

Douglas A. Ducey  
Governor

State of Arizona  
**Oil and Gas Conservation Commission**

1110 W. Washington Street, Phoenix, AZ 85007  
602-771-4501

[www.azogcc.az.gov](http://www.azogcc.az.gov)  
Dennis L. Turner, Oil and Gas Administrator

Commissioners:  
Frank Thorwald, Chair  
Robert L. Wagner, Vice Chair  
Stephen R. Cooper  
William C. Feyerabend  
J. Dale Nations, Ph.D.

October 21, 2016

IN THE MATTER OF APPLICATION TO:  
EXCEPTION TO SPACING RULE, FILED BY:

RANGER DEVELOPMENT LLC.

ON SECTION 2, TOWNSHIP 19 NORTH  
RANGE 26 EAST, G&SRM

ON SECTION 33, TOWNSHIP 20 NORTH  
RANGE 26 EAST, G&SRM, AND

ON SECTION 34, TOWNSHIP 20 NORTH  
RANGE 26 EAST, G&SRM

NOTICE OF HEARING

RANGER DEVELOPMENT LLC., having filed application and notice of intention to drill three new wells on Section 2, Township 19 North, Range 26 East, Section 33, Township 20 North, Range 26 East, and Section 34, Township 20 North, Range 26 East, Gila and Salt River Base and Meridian and on Gila and Salt River Base and Meridian, all locations being in Apache County, Arizona, and having requested that an exception be made to Arizona Administrative Code R12-7-107(B) relative to the spacing of gas wells,

IT IS HEREBY ORDERED, under the provisions of Arizona Administrative Code R12-7-107(E) that a public hearing be held at the office of the Arizona Department of Environmental Quality, 1110 West Washington Street, Phoenix Arizona on the 15<sup>th</sup> November 2016, Room 3100B at the hour of 10:00 a.m. at which time and place any and all interested parties may produce evidence as to why said application should or should not be granted.

GIVEN under my hand and the seal of seal of the State of Arizona this 21st day of October, 2016.

Frank Thorwald

Chairman, Oil Gas Conservation Commission

AGENDA FOR PUBLIC HEARING FOR RANGER DEVELOPMENT LLC.

November 15, 2016

10:00 a.m., Room 3100B

Arizona Department of Environmental Quality

- Presentation by Ranger Development LLC. on justification for well spacing exceptions for Ranger 2-1, Ranger 33-2 and Ranger 34-2, including geologic and seismic data
- Justification for field name change from Pinta Dome to Mustang Dome



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J. Dale Nations, Ph.D.

**Public Hearing of the Oil & Gas Conservation Commission**  
**10:00 a.m., Nov. 15, 2016, Room 3100B**

Name / Organization – please print	email	phone
William Feyerabend	billfeyerabend@yahoo.com	928-830-0721
Rich Zeise / A.A.G.	Rich.Zeise@azogcc.gov	(602) 542-8583
Von Tenson	Vontenson@cox.net	602-432-0549
Gen Northrup	bestmertz2@msn.com	602-697-5422
MICHELE VAN QUATHEN	mvg@mvglaw.com	602-357-7586
DAVID WAHL - CONSULTING GEOLOGIST	DAVEWAHL@COX.NET	480-946-0559
Filip Myc - Ranger	fmyc@twainbridgesllc.com	(303) 308-5463
TONY HINES - RANGER	tonyhines@iacx.com	972-960-3210
RURT CONSTENIUS - RANGER	KCONSTENIUS@COMCAST.NET	520-797-9515
Joe Dixon - AZ State Land	jdixon@azland.gov	602-542-2625
NYAL NIEMUTH	nyalniemuth2@gmail.com	602-266-0244
DALE NATIONS (via phone)	dalenations2@gmail.com	520/395-0200

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State of Arizona  
**Oil and Gas Conservation Commission**

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602-771-4501

[www.azogcc.az.gov](http://www.azogcc.az.gov)

Dennis L. Turner, Oil and Gas Administrator

Commissioners:  
Frank Thorwald, Chair  
Robert L. Wagner, Vice Chair  
Stephen R. Cooper  
William C. Feyerabend  
J. Dale Nations, Ph.D.

November 18, 2016

**NOTICE OF PUBLIC HEARING CANCELATION**

**OIL AND GAS CONSERVATION COMMISSION**

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Arizona Oil and Gas Conservation Commission (OGCC) and to the general public that the OGCC Public Hearing scheduled for Thursday, December 1, 2016 at 10:00 a.m. has been **cancelled**.

Consultations between counsel representing OGCC and the Arizona State Land Department (ASLD) determined that OGCC has no jurisdiction over the issues as presented.

Therefore, the hearing date is vacated. It is anticipated that this Hearing will not be rescheduled.

Dated this 18th day of November 2016

OIL AND GAS CONSERVATION COMMISSION

A handwritten signature in dark ink, appearing to read "Dennis L. Turner", with a stylized flourish at the end.

Dennis L. Turner, Oil and Gas Program Administrator

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

**Ranger Development LLC, 5400 LBJ Expressway, Suite 460, Dallas TX 75240 (972) 960-3212**

Address

City

State

Phone Number

Drilling Contractor

**not known at this time**

Address

## DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor

**State: 13-118076**

Well number

**Ranger 2-1**

Elevation (ground)

**5754'**

Nearest distance from proposed location to property or lease line:

**1553'** feet

Distance from proposed location to nearest drilling, completed or applied-for well on the same lease:

feet

Number of acres in lease

**1,997.64**

Number of wells on lease, including this well, completed in or drilling to this reservoir:

If lease purchased with one or more wells drilled, from whom purchased.

Name

Address

**all wells P&A when lease issued by State to Ranger**

Well location (give footage from section lines)

**1553' FNL, 1603' FWL**

Section - Township - Range or Block and Survey

**SECTION 2, T-19-N, R-26-E, G & SRM**

Dedication per A.A.C. R12-7-104(A)(3)

**637.62 acres  
(all Sec. 2)**

Field and reservoir (if wildcat, so state)

**Pinta Dome**

County

**APACHE**

Distance in miles and direction from nearest town or post office:

**S 41°W, 10 MILES FROM CHAMBERS, AZ.**

Proposed depth:

**985'**

Rotary or cable tools

**Rotary**

Approximate date work will start

**Upon Approval**

Bond status **\$25,000 on file**  
Amount

Organization Report

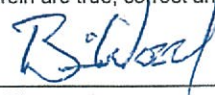
On file **Yes** Or attached

Filing Fee of \$25.00

Attached **Yes**

Remarks

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the: **Consultant** of the **Ranger Development, LLC** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.



**Brian Wood**

**(505) 466-8120**

**brian@permitswest.com**

Signature

**9-29-16**

Date

Mail completed form to:  
Oil and Gas Program Administrator  
Arizona Geological Survey  
416 W. Congress, #100  
Tucson, AZ 85701-1315

Permit Number: \_\_\_\_\_

Approval Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

NOTICE: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.


## STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill or Re-enter  
File Two Copies

Form No. 3



- Operator shall outline on the plat the acreage dedicated to the well in compliance with A.A.C. R12-7-107.
- A registered surveyor shall show on the plat the location of the well and certify this information in the space provided.
- ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
- Is the operator the only owner in the dedicated acreage outlined on the plat below ? YES ☒ NO ☐
- If the answer to question four is no, have the interests of all owners been consolidated by communitization agreement or otherwise?  
YES ☐ NO ☐ If answer is yes, give type of consolidation \_\_\_\_\_
- If the answer to question four is no, list all the owners and their respective interests below:

Owner	Land Description
<p>SECTION 2, TOWNSHIP 19 NORTH RANGE 26 EAST GILA &amp; SALT RIVER MERIDIAN</p>	
 <p><b>EXPIRES 6-30-19</b></p>	
<p>RANGER 2 -1 LAT: 35.0779629° N LONG: 109.5535418° W NAD 83</p>	
<p>1603' 1553'</p>	
<p>N 89°56'02" E - 2642.37' N 89°55'36" E - 2642.35'</p>	
<p>N 00°39'39" W - 5251.64' S 00°07'38" E - 5313.73'</p>	
<p>0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0</p>	
<p>CERTIFICATION</p> <p>I hereby certify that the information above is true and complete to the best of my knowledge and belief.</p> <p><i>Brian Wood</i></p> <p>Name <b>Brian Wood</b></p> <p>Position <b>Consultant</b></p> <p>Company <b>Ranger Development, LLC</b></p> <p>Date <b>9-29-16</b></p> <p><b>(505) 466-8120</b></p> <p>I hereby certify that the well location shown on the 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 knowledge and belief.</p> <p>Date Surveyed <b>8-30-16</b></p> <p>Registered Land Surveyor <i>Michael C. Lock</i></p> <p>Certificate No. <b>61902</b></p>	

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
8.625" in 11"	23	J-55	GL	500'	GL - 500'	405 sx	Class G
5.5" in 7.875"	15.5	J-55	GL	940'	GL - 940'	145 sx	Prem. Light
4.75" OH	N/A	N/A	940'	985'	N/A	N/A	N/A

Ranger Development LLC  
Ranger 2-1  
1553' FNL & 1603' FWL  
Sec. 2, T. 19 N., R. 26 E.  
Apache County, AZ

DRILL PLAN PAGE 1

1. ESTIMATED TOPS

Formation	TVD	Subsea
Chinle	000'	5754'
Shinarump Fm	690'	5064'
Moenkopi	820'	4934'
Coconino	947'	4807'
TD	985'	4769'

2. NOTABLE ZONES

Water could be found in the Chinle from  $\approx 348'$  to  $\approx 363'$ . Primary goal is the Coconino. Secondary goal is the Shinarump.

3. PRESSURE CONTROL

A 2000-psi BOP stack and choke system will be used. See attached typical diagram.

