NOTICE OF COMBINED PUBLIC MEETING AND POSSIBLE EXECUTIVE SESSION

OIL AND GAS CONSERVATION COMMISSION

Pursuant to A.R.S. § 38-431.02, notice is hereby given to the members of the Oil and Gas Conservation Commission and to the general public that the Oil and Gas Conservation Commission will hold a meeting open to the public on April 8, 2016, at 10:00 a.m. in Room 321 of the State Land Department Building located at 1616 West Adams Street, Phoenix, Arizona 85007.

The agenda for the meeting is as follows:

1 Call to Order
2 Approval of Minutes of Meeting of March 7, 2016
3 Conflicts of interest
4 Presentation by Ranger Development LLC
5 Hearing re Well Spacing Ranger 34-1 and Ranger 3-1
6 Report of State Geologist about administrative. budget, and legislative matters
7 Report of Oil and Gas Administrator about new permits and drilling activity
8 Discussion of 2016 IOGCC Annual Business Meeting, Denver, CO, May 15 - 17
9 Call to the public: This is the time for the public to comment. Members of the Commission may not discuss items that are not on the agenda. Therefore, action taken as a result of public comment will be limited to directing staff to study the matter or scheduling the matter for further discussion and decision at a later date.
10 Announcements
11 Adjournment

Members of the Oil and Gas Conservation Commission will attend either in person or by telephone conference call.

The Oil and Gas Conservation Commission may vote to go into Executive Session, pursuant to AR.S. § 38-431.03(A)(3) or (4), which will not be open to the public, to consult with its attorney and receive legal advice with respect to any regular agenda item listed on this agenda.

A copy of the agenda background material provided to Commission members (with the exception of material relating to possible executive sessions) is available for public inspection at the Oil and Gas Administrator's office, 416 West Congress, Suite 100, Tucson, Arizona 85701. Note that the agenda items may be taken out of order.

The public may be afforded an opportunity to comment on any item on the agenda; however, at the beginning of the meeting, the Commission may vote to set up a time limit on individual comments.

Dated this 4th day of April 2016

OIL AND GAS CONSERVATION COMMISSION

Nyal J. Niemuth

Nyal J. Niemuth, Oil and Gas Program Administrator

Persons with a disability may request a reasonable accommodation such as a sign language interpreter, by contacting Nyal Niemuth at 602-771-1604. Requests should be made as early as possible to allow time to arrange the accommodation. This document is available in alternative formats by contacting Nyal Niemuth at 602-771-1604.

State of Arizona
Oil and Gas Conservation Commission
416 W. Congress, Suite 100, Tucson AZ 85701
520-770-3500
www.azogcc.az.gov
Nyal J. Niemuth, Oil and Gas Administrator

Douglas A. Ducey
Governor

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

April 4, 2016

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

RANGER DEVELOPMENT LLC.

ON SECTION 3, TOWNSHIP 19 NORTH
RANGE 26 EAST, GSRM
AND
ON SECTION 34, TOWNSHIP 20 NORTH
RANGE 26 EAST, GSRM

NOTICE OF HEARING

RANGER DEVELOPMENT LLC., having filed application and notice of intention to drill new wells on Section 34, Township 20 North, Range 26 East, Gila and Salt River Base and Meridian and on Section 3, Township 19 North, Range 26 East, Gila and Salt River Base and Meridian, both locations in Apache County, Arizona, and having requested that an exception be made to Arizona Administrative Code Rule R12-7-107 B. relative to the spacing of gas wells,

IT IS HEREBY ORDERED, under the provisions of Arizona Administrative Code Rule R12-7-107 E. that a public bearing be held at the office of the State Land Department 1616 West Adams, Phoenix Arizona on the 8th April 2016 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 4th day of April, 2016

Frank Thorwald

Frank Thorwald
Chairman, Oil Gas Conservation Commission

OIL & GAS CONSERVATION COMMISSION
416 W. Congress St. #100
Tucson, AZ 85701

Minutes of Meeting
March 7, 2016

Present:

Mr. Stephen R. Cooper, Member (PHONE)
Mr. Frank Thorwald, Member
Mr. Dale Nations, Member (PHONE)
Mr. Chris Hanson, Deputy Director of the Arizona Geological Survey (PHONE)
Mr. Nyal Niemuth, Oil & Gas Program Administrator
Mrs. Kendra Decker, Oil & Gas Program Secretary (PHONE)

Mr. Thorwald, OGCC Chairman, called the Commission Meeting of March 7, 2016 to order at 10:03 am in Room 321, State Land Department Building, Phoenix, Arizona.

APPROVAL OF THE MINUTES OF THE MEETING OF February 5, 2016

Mr. Nations moved, seconded by Mr. Cooper:

THAT THE MINUTES OF THE MEETING OF February 5, 2016, BE APPROVED.

Motion carried unanimously.

CONFLICT OF INTEREST

None

REVIEW OF AMERICA WEST POTASH BOND ISSUE

Mr. Cooper moved, seconded by Mr. Nations:

THAT THE COMMISSION ENTER EXECUTIVE SESSION.

Motion carried unanimously. The Executive Session began at 10:05 am

The regular meeting resumed at 10:12 am

Mr. Cooper moved, seconded by Mr. Thorwald:

THAT THE COMISSION DIRECT MR. ZEISE AND THE ARIZONA ATTORNEY GENERALS OFFICE TO RESOLVE THE BOND CLAIM OF THE KARLSSON GROUP PER DIRECTIONS GIVEN IN THE EXECUTIVE SESSION.

Motion carried unanimously.

REPORT OF THE STATE GEOLOGIST

Mr. Hanson discussed the pending transfer of the Arizona Geological Survey to the University of Arizona, discussion is ongoing between UA and Governor's office. No updates to report at this time. There are also no updates on the transfer of OGCC to DEQ. The budget is moving through the legislature and should up for discussion this week or next.

Mr. Nations expressed concern that the OGCC has had no input in this transition and could be in violation of our statutes if the move to DEQ takes place. Mr. Hanson stated that it is the understanding of the AZGS that legislation would need to take place regarding the transfer of AZGS to the UA and the assumption is that the same would be true of the transfer of the OCGG to DEQ.

Mr. Hanson explained that SB 1059, the bill to extend the OGCC, has been amended to extend the OGCC for 6 years (to match DEQ's Sunset Statute) and passed the Senate. It is being reviewed by the House rules committee today. We expect it to pass with no problems.

Mr. Hanson updated the commission of HB 2613 the bill relating to the licensing of state geologists. The bill would actually remove the requirement for geologists to be licensed. The bill passed House with a floor amendment to keep the registration for state geologists intact. But would add a clause that a geologist may engage in geologic practice without being registered. Mr. Nations expressed concern on what that may mean for professional geologists. The bill is now in the Senate- AZGS will keep the OGCC updated on the progress.

HB 2407 regarding fracking is officially dead- it was never assigned to a committee.

Mr. Dixon asked if SB 1059 will have to go back to the Senate since it was amended?

Mr. Hanson clarified that yes, the bill would have to go back to the Senate for a vote but should pass with no problems.

REPORT OF THE OIL AND GAS ADMINISTRATOR

Mr. Niemuth reported that he received a call from Carmon Bonano stating that Blackstone is drilling Rocking Chair Ranch 1.

Mr. Niemuth reported that mechanical integrity tests are being conducted at the Plains Midstream LPG storage facility and he witnessed the test being conducted in a reasonable fashion and will write a note for the permit folder regarding the testing.

Mr. Nations questioned Nyal about his comfort in doing the technical aspects of the inspections and the possibility of more training. Mr. Nations had previously contacted the IOGCC to see if they have any training programs but those programs are no longer offered.

Mr. Niemuth stated that the AZGS had discussed the possibility of traveling to Utah to do some shadowing with the Utah Geological Survey but that was put on hold considering the legislation to transfer OGCC to DEQ.

CALL TO THE PUBLIC

Mr. Porter with Ranger Development stated that he has submitted two drilling applications to the OGCC. They should be received by the office today. Joe Dixon reported that the State Land Department is doing archeological review for the well sites.

Mr. Porter requested that Ranger Development be on the next meeting agenda to give a presentation to the commission at the next meeting.

Mr. Thorwald expressed his interest in accompanying Mr. Niemuth in the site inspections.

Mr. Thorwald moved, seconded by Mr. Nations:

> TO REPLACE THE PROPOSED MAY 15, 2016 COMMISSION MEETING WITH A REGULAR MEETING ON APRIL 8, 2016 AT 10A AM IN THE STATE LAND DEPARTMENT ROOM 321.

Motion carries unanimously.

ANNOUNCEMENTS

None

ADJOURNMENT

Mr. Nations moved, seconded by Mr. Cooper:

THAT THE MEETING BE ADJOURNED

Motion carried unanimously. Time of adjournment was 10:43 am.

