4064.99	-0.52	-0.39	709472.18	724892.95	0.54	0.00
4709.11	61.23	218.39	4587.37	-257.77	-203.66	709214.93	724689.68	265.77	9.04
5220.59	89.50	180.00	4720.00	-714.28	-350.97	708758.41	724542.37	727.85	9.05
13220.59	89.50	180.00	4790.00	-8713.98	-350.97	700758.72	724542.37	8721.04	0.00

## Plan Data for Anderson Ranch Unit #17

Slot: Anderson Ranch Unit #17

Position:

Offset is from Site centre

+N/-S: 0.00USft Northing: 709472.70USft Latitude: 32.948917°  
+E/-W: 0.00USft Easting: 724893.34USft Longitude: -103.734955°  
Elevation Above VRD: 4302.00USft

## Plan Data for Anderson Ranch Unit #17

Well: Anderson Ranch Unit #17

Type: Main-Well

File Number:

Plan Folder: P1

Plan: P1:V3

Vertical Section: Position offset of origin from Slot centre:

+N/-S: 0.00USft

Azimuth: 182.31°

+E/-W: 0.00USft

Magnetic Parameters:

Model: Field Strength: Declination: Dip: Date:  
bggm2015 48590(nT) 7.28° 60.77° 2016-03-07

## Plan Data for Anderson Ranch Unit #17

Target Set Information:

Name: ARU #17 Option 3

Position offsets from Slot centre

Name	TVD	TVD SS	+N/-S	+E/-W	Northing	Easting
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)
PBHL #17	4790.00	-488.00	-8713.98	-350.97	700758.72	724542.37
Plan LP	4720.00	-418.00	-714.28	-350.97	708758.42	724542.37

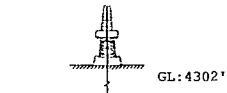
Anderson Ranch Unit #17

ARU #7

ARU #4

ARU #1

ARU #5



GL:4302'