4. MUD PROGRAM

Hole will be drilled with mud to just above the Coconino. Coconino will be drilled with air. Mud and pit will comply with Arizona rule R12-7-108. A diversion ditch will be built on the uphill side of the pad.

5. CORES, TESTS, & LOGS

No coring is planned. FDC-CNL, sonic, resistivity, SP gamma ray, and caliper logs are planned.



Ranger Development LLC  
Ranger 2-1  
1553' FNL & 1603' FWL  
Sec. 2, T. 19 N., R. 26 E.  
Apache County, AZ

DRILL PLAN PAGE 2

6. DOWN HOLE CONDITIONS

No H<sub>2</sub>S or abnormal high pressure or temperature is expected. In fact, the Coconino is expected to be under-pressured.

7. OTHER INFORMATION

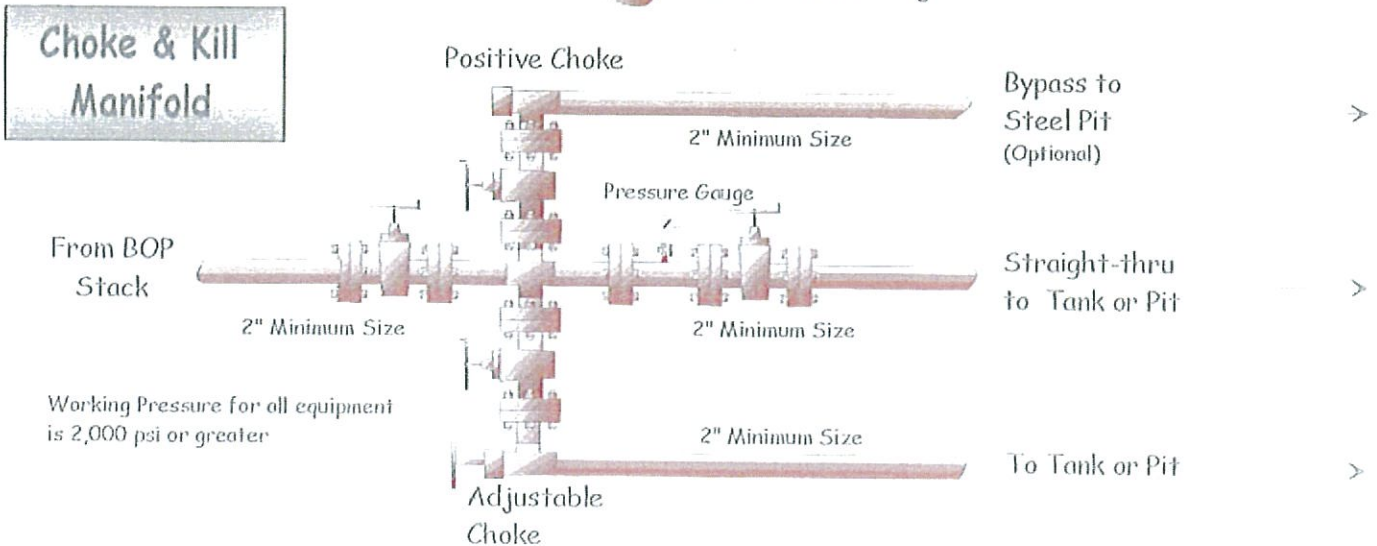
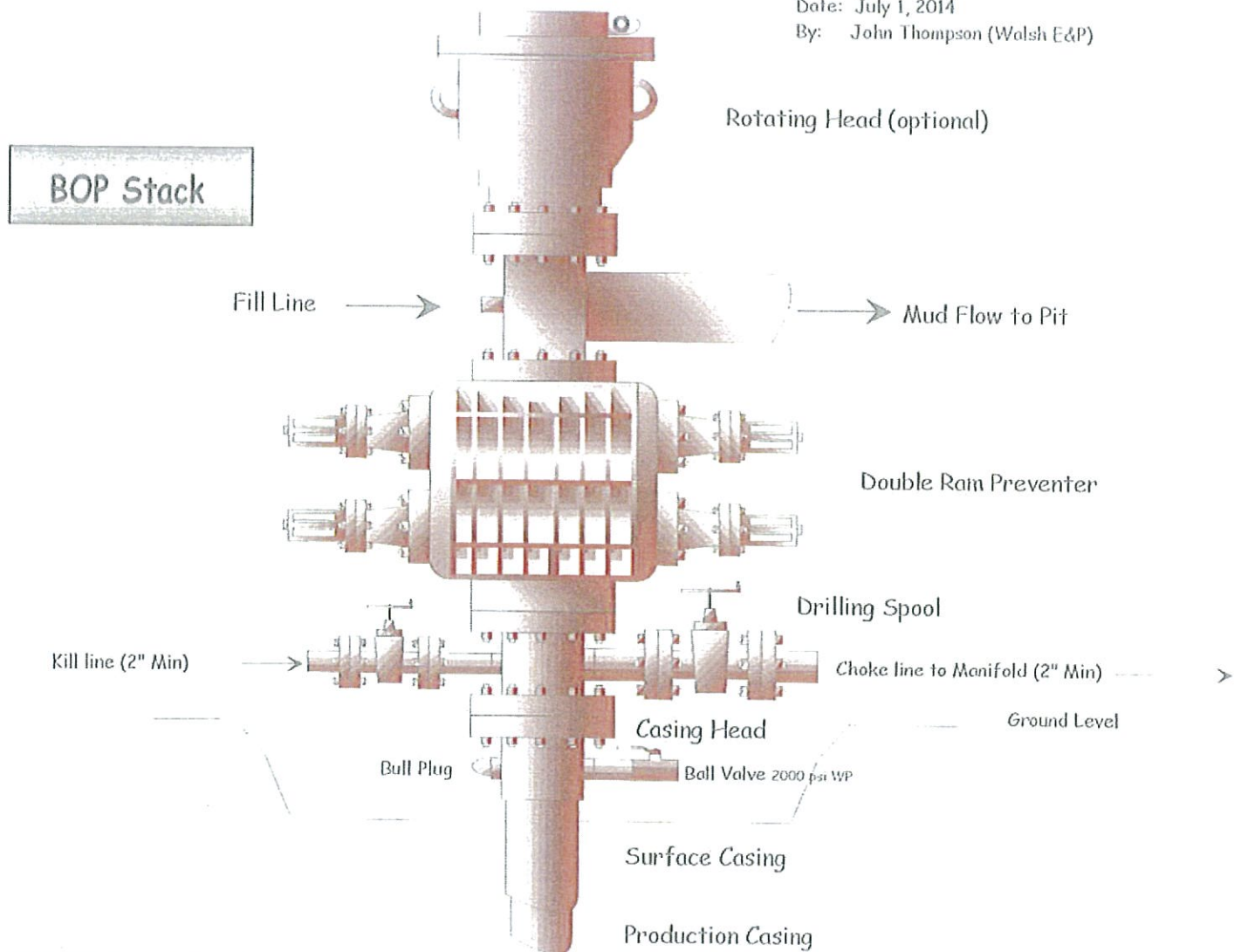
The anticipated spud date is upon approval. It is expected it will take ≈1 week to drill the well.

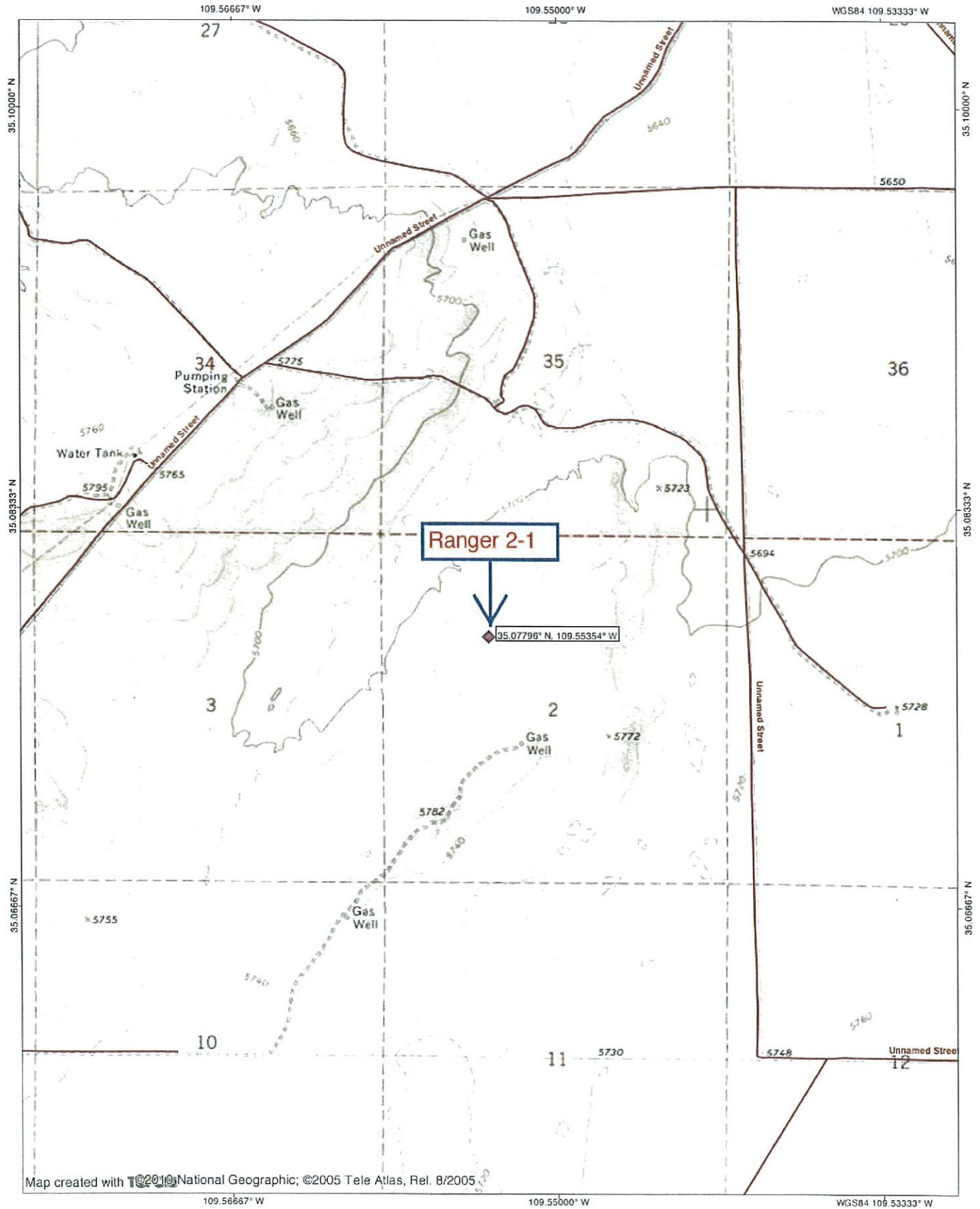
# Well Control Equipment Schematic for 2M Service