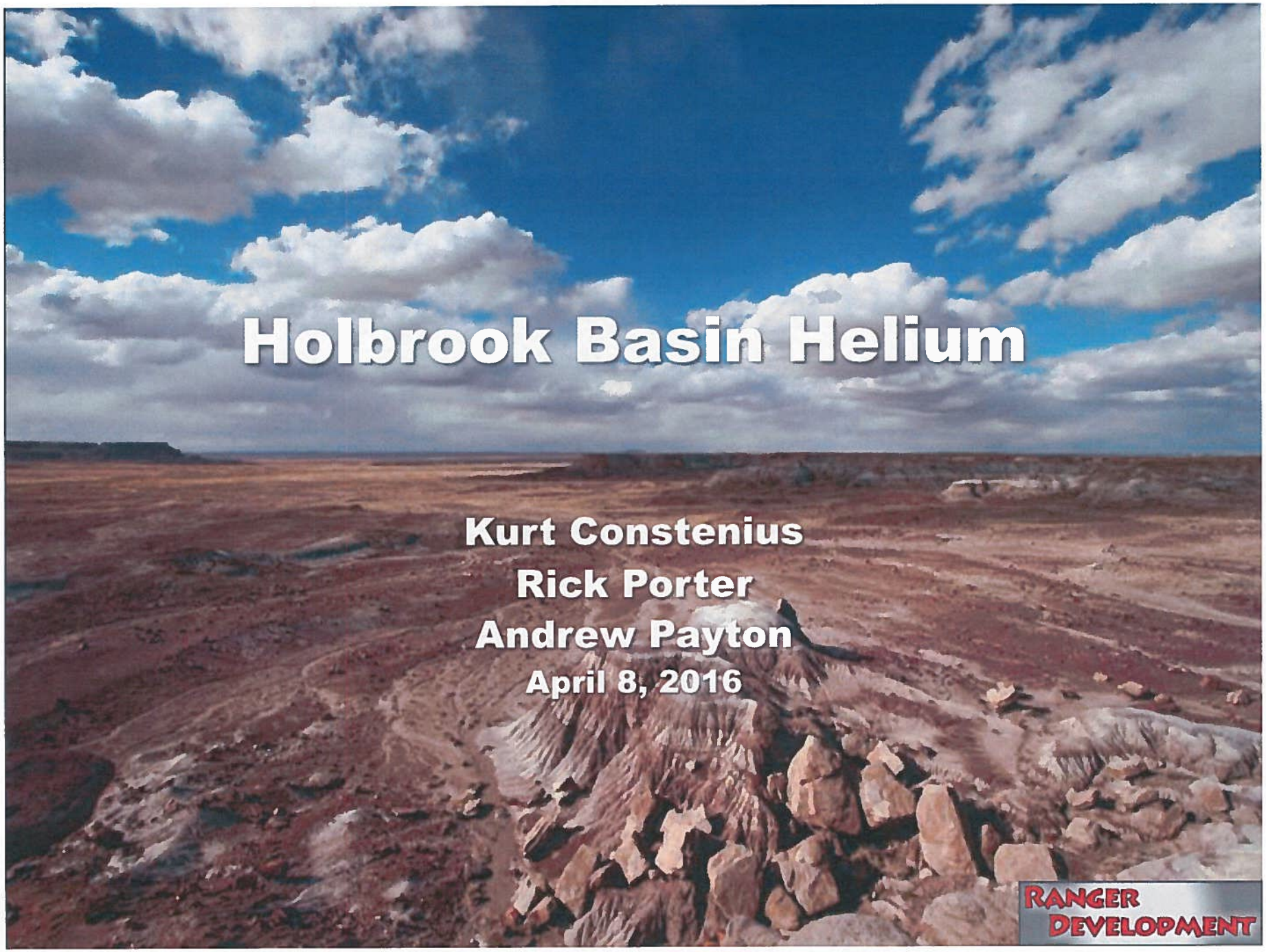
REVIEWED

FRANK THORWALD
CHAIRMAN

3/30/2016
DATE

GUESTS IN ATTENDANCE

Mr. Rick Zeise, Assistant Attorney General
Ms. Michele Van Quathem, Ryley Carlock & Applewhite
Mr. Rick Porter, Ranger Development
Mr. Joe Dixon, AZ State Land Department



Holbrook Basin Helium

Kurt Constenius
Rick Porter
Andrew Payton

April 8, 2016

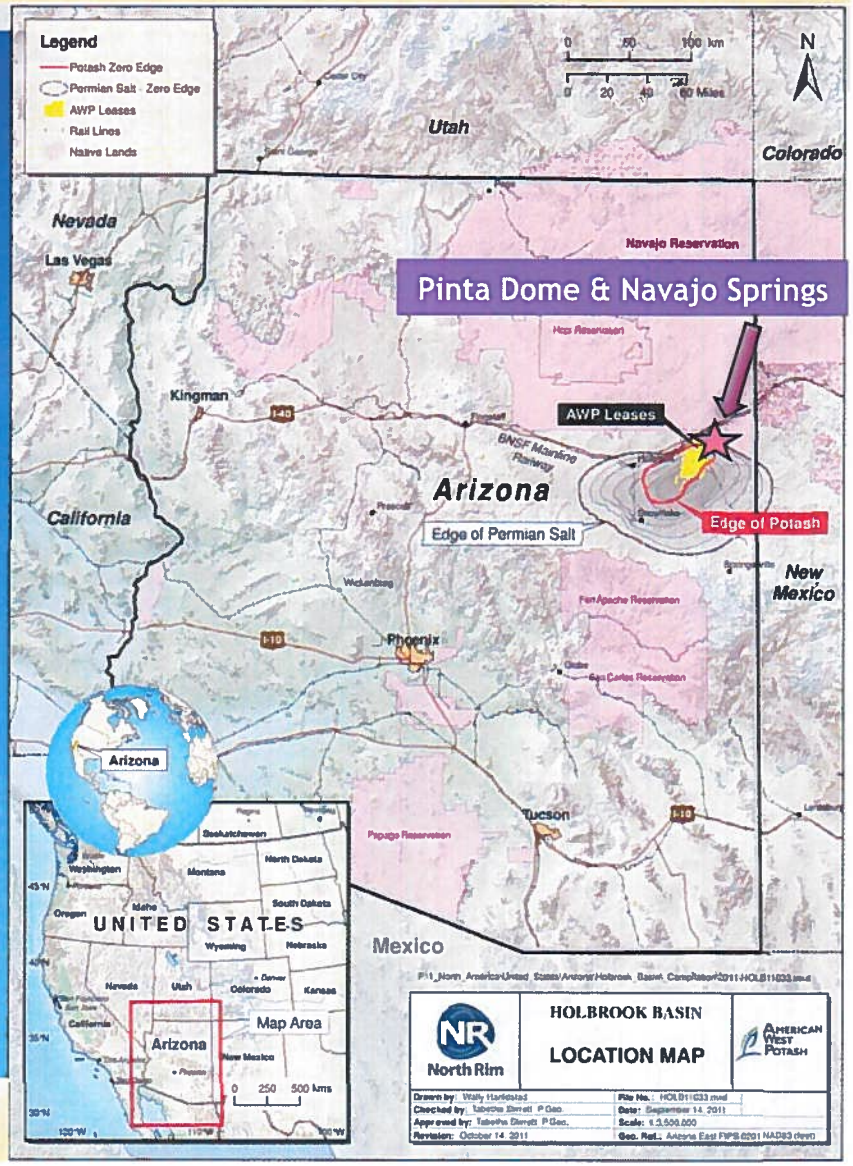
RANGER DEVELOPMENT

HELIUM - HOLBROOK BASIN

Pinta Dome Helium Field Background

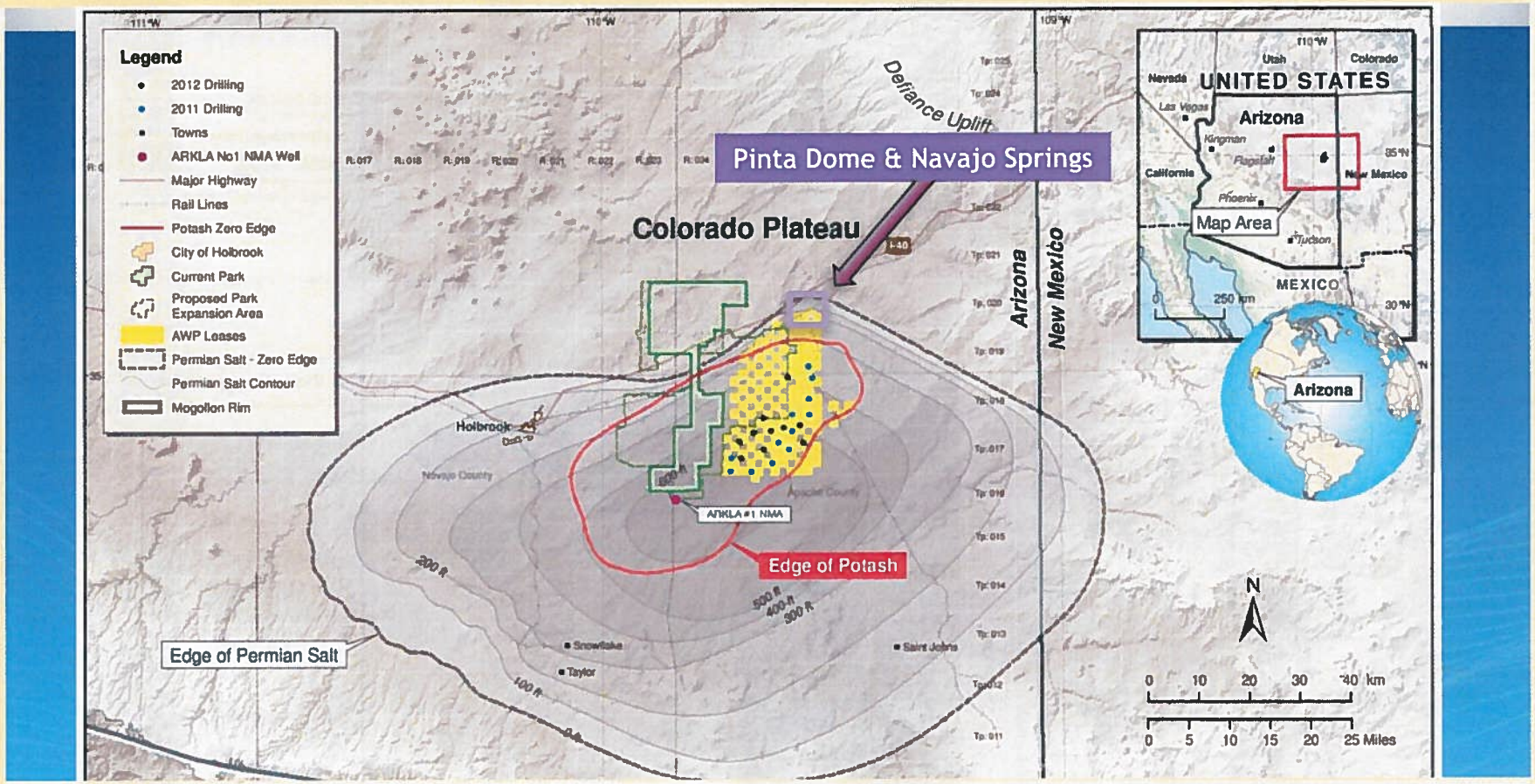
Helium was produced near the northeastern edge of potash deposits from 1961 to 1976. Two helium fields, Pinta Dome and Navajo Springs, produced nearly 700 MMcf of Grade-A helium from the Permian Coconino Sandstone out of 9 Bcf total gas produced. Concentrations of helium from these fields was as high as 10% with an average of 8%, making it some of the richest helium-bearing gas ever produced (Rauzi, 2003).