## Typical BOP setup

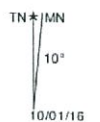
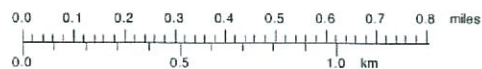
Date: July 1, 2014

By: John Thompson (Walsh E&P)





Map created with TIGER National Geographic; ©2005 Tele Atlas, Rel. 8/2005

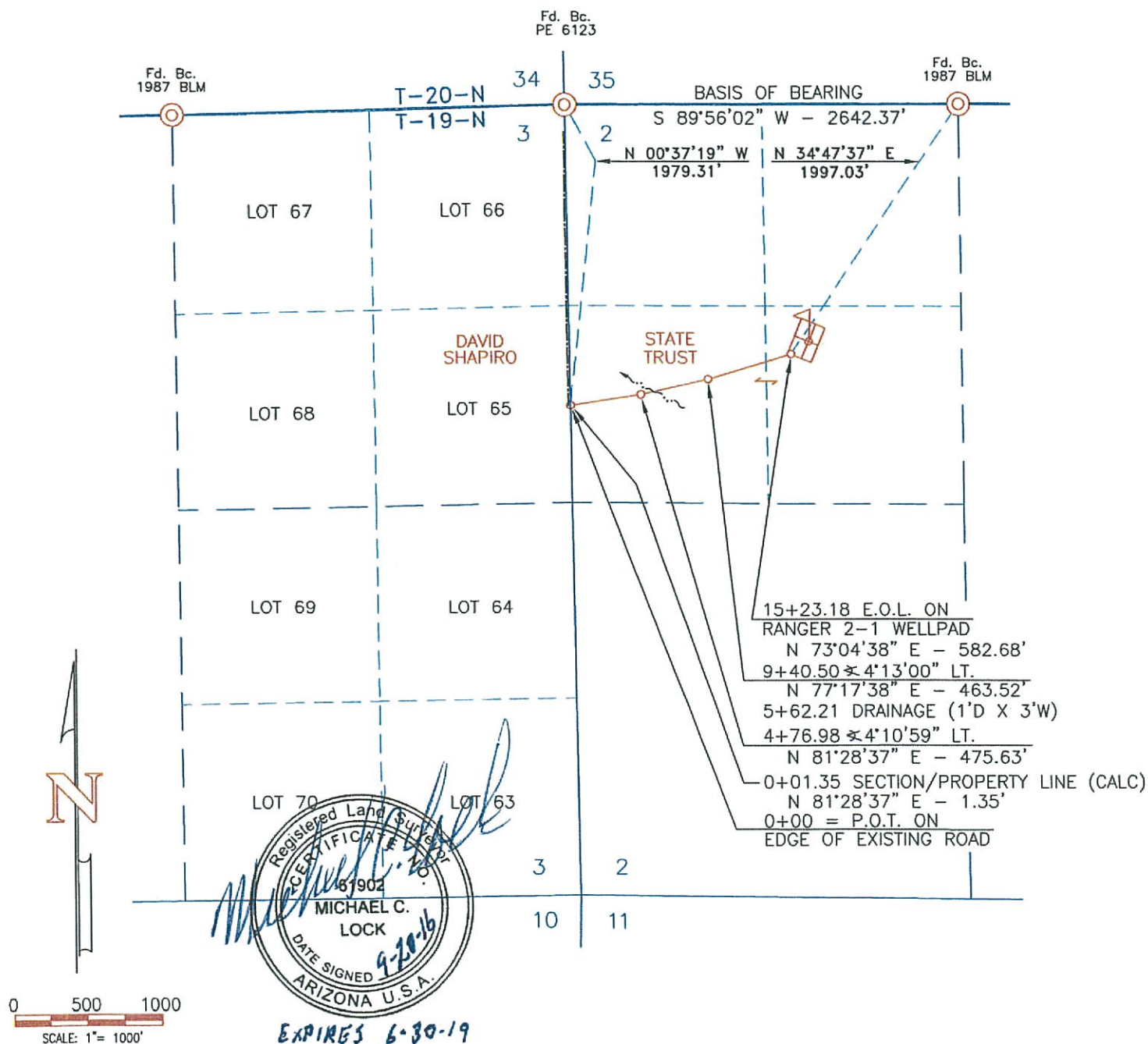




# Ranger Development, LLC

## ACCESS EASEMENT

SECTIONS 2 & 3, T-19-N, R-26-E,  
GILA AND SALT RIVER MERIDIAN, APACHE COUNTY, ARIZONA



### NOTES:

1. BASIS OF BEARING: AS MEASURED BETWEEN THE NORTH QUARTER CORNER & THE NORTHWEST CORNER OF SECTION 2, T-19-N, R-26-E, GILA AND SALT RIVER MERIDIAN, APACHE COUNTY, ARIZONA.  
BEARS: S 89°56'02" W - 2642.37'
2. ALL BEARINGS & DISTANCES SHOWN ARE BASED UPON THE ARIZONA COORDINATE SYSTEM, EAST ZONE, NAD 83 IN INTERNATIONAL FEET.

### SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAT REPRESENTS A SURVEY PERFORMED BY BY ME OR UNDER MY SUPERVISION AND THAT IT ACCURATELY REPRESENTS SAID SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Michael C. Lock* 9-20-16  
MICHAEL C. LOCK, R.L.S. #61902 DATE

OWNER	STATION	FEET/RODS
DAVID SHAPIRO	0+00 TO 0+01.35	1.35/0.082
STATE TRUST	0+01.35 TO 15+23.18	1521.83/92.232

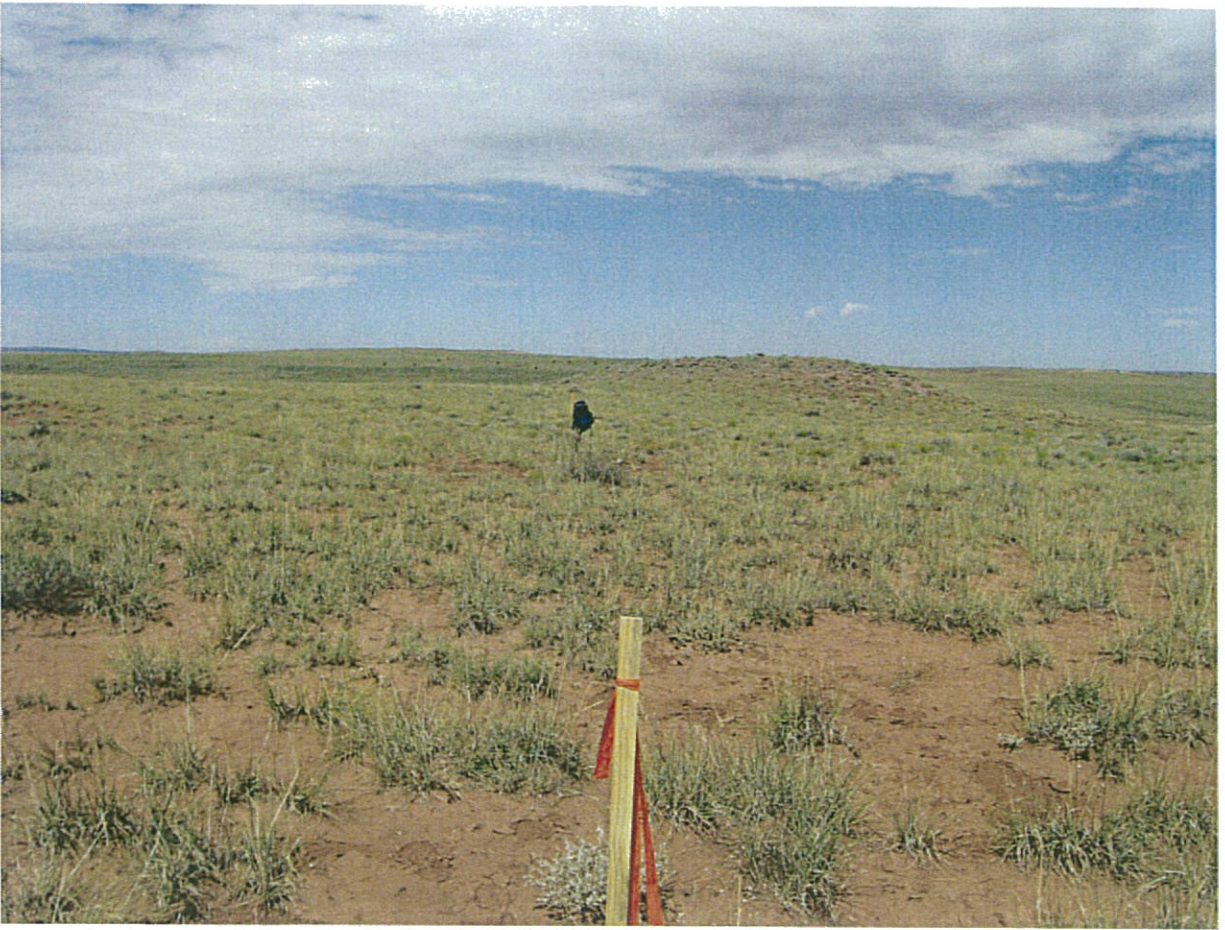
### Ranger Development, LLC

SURVEYED: 08/30/16	REV. DATE:	APP. BY M.C.L.
DRAWN BY: V.C.	DATE DRAWN: 09/07/16	FILE NAME: 11055A03



P.O. BOX 3651  
FARMINGTON, NM 87499  
OFFICE: (505) 334-0408





Looking North toward Ranger 2-1 center stake



Looking West at center stake



# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Ranger Development LLC, 5400 LBJ Expressway, Suite 1020, Dallas TX 75240 (972) 960-3212

Address

City

State

Phone Number

Drilling Contractor

not known at this time

Address

## DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor

fee: Pap & Pop Family, Ltd. and 3MJK, L. P.