Pinta Dome and Navajo Springs fields lie one to two miles south of I-40, and in even closer proximity to the BNSF Railway.



HELIUM - HOLBROOK BASIN

Pinta Dome Helium Field versus Potash Deposits

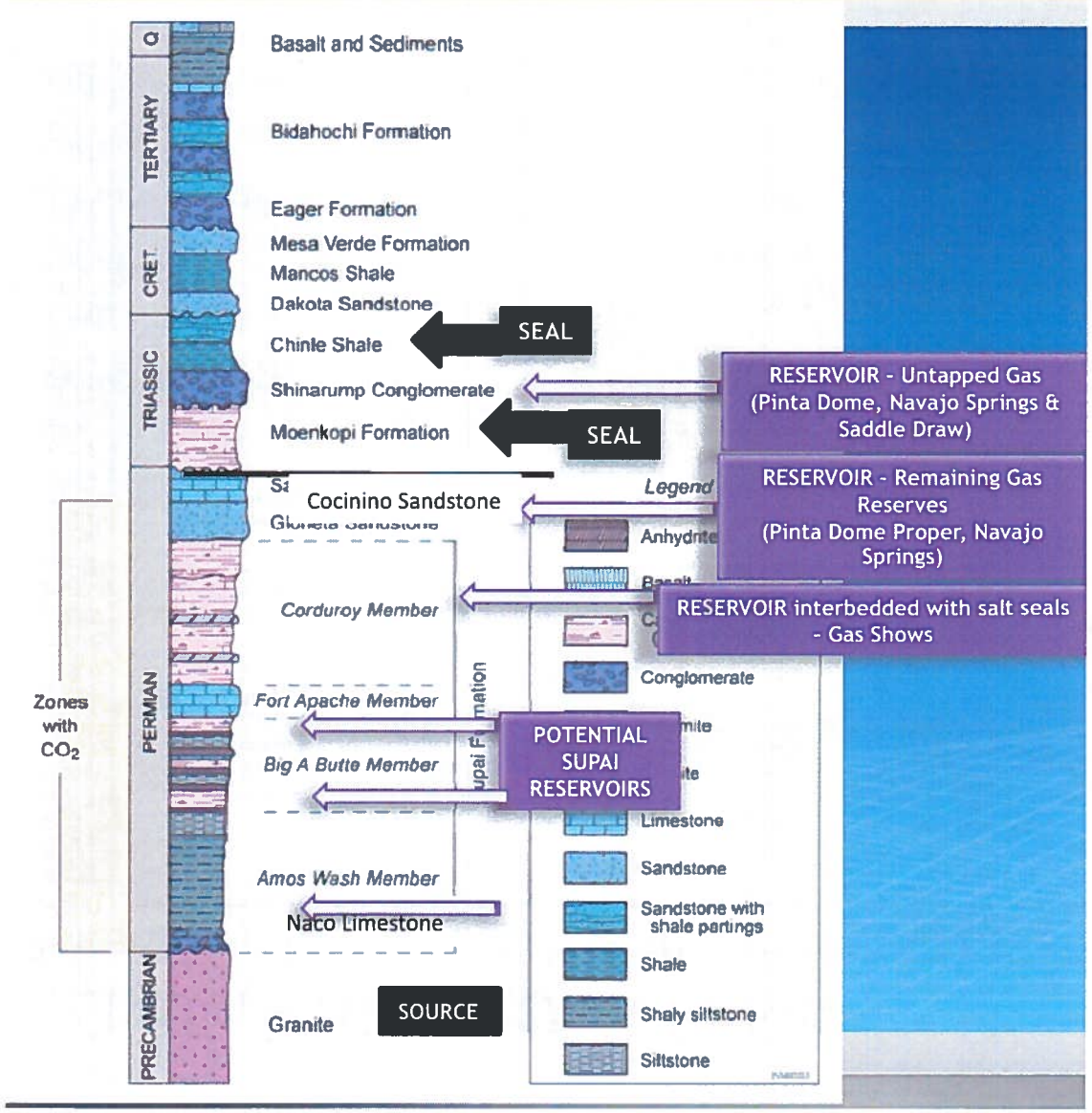


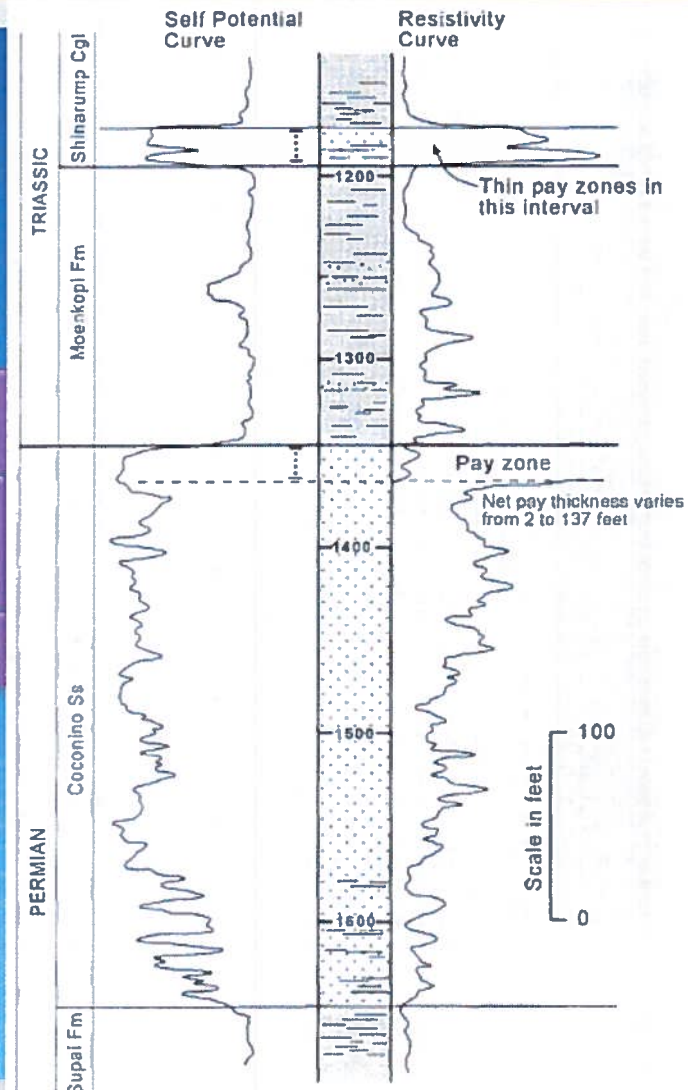
<u>Exploration Model for Helium Concentration</u>

Permian salts focus migration of gases emanating from the Precambrian basement. In other words, no helium gas can penetrate the Permian salt (composite thickness up to 180m) so it trap beneath it or migrates laterally. In effect the salt basin serves as a large catchment, and traps that rim the salt basin are charged with high helium concentrations.

HELIUM - HOLBROOK BASIN

Holbrook Basin Stratigraphy - Helium Source, Reservoir & Seal System

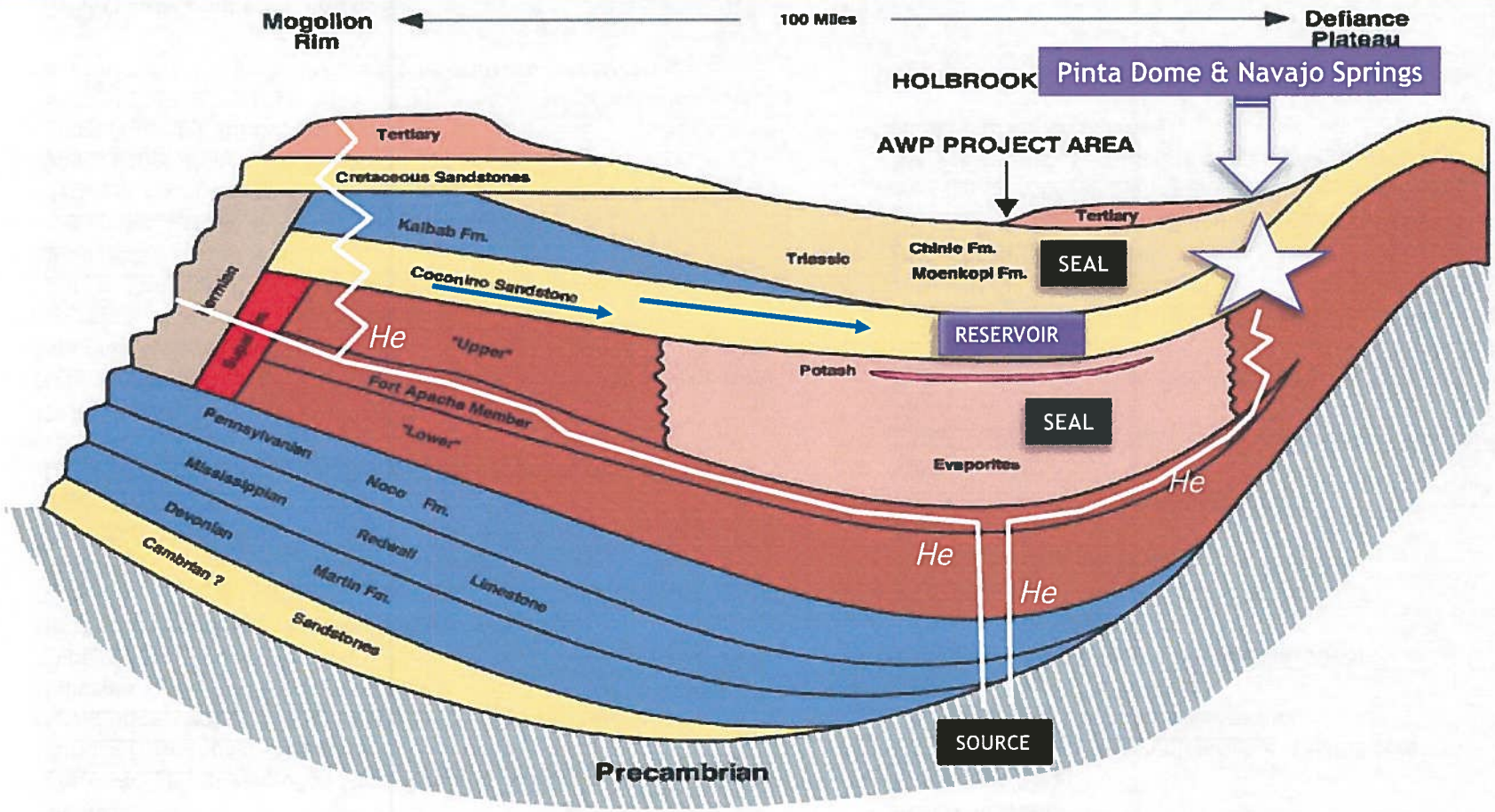




Composite Log (Allen, 1978)

HELIUM - HOLBROOK BASIN

Holbrook Basin Stratigraphy - Helium Source, Reservoir & Seal System



Pinta Dome is ideally placed to receive helium charge from lateral migration beneath Supai Formation evaporites and short distance vertical migration above Precambrian crystalline basement. The Coconino Sandstone and Shinarump Conglomerate are effectively sealed by the Moenkopi and Chinle Formations, respectively. Note that the Coconino Sandstone cannot be sealed toward the Mogollon Rim in this figure because the Kaibab is a fractured limestone. The search for helium in these parts of the Mogollon Rim should be focused on the Supai Group and lower.

HELIUM – PINTA DOME

Field Summary & Characteristics (Allen, 1978)

Geology:
Regional Setting: Mogollon Slope (Holbrook Basin)
Surface Formations: Triassic Chinle Formation
Exploration Method Leading to Discovery: Detailed plane-table survey, followed by subsurface cross section
Type of Trap: Faulted Anticline
Producing Formation: Permian Coconino Sandstone
Gross Thickness & Lithology of Reservoir: 70 feet, fractured eolian and fluvial sandstone
Geometry of Reservoir: Sandstone body is continuous within fault blocks
Other Significant shows: None
Oldest Stratigraphic Horizon Penetrated: Permian, Supai Formation

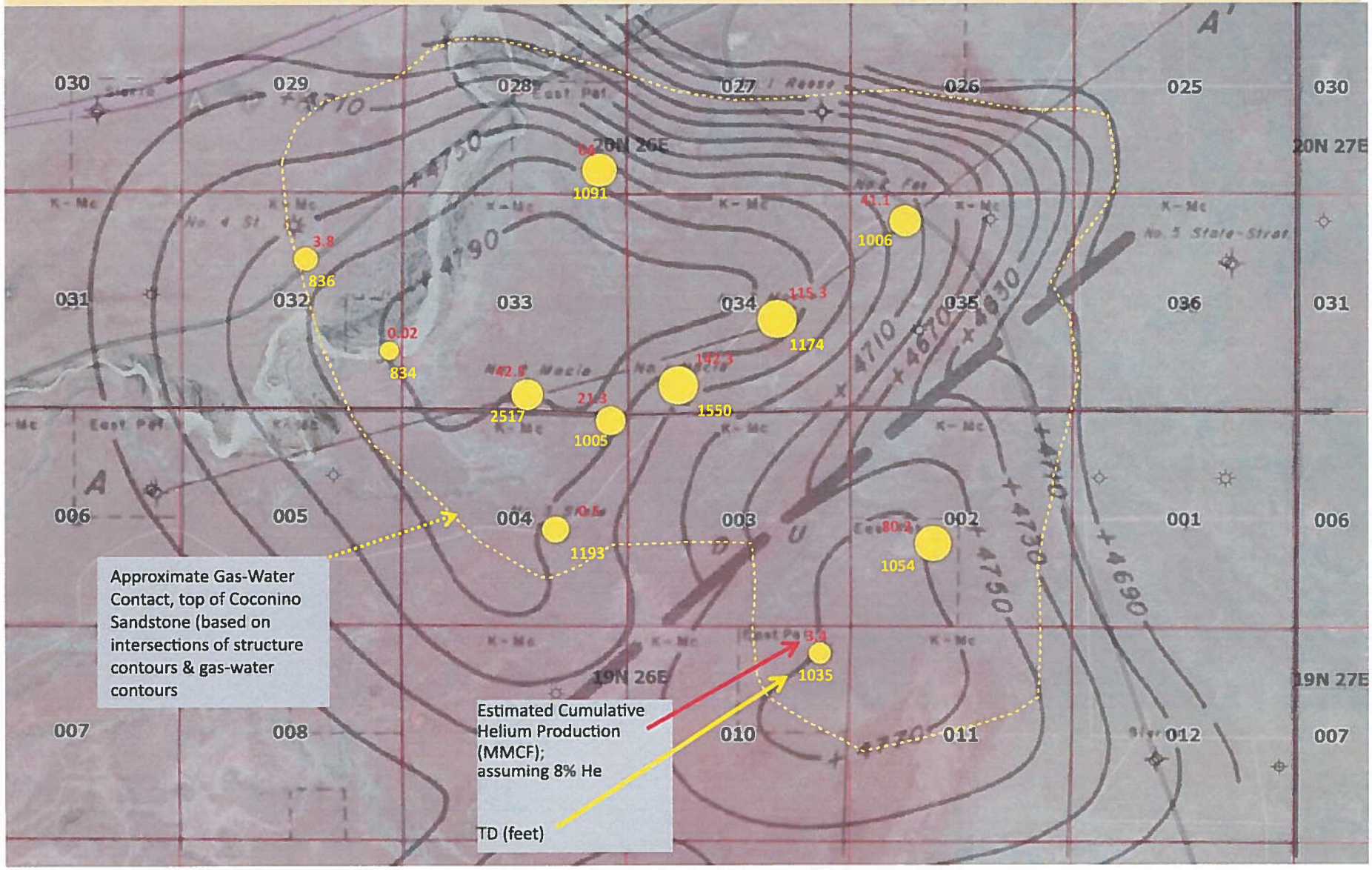
Discovery Well:
Name: Kipling Petroleum Co. No. 1 Macie-State (Kerr McGee became operator & developer)
Location: SW SW, sec. 34, T. 20N., R. 26E.
Date of Completion: Drilling completed 1950, final completion October 1956
Total Depth: 1,550 feet
Production Casing: 6 5/8" at 1,530 feet, not cemented
Perforations: 1,098 to 1,100 feet and 1,026 to 1,046 feet
Stimulation: None
Initial Potential: 10,800 MCFGD
Bottom Home Pressure: Not available, well blew free for several weeks before being shut in, first bottom hole pressure test 102 psi

Drilling and Completion Practices:
The discovery well was drilled with cable tools and did not follow the pattern later adopted to complete wells in this field (rotary). Surface casing 8 5/8" at 200 feet with 100 sacks cement, 4 ½" at 1,000 feet with 150 sacks of cement, 4 ½" perforated with 2 to 4 shots per foot. Sand-water fractured when

Reservoir Data:
Productive Area:
Proved (as determined geologically): 4,926.5 acres
Unproved: None present with spacing
Approved Spacing: 640 acres
Producing Wells: 0 (all now plugged, 1978)
Abandoned Wells: 11
Dry Holes: 8
Average Net Pay: 61 feet
Porosity: 14%
Permeability: 110 millidarcies (average)
Water Saturation: 29%
Initial Field Pressure: 102 psi when first bottom hole pressure taken
Type of Drive: Gas expansion with northward tilted gas water contact
Gas Characteristics & Analysis (%): Helium (8.2), Methane (0.2), Nitrogen (90.0), other gases (1.6)
Oil Characteristics: None
Original Gas, Oil, and Water contact datums: +4,679 ft
Average Daily Production During Life of Field: 1,400 MCFGD
Market Outlets: Kerr-McGee processed the raw gas; pure helium shipped to various markets