Well number

Ranger 33-2

Elevation (ground)

5723'

Nearest distance from proposed location to property or lease line:

1549

feet

Distance from proposed location to nearest drilling, completed or applied-for well on the same lease:

1164

feet

Number of acres in lease

642.5 ACRES

Number of wells on lease, including this well, completed in or drilling to this reservoir:

2 (1 gas + P&A)

If lease purchased with one or more wells drilled, from whom purchased.

Name

Pap & Pop Family, Ltd.: 10303 Burgoyne, Houston TX 77042  
3MKJ, L. P.: 4017 15th St., Lubbock TX 79416

P&A well only @ purchase

Well location (give footage from section lines)

1941' FNL- 1549' FEL

Section - Township - Range or Block and Survey

SEC. 33, T-20-N, R-26-E, G & SRM

Dedication per A.A.C. R12-7-104(A)(3)

all of 33-20n-26e

Field and reservoir (if wildcat, so state)

Pinta Dome

County

APACHE

Distance in miles and direction from nearest town or post office

S 50°W, 11 MILES FROM CHAMBERS, AZ

Proposed depth:

985'

Rotary or cable tools

Rotary

Approximate date work will start

On Approval

Bond status

filed & \$25,000

Organization Report

On file

Or attached

Filing Fee of \$25.00

Attached

Remarks

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the:

Consultant

of the

Ranger Development, LLC

(company), and that I am authorized by said company to make this report; and that this

report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

10-4-16

Date

Brian Wood

(505) 466-8120

brian@permitswest.com

Mail completed form to:  
Oil and Gas Program Administrator  
Arizona Geological Survey  
416 W. Congress, #100  
Tucson, AZ 85701-1315

Permit Number: \_\_\_\_\_

Approval Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

NOTICE: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

## STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill or Re-enter  
File Two Copies

Form No. 3

- Operator shall outline on the plat the acreage dedicated to the well in compliance with A.A.C. R12-7-107.
- A registered surveyor shall show on the plat the location of the well and certify this information in the space provided.
- ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
- Is the operator the only owner in the dedicated acreage outlined on the plat below ? YES ☒ NO ☐
- If the answer to question four is no, have the interests of all owners been consolidated by communitization agreement or otherwise?  
YES ☐ NO ☐ If answer is yes, give type of consolidation \_\_\_\_\_
- If the answer to question four is no, list all the owners and their respective interests below:

Owner	Land Description

SECTION 33, TOWNSHIP 20 NORTH  
RANGE 26 EAST  
GILA & SALT RIVER MERIDIAN

RANGER 33 - 2  
LAT: 35.0912289° N  
LONG: 109.5816510° W  
NAD 83

RANGER 33 #1  
(EXISTING WELL)

**CERTIFICATION**

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

*Brian Wood*

Name **Brian Wood**

Position **Consultant**

**Ranger Development, LLC**

Date **10-4-16**

**(505) 466-8120**

I hereby certify that the well location shown on the 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 knowledge and belief.

Date Surveyed **8-30-16**

Registered Land Surveyor  
*Michael C. Lock*

Certificate No. **61902**

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
8.625" in 11"	23	J-55	GL	500'	GL - 500'	120 sx	prem. light
5.5" in 7.875"	15.5	J-55	GL	940'	GL - 940'	85 sx	prem. light
4.75" OH	N/A	N/A	940'	985'	N/A	N/A	N/A

Ranger Development LLC  
Ranger 33-2  
1941' FNL & 1549' FEL  
Sec. 33, T. 20 N., R. 26 E.  
Apache County, AZ

DRILL PLAN PAGE 1

1. ESTIMATED TOPS

Formation	TVD	Subsea
Chinle	000'	5723'
Shinarump Fm	656'	5067'
Moenkopi	774'	4949'
Coconino	906'	4817'
TD	985'	4738'

2. NOTABLE ZONES

Water could be found in the Chinle from  $\approx 290'$  to  $\approx 410'$ , though none were found in the Ranger 33-1 (1164' south). Primary goal is the Coconino. Secondary goal is the Shinarump.

3. PRESSURE CONTROL

A 2000-psi BOP stack and choke system will be used. See attached typical diagram.

4. MUD PROGRAM

Hole will be drilled with mud to just above the Coconino. Coconino will be drilled with air. Mud and pit will comply with Arizona rule R12-7-108. A diversion ditch will be built on the uphill side of the pad.

5. CORES, TESTS, & LOGS

No coring is planned. FDC-CNL, sonic, resistivity, SP gamma ray, and caliper logs are planned.



Ranger Development LLC  
Ranger 33-2  
1941' FNL & 1549' FEL  
Sec. 33, T. 20 N., R. 26 E.  
Apache County, AZ

DRILL PLAN PAGE 2

6. DOWN HOLE CONDITIONS

No H<sub>2</sub>S or abnormal high pressure or temperature is expected. In fact, the Coconino is expected to be under-pressured.

7. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈1 week to drill the well.

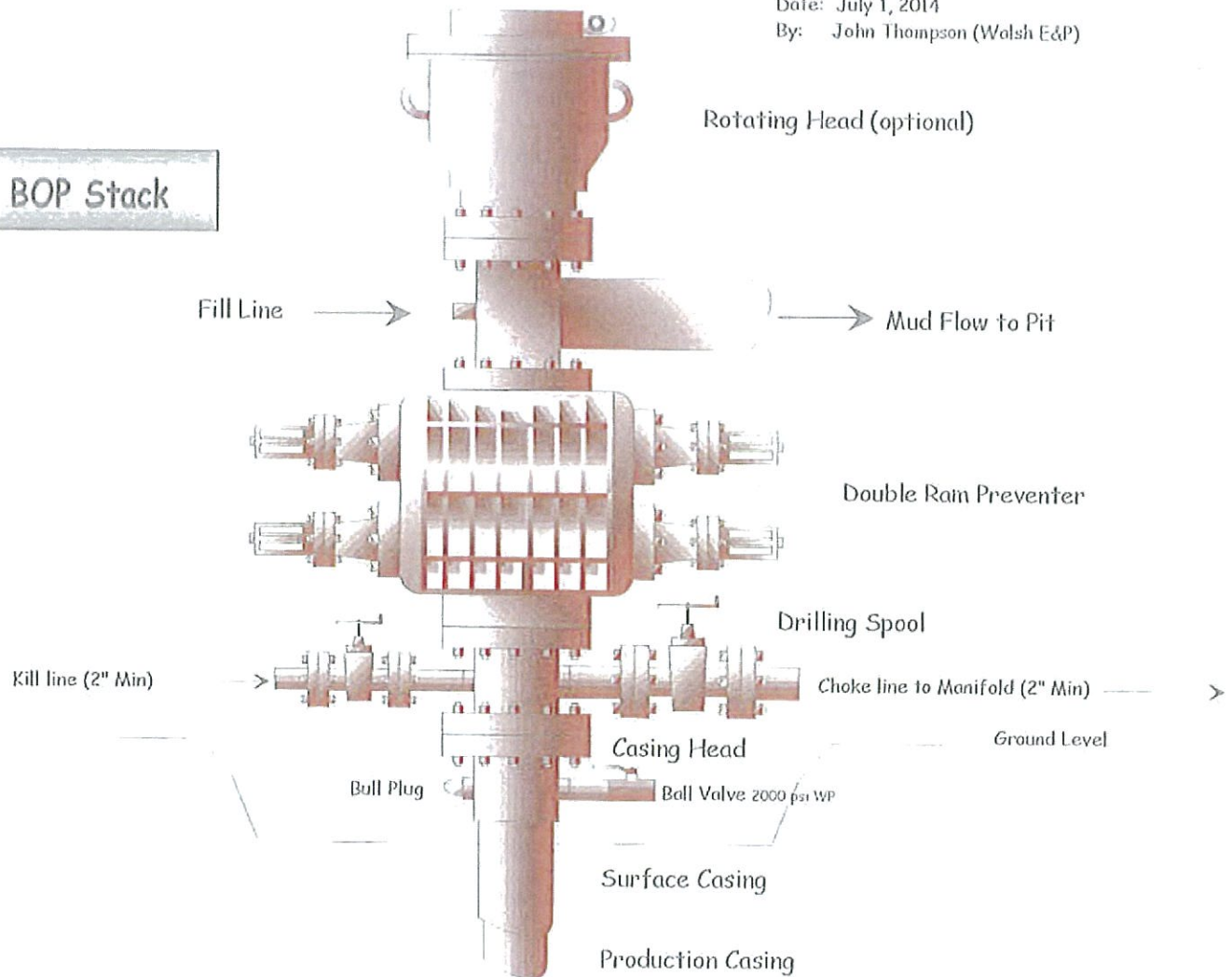
# Well Control Equipment Schematic for 2M Service