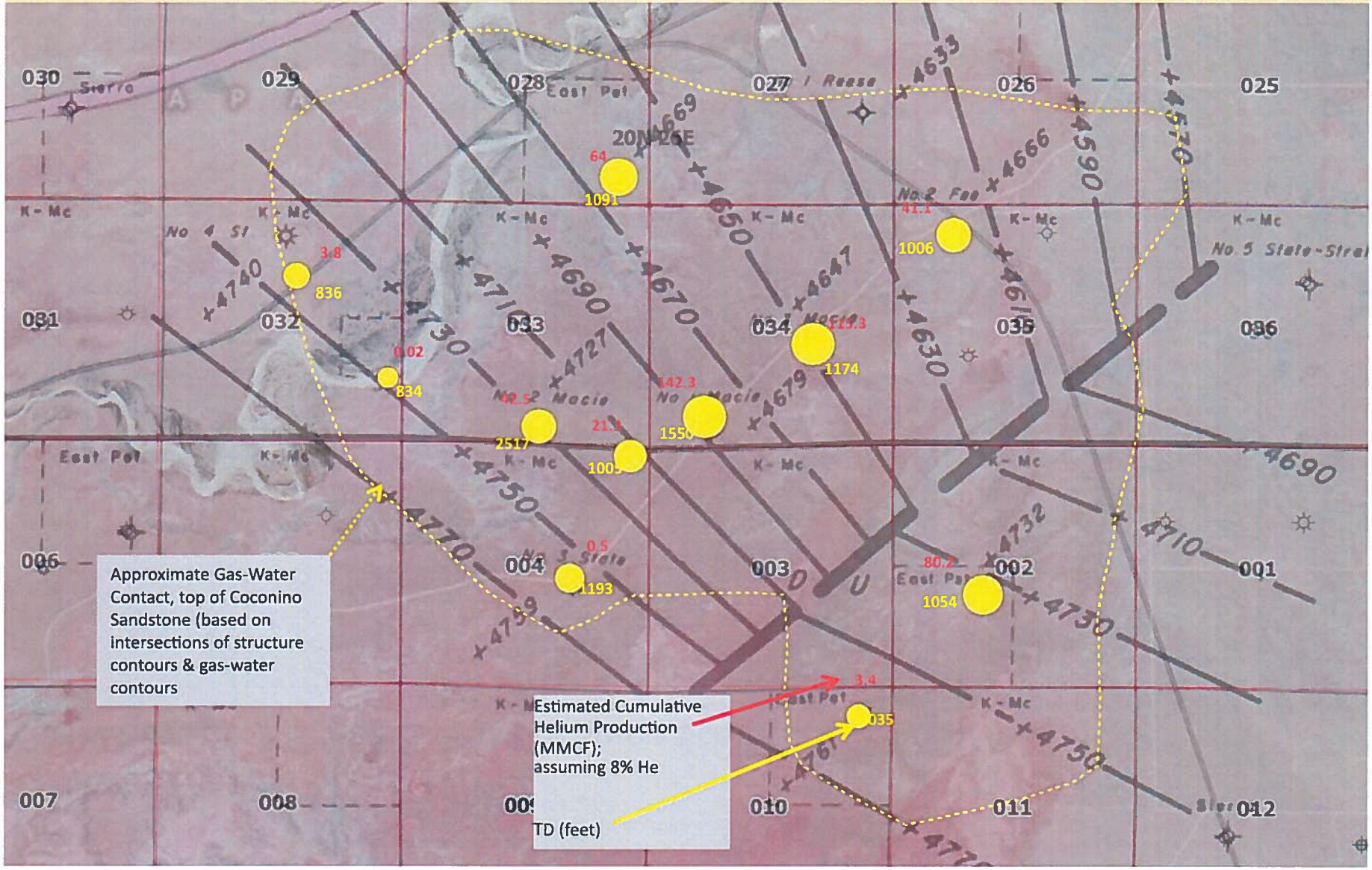
HELIUM – PINTA DOME

Gas-Water Contact on top of Coconino Structure Contour



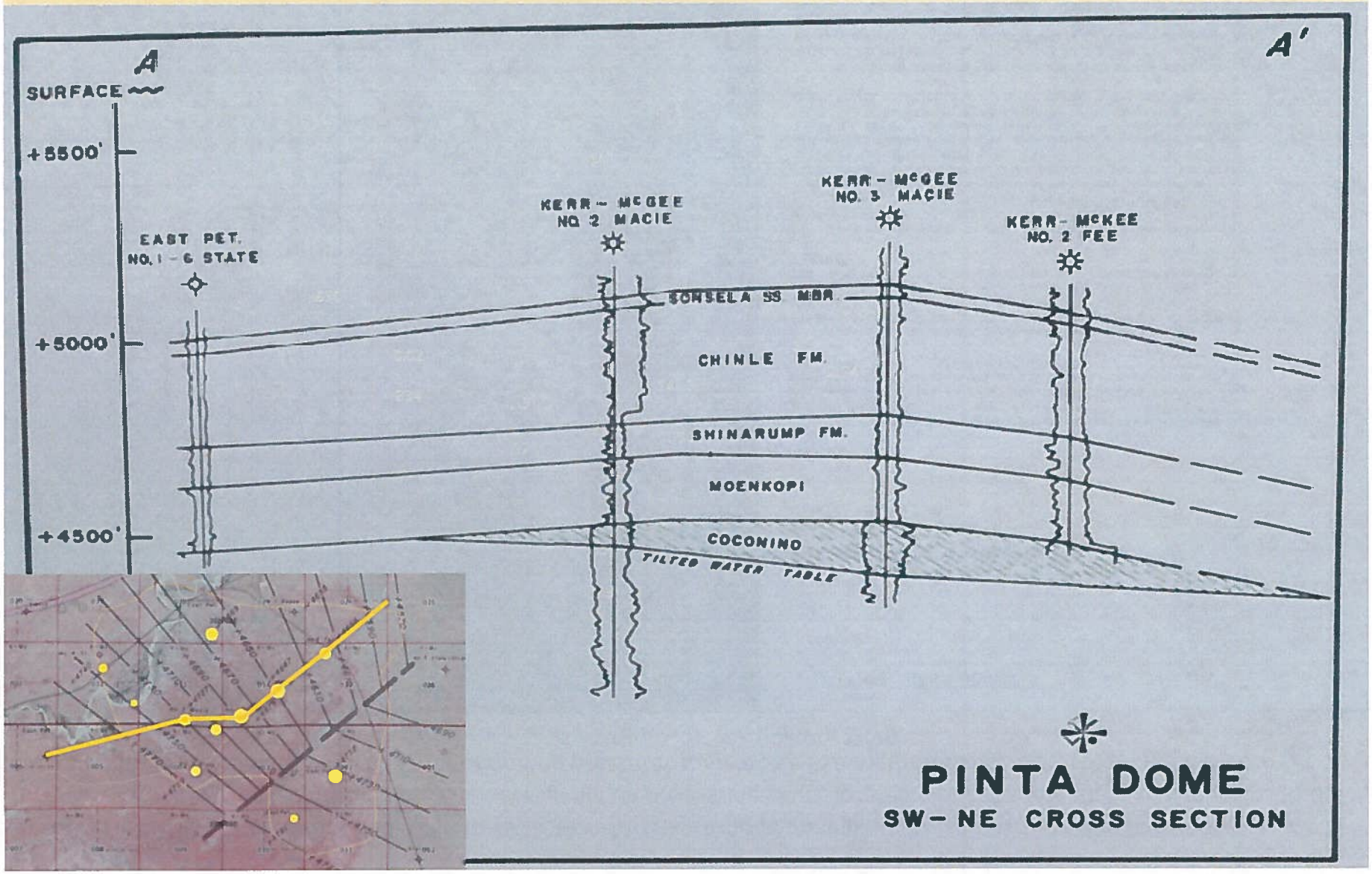
HELIUM – PINTA DOME

Gas-Water Contours (C.I. = 20')

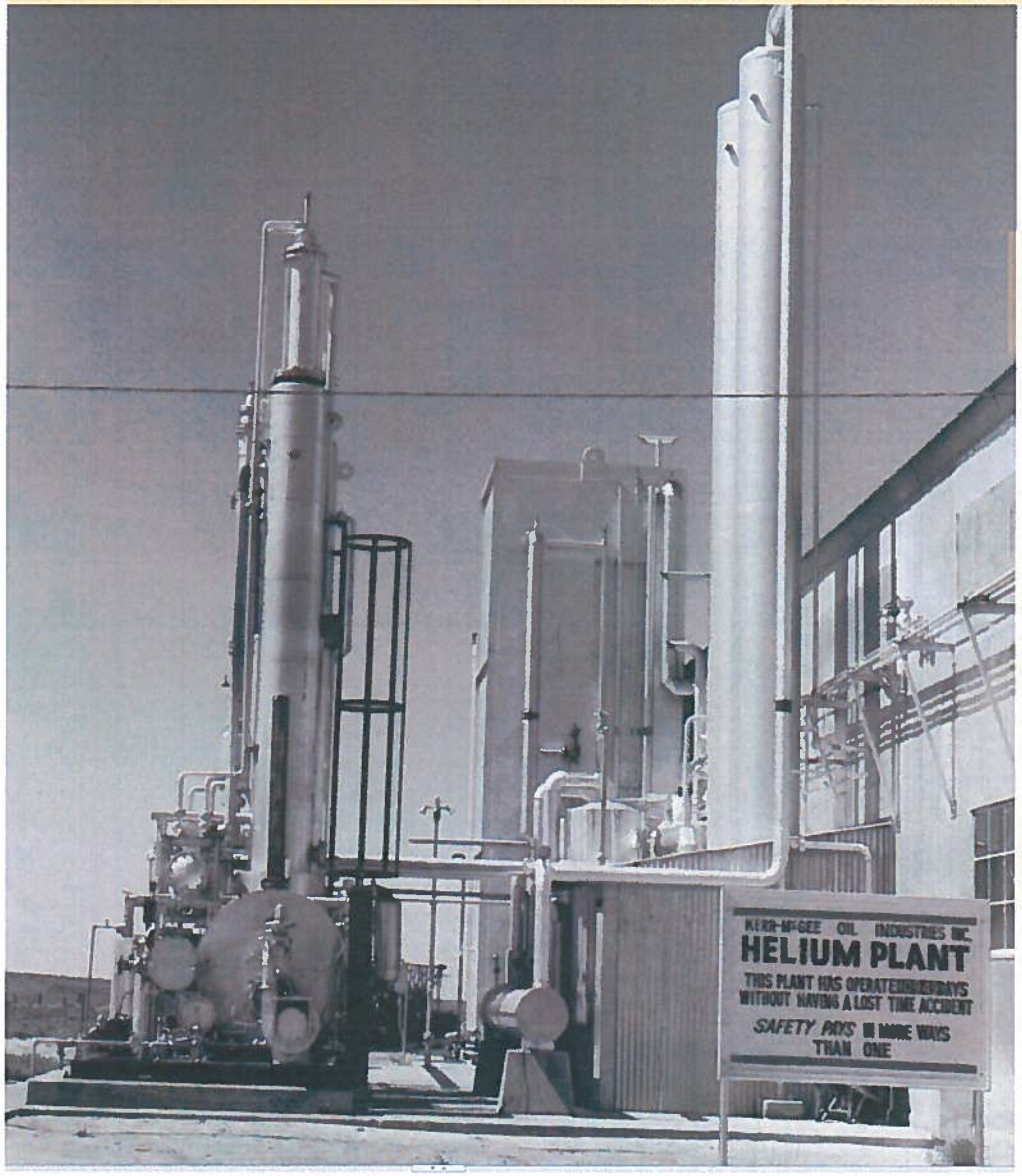


HELIUM – PINTA DOME

Cross Section showing tiled gas-water contact



HELIUM - PINTA DOME From mid-1968 to 1976, Kerr-McGee stopped annual pressure/flow tests due to erratic line pressures which disrupted production. Their cryogenic He processing plant, located along the interstate several miles to the NE of Pinta Dome, required much higher operating pressures than IACX's PSA method does. This, combined with market conditions, led to a rapid decline in production and shutdown of the plant in 1976



KERR-McGEE

June 9, 1969

Oil and Gas Conservation Commission
State of Arizona
Room 202 - 1624 West Adams
Phoenix, Arizona 85007

Attention: Mr. James A. Lambert

Dear Sir:

In accordance with my telephone conversation with you and Mr. John Bannister today, we are hereby requesting the commissions approval to defer the annual testing requirements set forth in Rule 401 on all helium gas wells in the Pinta Dome Unit, Apache County, Arizona.

This field is a unit operation. Only six wells, Eastern State #1-2 and #1-28, Kerr-McGee State #1, #2, #3A, and Fee #1 have been produced, the other three wells, Eastern State 1-10, Kerr-McGee State #4A and Kerr-McGee Fee #2 have been shut-in since unit was formed on January 1, 1968.

Shut in pressures in this field are very low with none exceeding 60 p.s.i.g. Plant operation makes gas flow very erratic, rate of flow and line pressures are very seldom steady for over a few hours at one time. Also when plant is in full operation, line pressures and well operating pressures are never more than 1 to 5# less than well shut in pressures. These conditions make testing procedures as outlined in the testing manual impossible. The only way potential tests could be accomplished would be by venting gas to air which would constitute a waste of valuable natural resources.

We believe that a representative test of the wells in this field is almost impossible and that no useful purpose can be accomplished by flow tests of wells in this unit operation. Therefore we are making this request that annual tests on all wells in Pinta Dome unit be again deferred.

Yours very truly,

KERR-McGEE CORPORATION

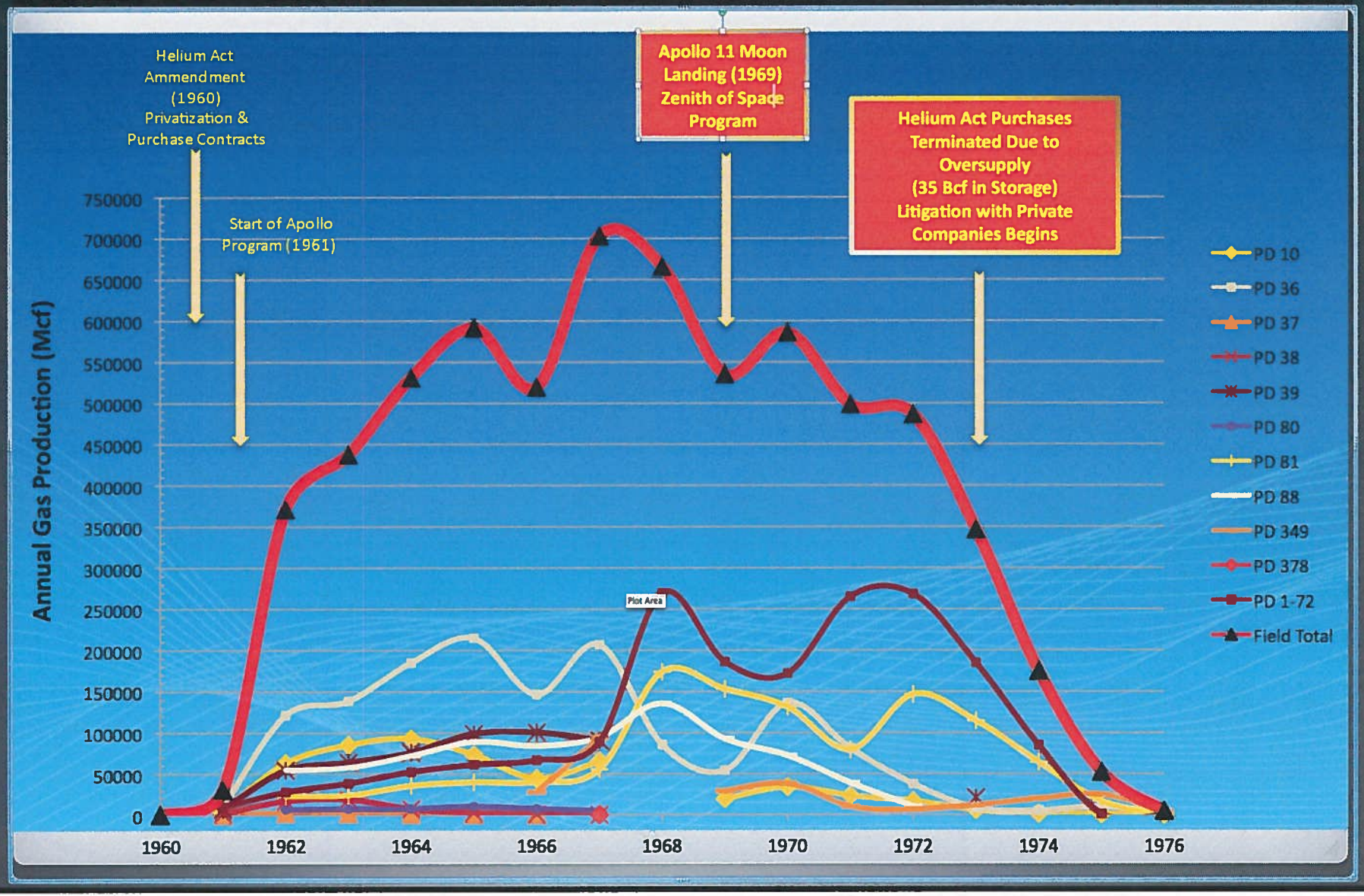
Otto C. Barton
Division Superintendent
Oil and Gas Production

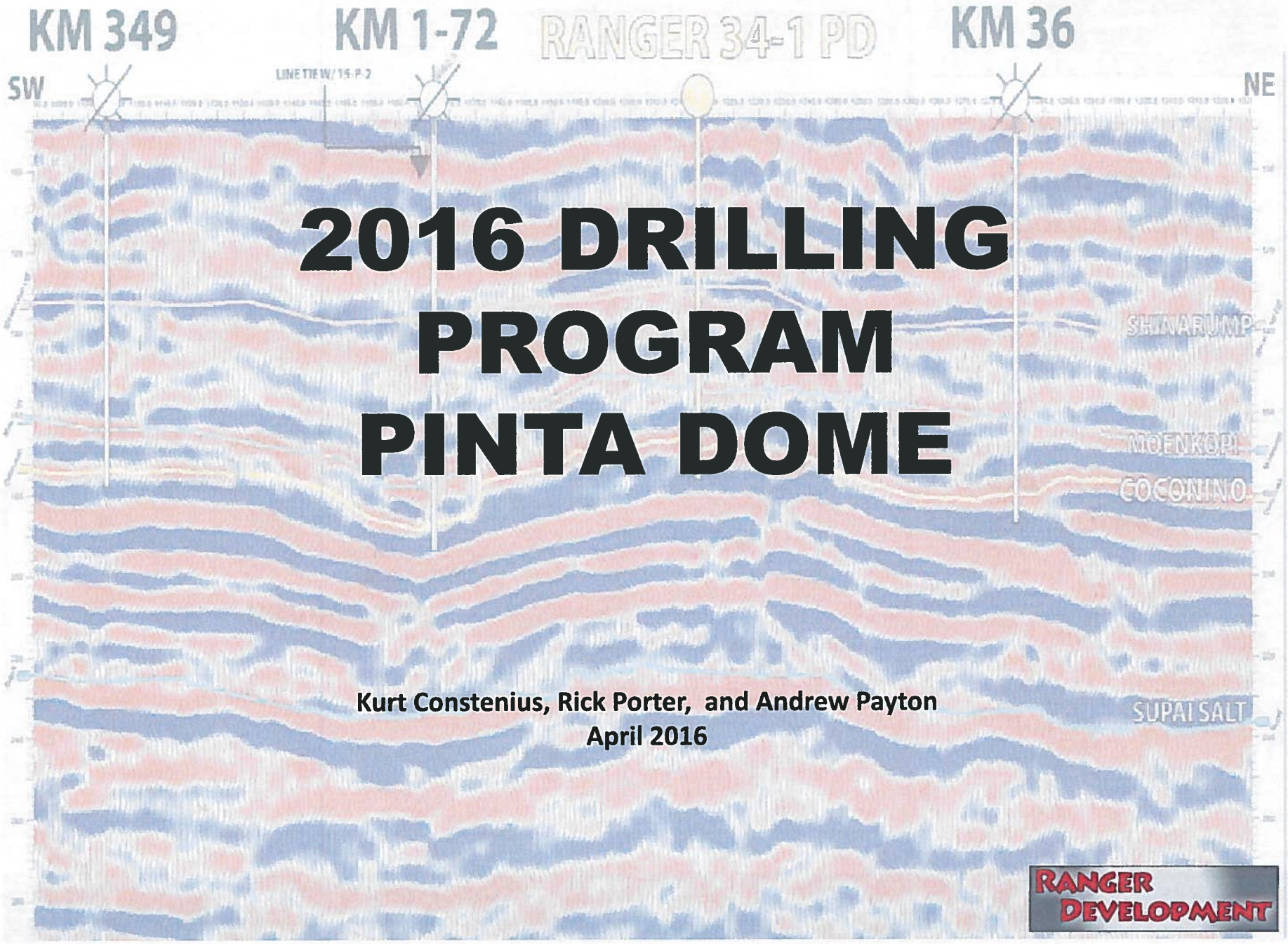
RECEIVED JUN 11 1969 STATE O & G CONS. COMM.