## Typical BOP setup

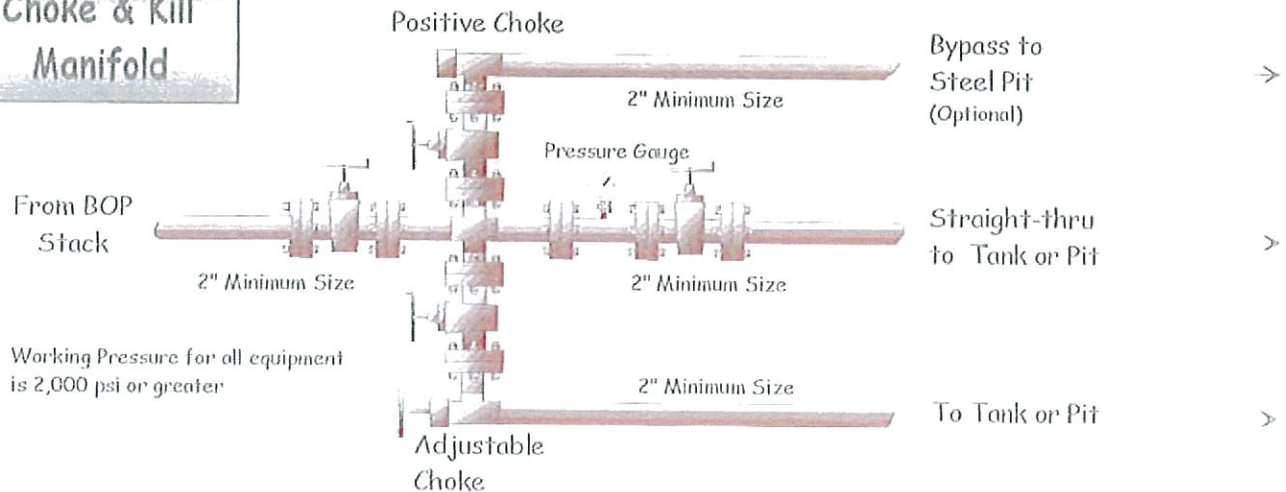
Date: July 1, 2014

By: John Thompson (Walsh E&P)

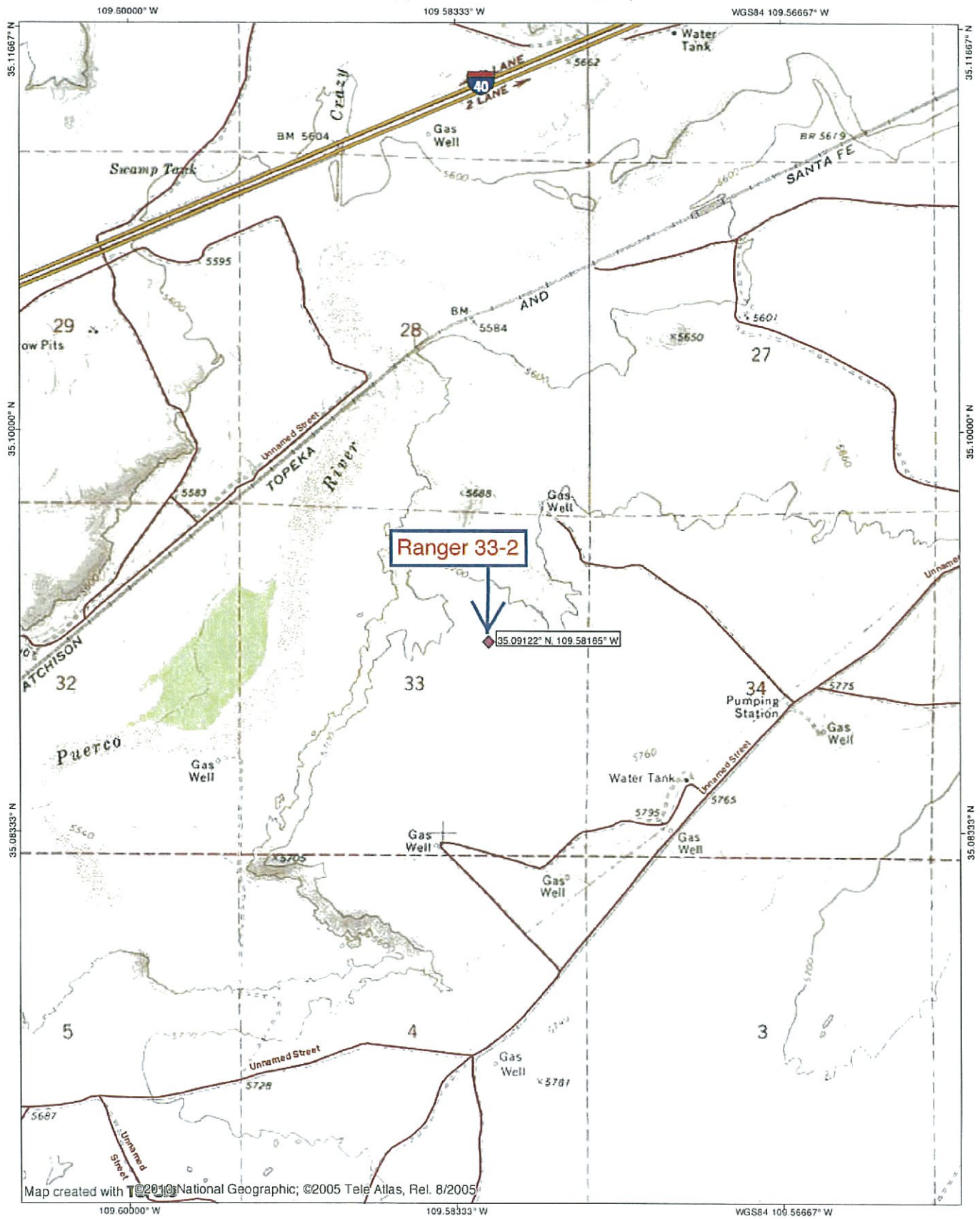
### BOP Stack



### Choke & Kill Manifold



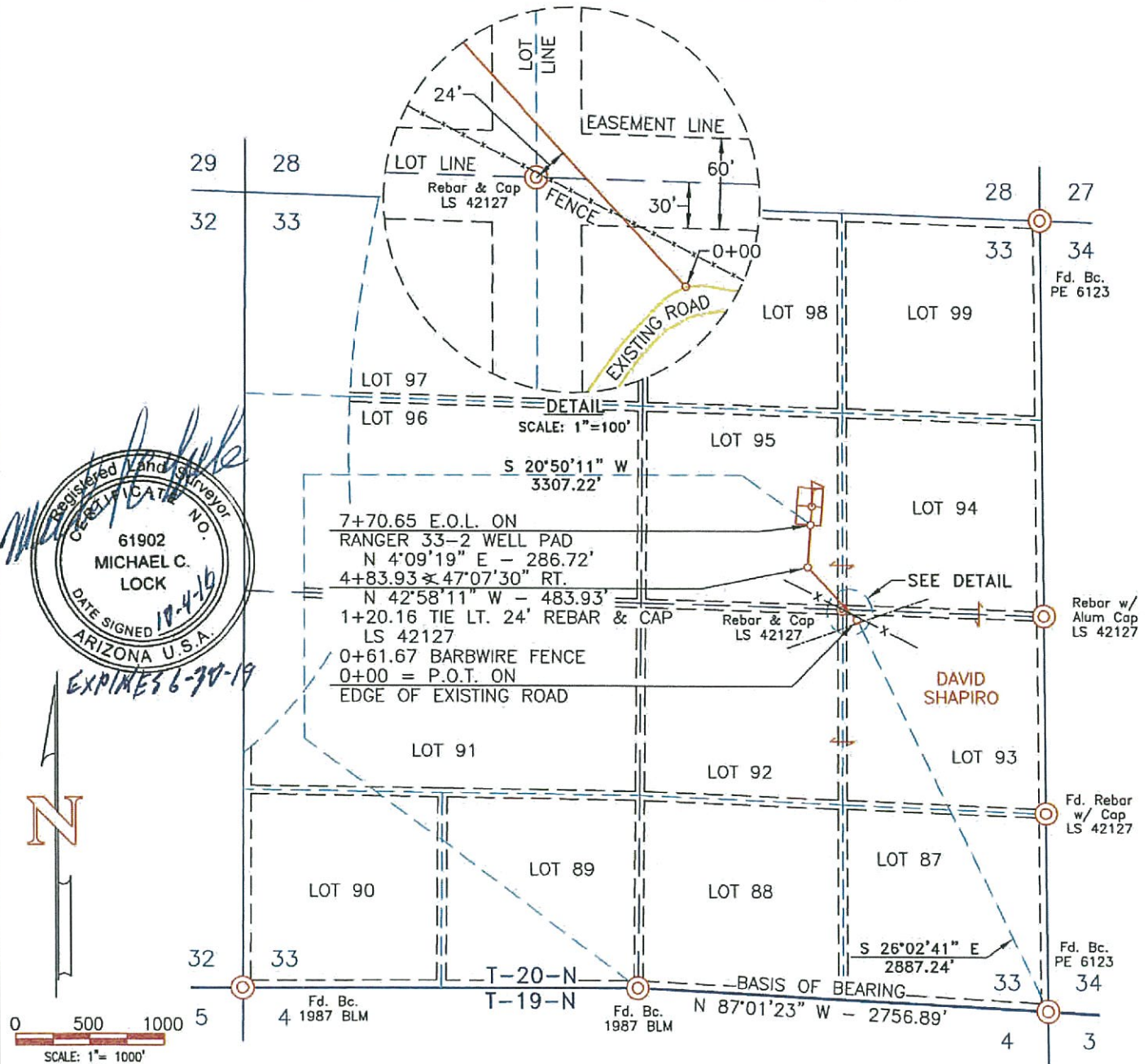




# Ranger Development, LLC

## ACCESS EASEMENT

LOTS 93, 94 & 95 OF ROLLING HILLS RANCH SUBDIVISION  
IN SECTION 33, T-20-N, R-26-E,  
GILA AND SALT RIVER MERIDIAN, APACHE COUNTY, ARIZONA



### NOTES:

1. BASIS OF BEARING: MONUMENTED SOUTH LINE OF THE SE 1/4 OF SECTION 33, T-20-N, R-26-E, GILA AND SALT RIVER MERIDIAN, APACHE COUNTY, ARIZONA. BEARS: N 87°01'23" W - 2756.89'
2. ALL BEARINGS & DISTANCES SHOWN ARE BASED UPON THE ARIZONA COORDINATE SYSTEM, EAST ZONE, NAD 83 IN INTERNATIONAL FEET.

### SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAT REPRESENTS A SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION AND THAT IT ACCURATELY REPRESENTS SAID SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Michael C. Lock* 10-4-16  
MICHAEL C. LOCK, R.L.S. #61902 DATE

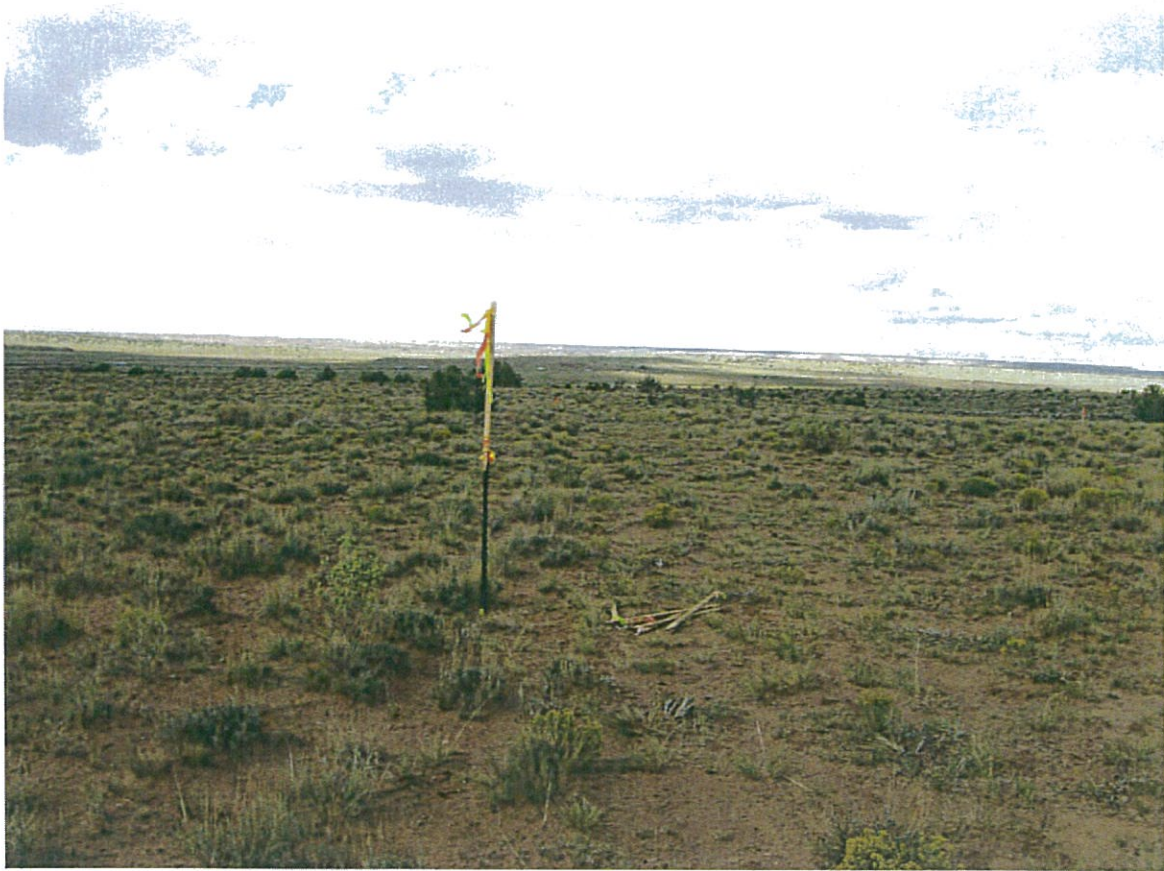
OWNER	STATION	FEET/RODS
DAVID SHAPIRO	0+00 TO 7+70.65	770.65 / 46.706

Ranger Development, LLC		
SURVEYED: 08/30/16	REV. DATE:	APP. BY M.C.L.
DRAWN BY: C.B.	DATE DRAWN: 09/22/16	FILE NAME: 11054A02



P.O. BOX 3651  
FARMINGTON, NM 87499  
OFFICE: (505) 334-0408





Looking North at Ranger 33-2 center stake



Looking South at center stake



# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

**Ranger Development LLC, 5400 LBJ Expressway, Suite 460, Dallas TX 75240 (972) 960-3212**

Address

City

State

Phone Number

Drilling Contractor **not known at this time**

Address

## DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor

**State: 13-118076**

Well number

**Rander 34-2**

Elevation (ground)

**5742'**

Nearest distance from proposed location to property or lease line:

**855** feet

Distance from proposed location to nearest drilling, completed or applied-for well on the same lease:

feet

Number of acres in lease

**1,997.64**

Number of wells on lease, including this well, completed in or drilling to this reservoir:

If lease purchased with one or more wells drilled, from whom purchased.

Name

Address

**all wells P&A when lease issued by State to Ranger**

Well location (give footage from section lines)

**2284' FNL- 855' FEL**

Section - Township - Range or Block and Survey  
**SEC. 34, T-20-N, R-26-E, G & SRM**

Dedication per A.A.C. R12-7-104(A)(3)

**640 acres**

Field and reservoir (if wildcat, so state)

**Pinta Dome**

County

**APACHE**

**(all Sec. 34)**

Distance in miles and direction from nearest town or post office

**S 44°W, 10 MILES FROM CHAMBERS, AZ**

Proposed depth: **985'**

Rotary or cable tools

**Rotary**

Approximate date work will start

**Upon Approval**

Bond status **\$25,000 on file**  
Amount

Organization Report

On file **Yes**

Or attached

Filing Fee of \$25.00

Attached

**Yes**

Remarks

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the:

**Consultant**

of the

**Ranger Development, LLC**

(company), and that I am authorized by said company to make this report; and that this

report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*Brian Wood*

Signature

**9-29-16**

Date

**Brian Wood**

**(505) 466-8120**

**brian@permitswest.com**

Mail completed form to:  
Oil and Gas Program Administrator  
Arizona Geological Survey  
416 W. Congress, #100  
Tucson, AZ 85701-1315

Permit Number: \_\_\_\_\_

Approval Date: \_\_\_\_\_

Approved By: \_\_\_\_\_

NOTICE: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

## STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION

Application to Drill or Re-enter  
File Two Copies

Form No. 3

- Operator shall outline on the plat the acreage dedicated to the well in compliance with A.A.C. R12-7-107.
- A registered surveyor shall show on the plat the location of the well and certify this information in the space provided.
- ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
- Is the operator the only owner in the dedicated acreage outlined on the plat below ? YES ☒ NO ☐
- If the answer to question four is no, have the interests of all owners been consolidated by communitization agreement or otherwise?  
YES ☐ NO ☐ If answer is yes, give type of consolidation \_\_\_\_\_
- If the answer to question four is no, list all the owners and their respective interests below:

Owner	Land Description

SECTION 34, TOWNSHIP 20 NORTH  
RANGE 26 EAST  
GILA & SALT RIVER MERIDIAN

RANGER 34 - 2  
LAT: 35.0904120° N  
LONG: 109.5616942° W  
NAD 83

**CERTIFICATION**

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

*Brian Wood*

Name	Brian Wood
Position	Consultant
Company	Ranger Development, LLC
Date	9-29-16

(505) 466-8120

I hereby certify that the well location shown on the 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 knowledge and belief.

Date Surveyed	8-30-16
Registered Land Surveyor	<i>Michael C. Lock</i>
Certificate No.	61902

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
8.625" in 11"	23	J-55	GL	500'	GL - 500'	405 sx	Class G
5.5" in 7.875"	15.5	J-55	GL	940'	GL - 940'	145 sx	Prem. Light
4.75" OH	N/A	N/A	940'	985'	N/A	N/A	N/A



Ranger Development LLC  
Ranger 34-2  
2284' FNL & 855' FEL  
Sec. 34, T. 20 N., R. 26 E.  
Apache County, AZ

DRILL PLAN PAGE 1

1. ESTIMATED TOPS

Formation	TVD	Subsea
Chinle	000'	5742'
Shinarump Fm	683'	5059'
Moenkopi	810'	4932'
Coconino	935'	4807'
TD	985'	4757'

2. NOTABLE ZONES

Water could be found in the Chinle at  $\approx 301'$ ,  $\approx 456'$ ,  $\approx 576'$ , and  $\approx 624'$ . Primary goal is the Coconino. Secondary goal is the Shinarump.

3. PRESSURE CONTROL

A 2000-psi BOP stack and choke system will be used. See attached typical diagram.

4. MUD PROGRAM

Hole will be drilled with mud to just above the Coconino. Coconino will be drilled with air. Mud and pit will comply with Arizona rule R12-7-108. A diversion ditch will be built on the uphill side of the pad.

5. CORES, TESTS, & LOGS

No coring is planned. FDC-CNL, sonic, resistivity, SP gamma ray, and caliper logs are planned.

Ranger Development LLC  
Ranger 34-2  
2284' FNL & 855' FEL  
Sec. 34, T. 20 N., R. 26 E.  
Apache County, AZ

DRILL PLAN PAGE 2

6. DOWN HOLE CONDITIONS

No H<sub>2</sub>S or abnormal high pressure or temperature is expected. In fact, the Coconino is expected to be under-pressured.

7. OTHER INFORMATION

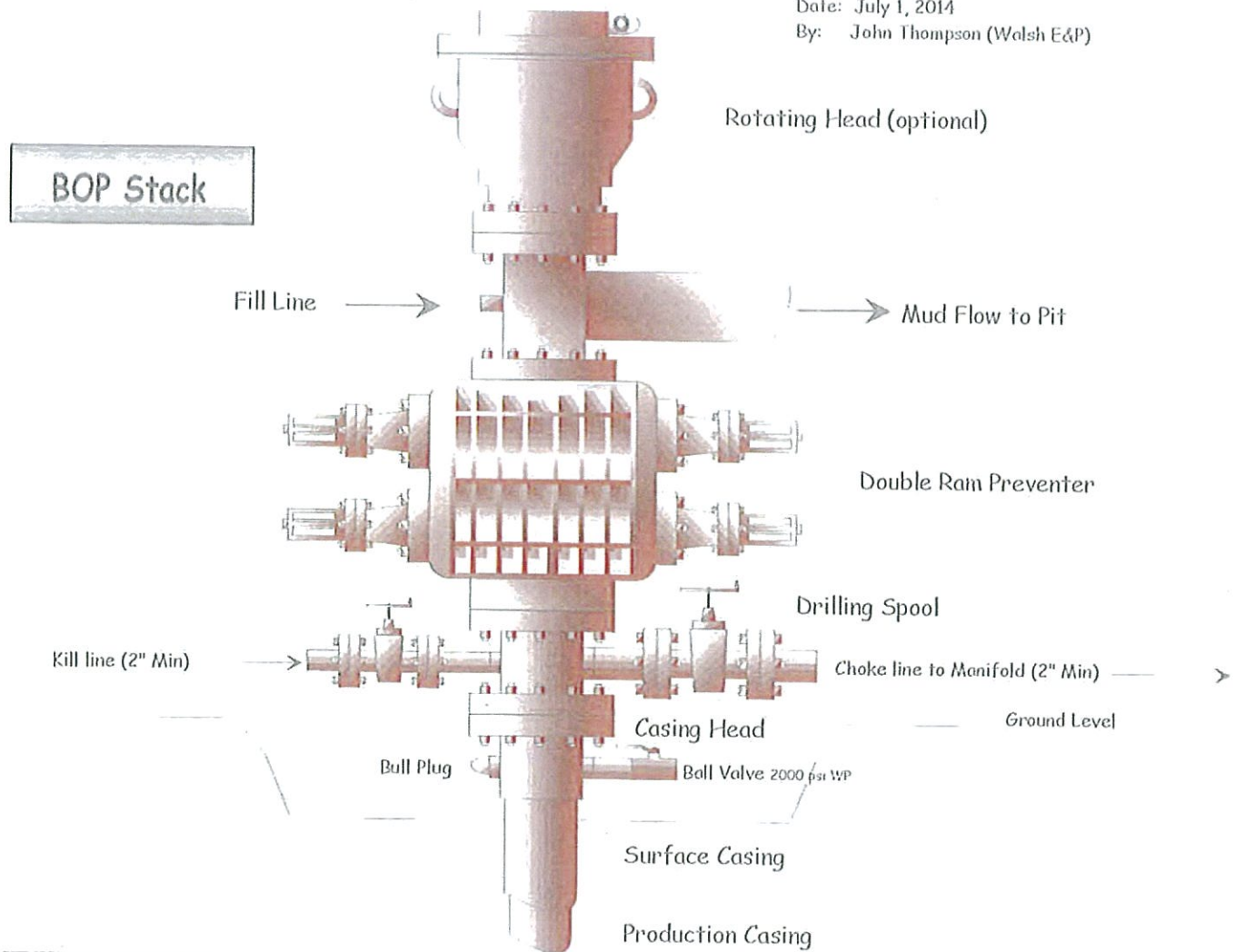
The anticipated spud date is upon approval. It is expected it will take ≈1 week to drill the well.

# Well Control Equipment Schematic for 2M Service

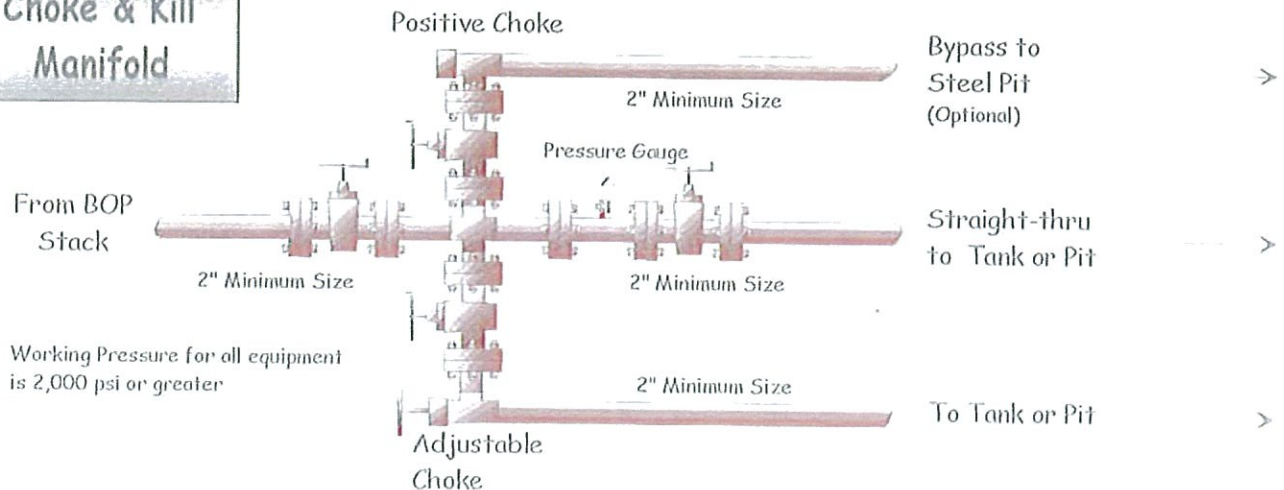
## Typical BOP setup

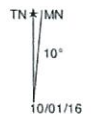
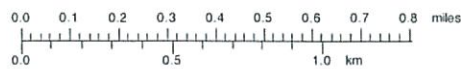
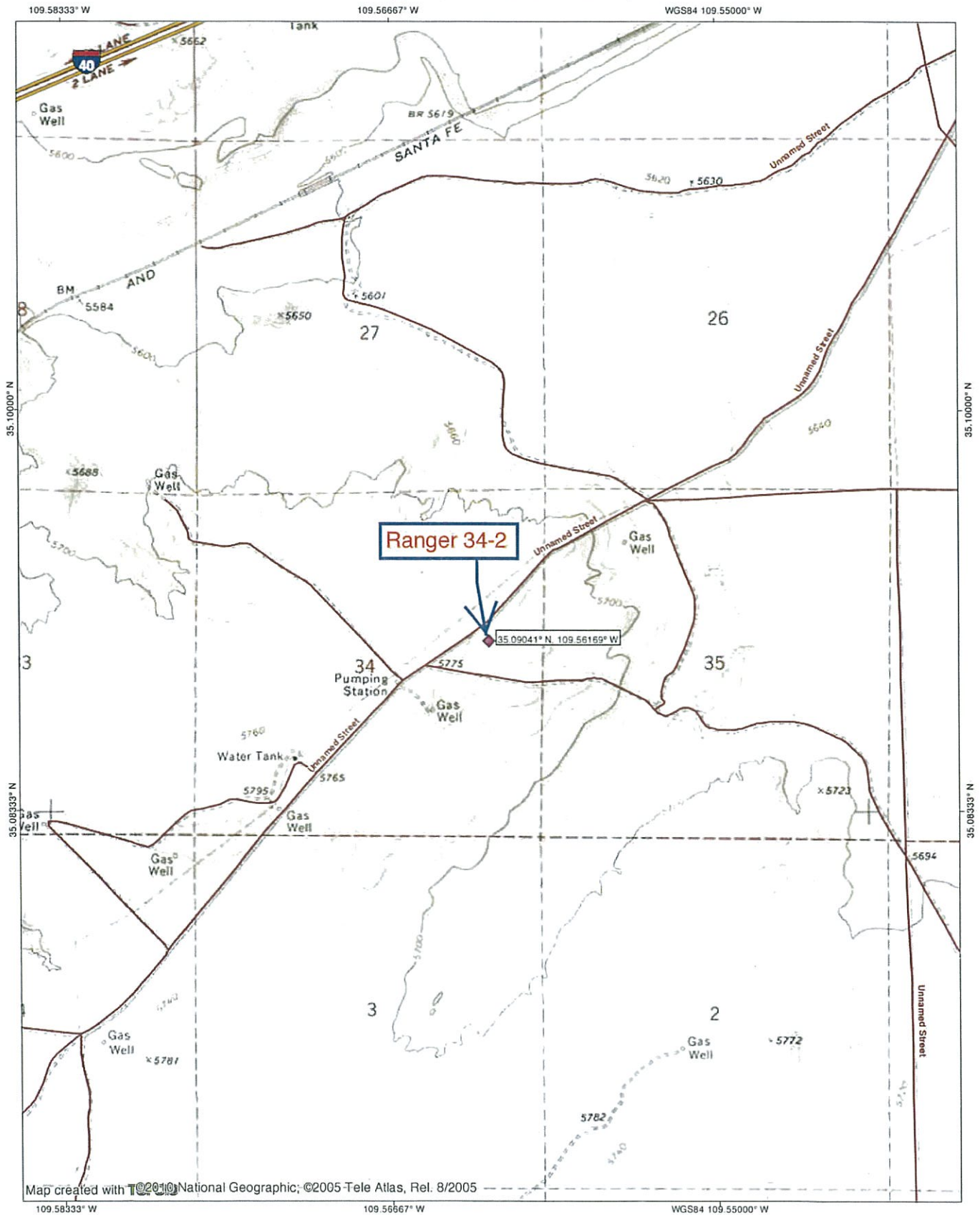
Date: July 1, 2014