OCB/ds

HELIUM - PINTA DOME

Annual Gas Production





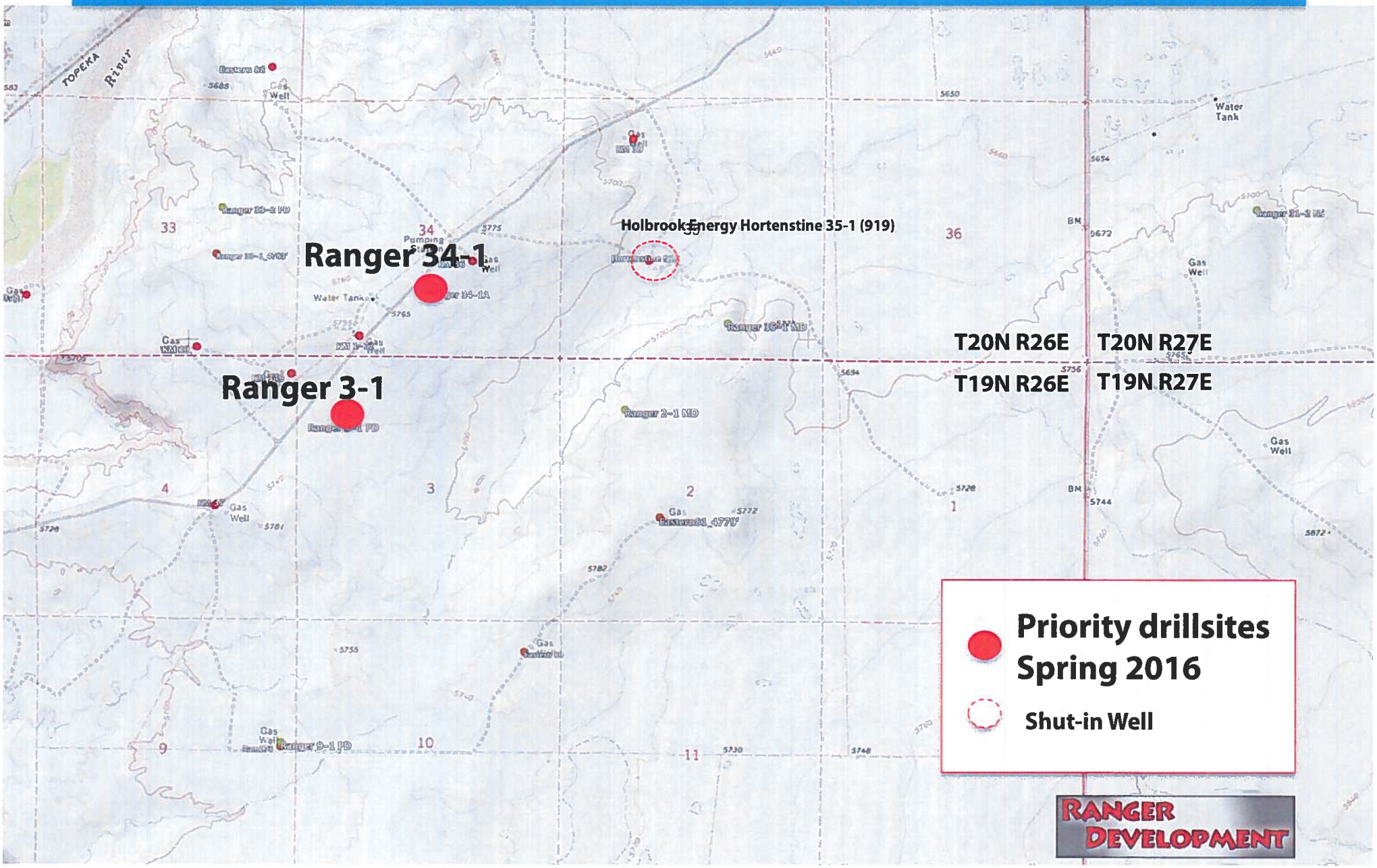
2016 DRILLING PROGRAM PINTA DOME

Kurt Constenius, Rick Porter, and Andrew Payton

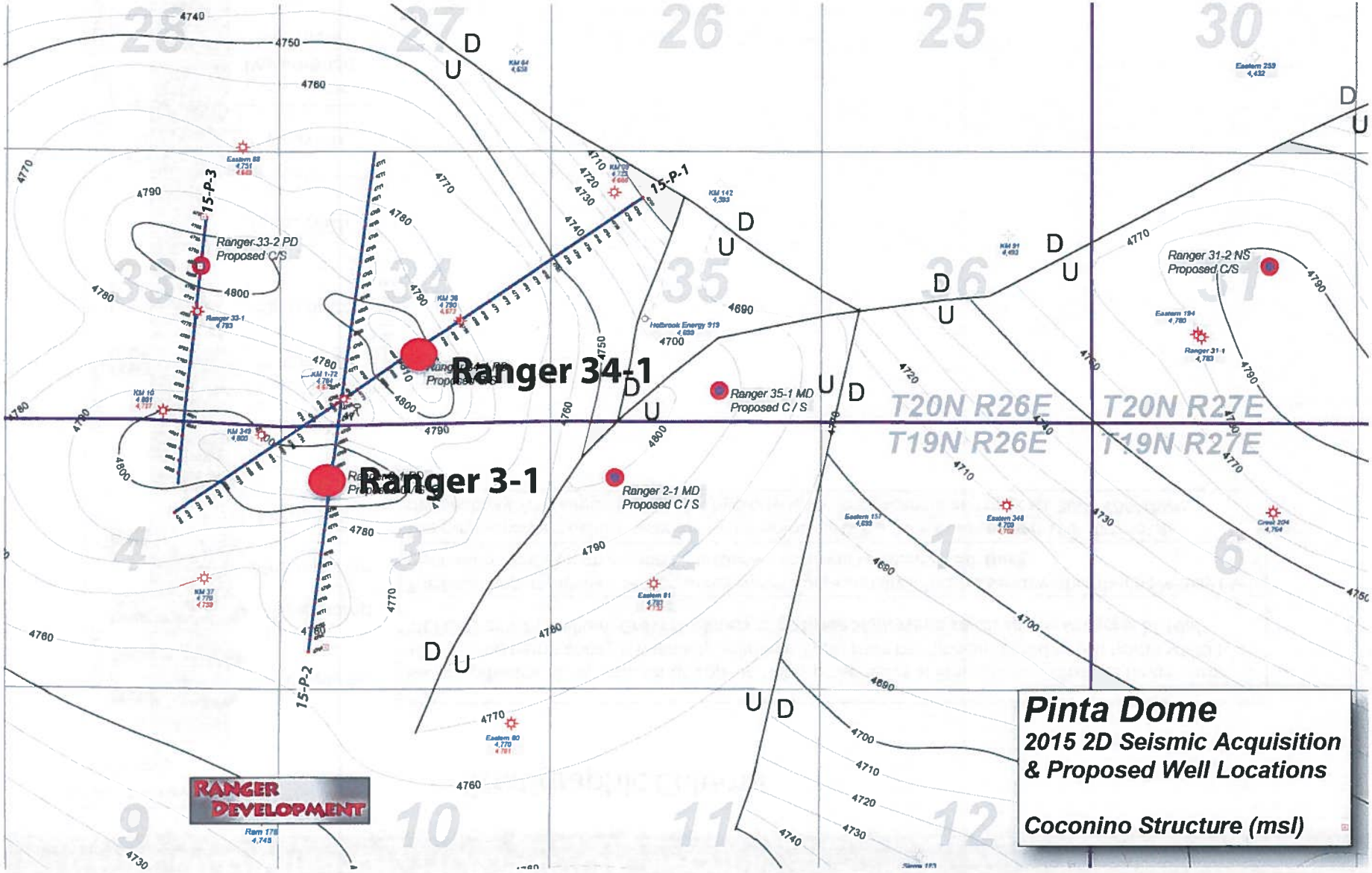
April 2016

RANGER DEVELOPMENT

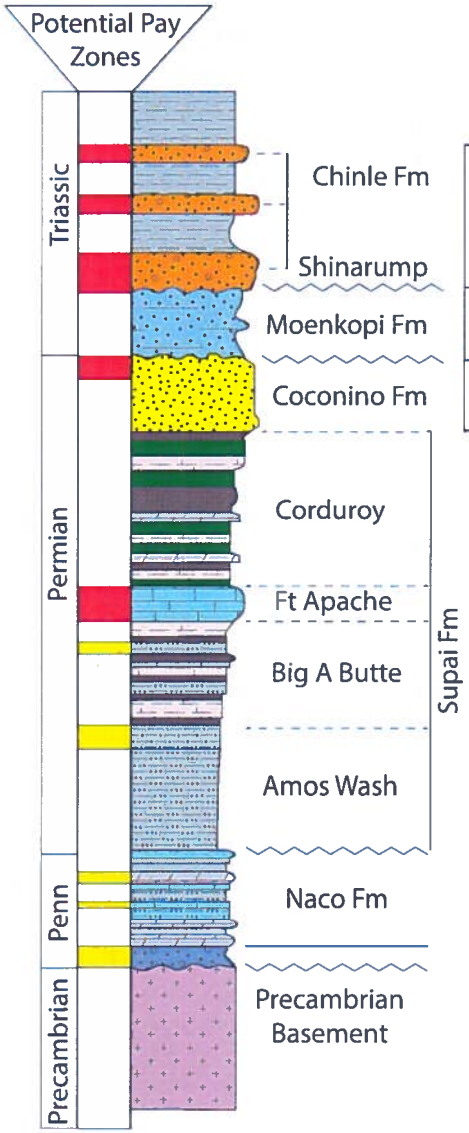
TOPOGRAPHIC INDEX MAP SHOWING PLANNED WELLS