By: John Thompson (Walsh E&P)



## Choke & Kill Manifold



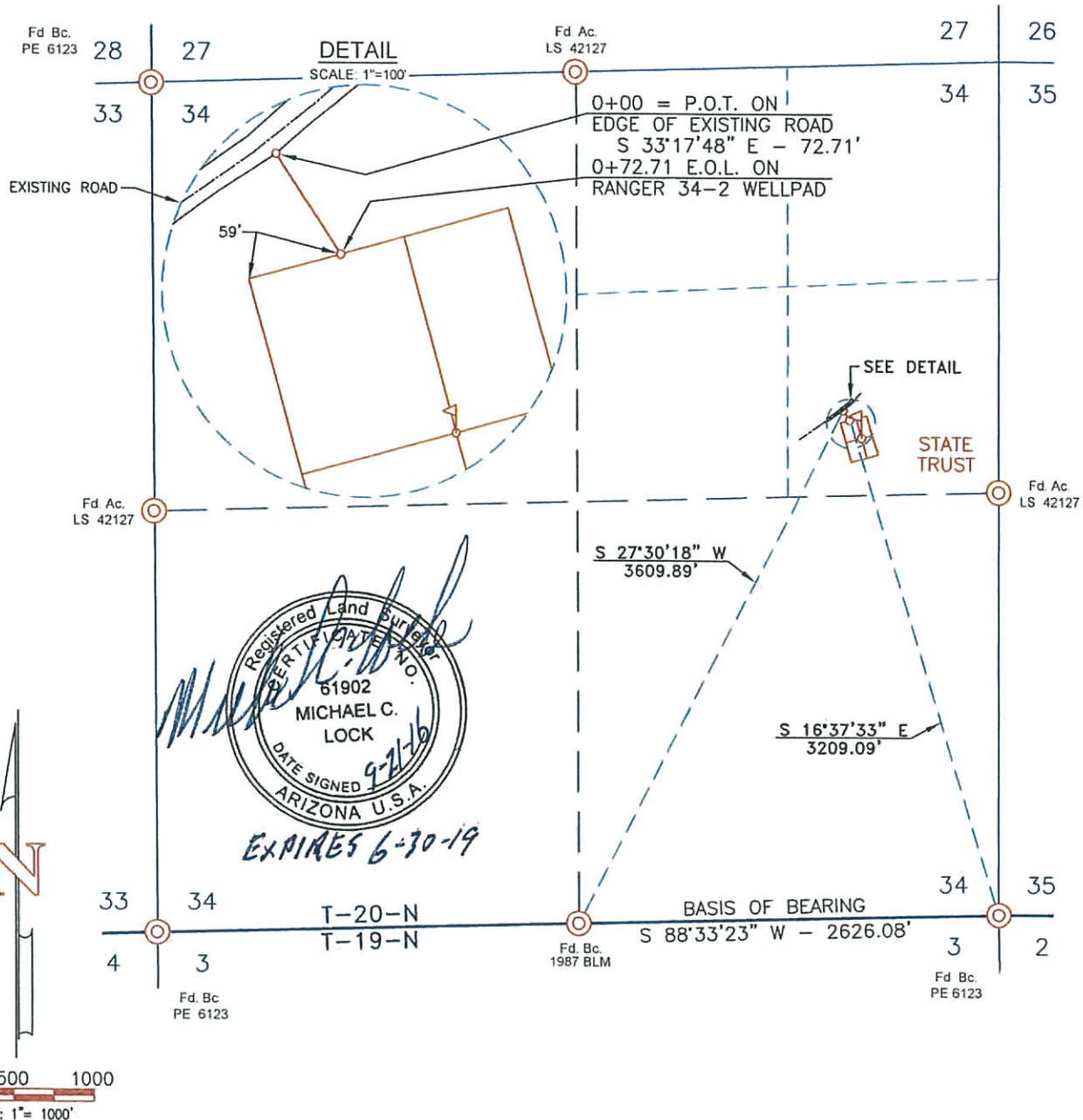




# Ranger Development, LLC

## ACCESS EASEMENT

SECTION 34, T-20-N, R-26-E,  
GILA AND SALT RIVER MERIDIAN, APACHE COUNTY, ARIZONA



### NOTES:

1. BASIS OF BEARING: MONUMENTED SOUTH LINE OF THE SE 1/4 OF SECTION 34, T-20-N, R-26-E, GILA AND SALT RIVER MERIDIAN, APACHE COUNTY, ARIZONA.  
BEARS: S 88°33'23\" W - 2626.08'
2. ALL BEARINGS & DISTANCES SHOWN ARE BASED UPON THE ARIZONA COORDINATE SYSTEM, EAST ZONE, NAD 83, IN INTERNATIONAL FEET.

### SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAT REPRESENTS A SURVEY PERFORMED BY ME OR UNDER MY SUPERVISION AND THAT IT ACCURATELY REPRESENTS SAID SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

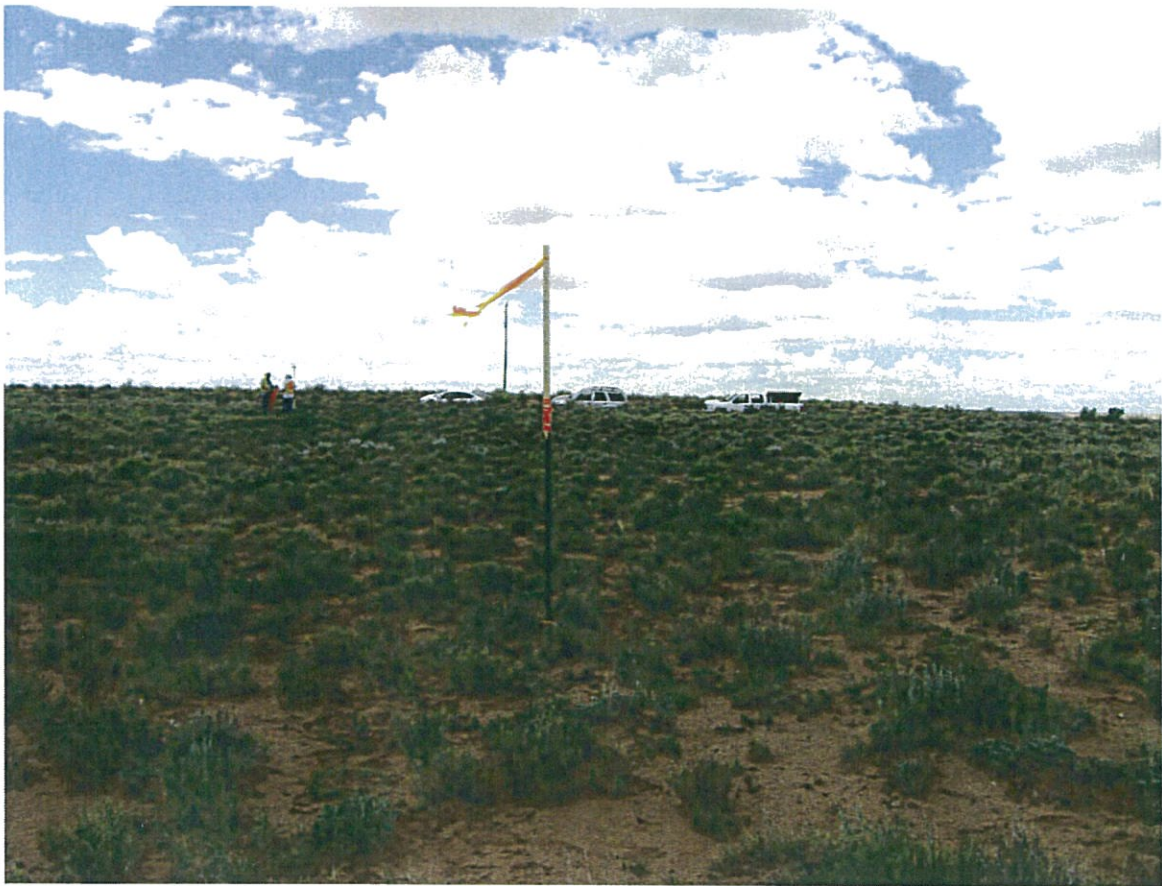
*Michael C. Lock* 9-21-16  
MICHAEL C. LOCK, R.L.S. #61902 DATE

OWNER	STATION	FEET/RODS
STATE TRUST	0+00 TO 0+72.71	72.71 / 4.407

Ranger Development, LLC		
SURVEYED: 08/30/16	REV. DATE:	APP. BY M.C.L.
DRAWN BY: H.J.	DATE DRAWN: 09/09/16	FILE NAME: 11104A01

 <b>UNITED</b> FIELD SERVICES INC.	P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408
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Looking North at Ranger 34-2 center stake



Looking North along proposed road