STRUCTURE INDEX MAP SHOWING PLANNED WELLS



STRAT COLUMN FOR HOLBROOK BASIN



Stratigraphic Column

Several different Shinarump sands appear highly prospective at Pinta Dome. Porosities range from 10-20% and permeability is relatively unknown. Wells have been documented to test from 150-300 MCFGPD at 5-7% helium. ***Gross thickness of all three Shinarump sands can be in excess of 100'.***
The Moenkopi is mostly a sealing unit, however occasionally it has 1-2 sands within that have may have reservoir potential, with a good SP response, and high resistivity. ***150' thick.***
The prolific historic helium reservoir in the Holbrook Basin. 15% porosity, and 100-200 md of permeability. Also a regional aquifer, hydrodynamic forces can tilt any gas cap. ***300 - 400' thick.***

RANGER DEVELOPMENT

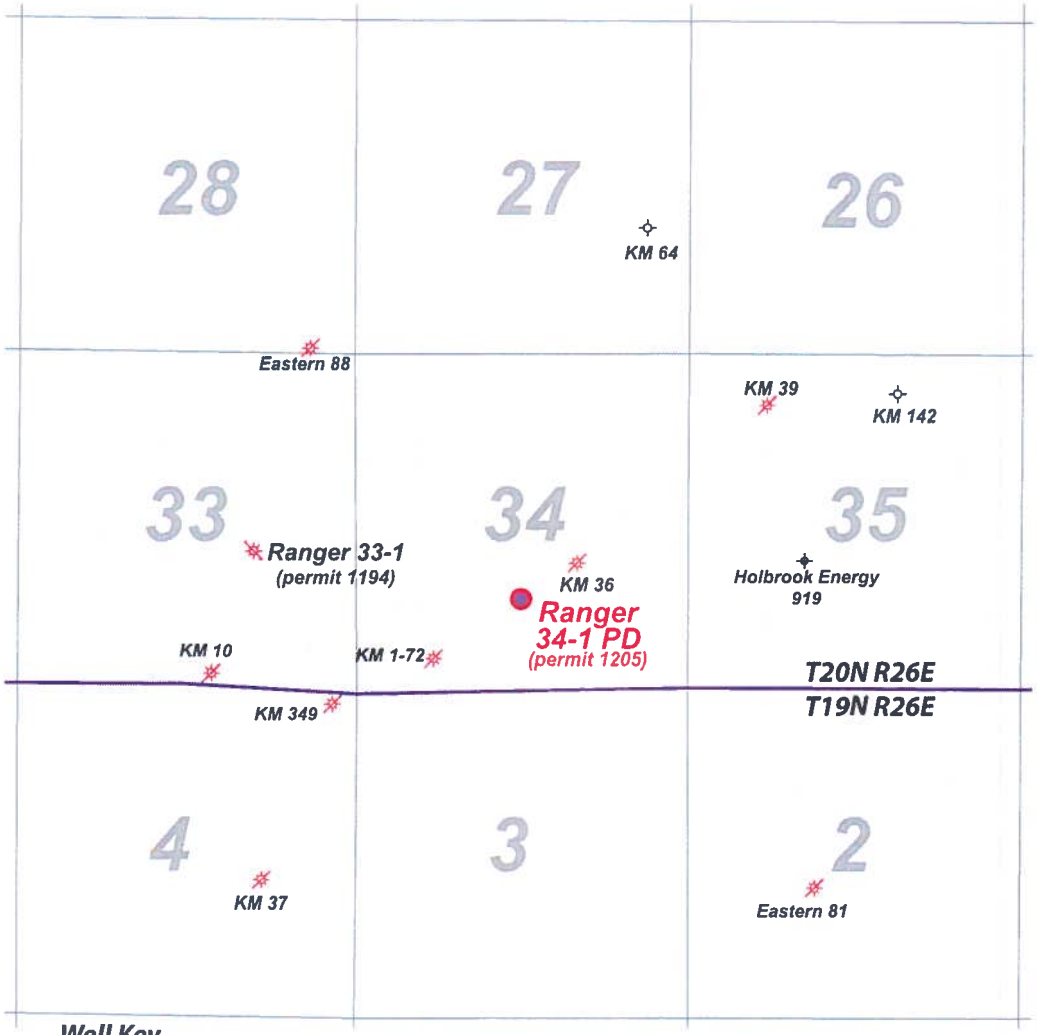
PINTA DOME
RANGER 34-1 PD

Location

C S/2 Section 34, T20N, R28E

RANGER DEVELOPMENT

Well Plat



Well Key

- Shut-in helium well
- P&A Historic Producing Helium well
- P&A Historic Helium Gas Show Well
- Shut-in well, production capability unknown
- P&A Dry Hole
- Actively Permitted Well (Location Exception Required)

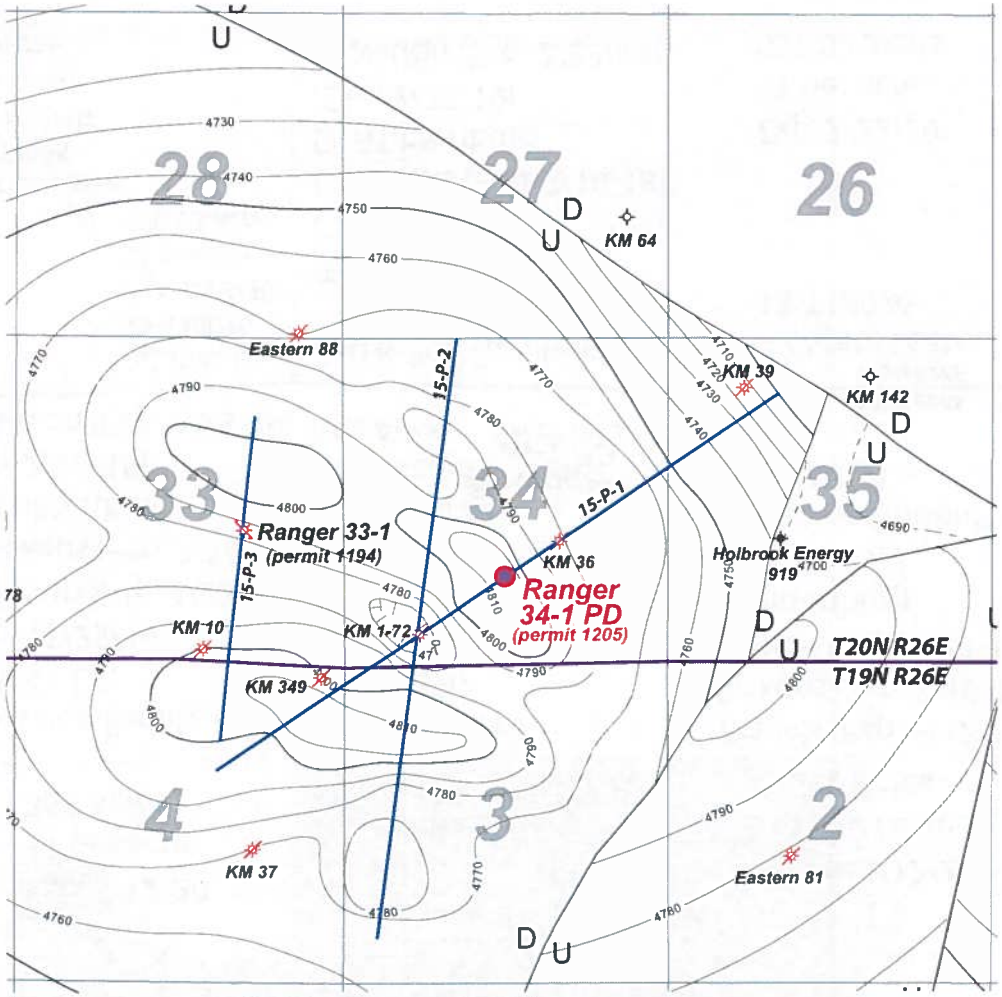
Ranger 34-1 PD Details:
C S/2 Sec 34, T20N, R28E
35.086001° N
-109.567764° W
(WGS 84)
1400' FSL
2640' FEL
Shotpoint 1236

Note: Wells referred to by Historical Operator - State Permit Number
(KM 1-72 = Kerr McGee State Permit 1-72)

Well Location Plat
Ranger Development
Showing all current & historic wells

RANGER DEVELOPMENT

Structure Plat



Well Key

- Shut-in helium well
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- Shut-in well, production capability unknown
- P&A Dry Hole
- Actively Permitted Well

Note: Wells referred to by Historical Operator - State Permit Number (KM 1-72 = Kerr McGee State Permit 1-72)

Map Datum: NAD27
Polyconic Projection
XY Units: US FEET
Ellipsoid: Clarke 1866
Central Meridian: -109.5243027
Latitude of Origin: 35.0582902

Seismic-Structure Plat

Ranger Development

Structure Contours (MSL) Top Coconino

Based on well control & 2015 2D Seismic Acquisition

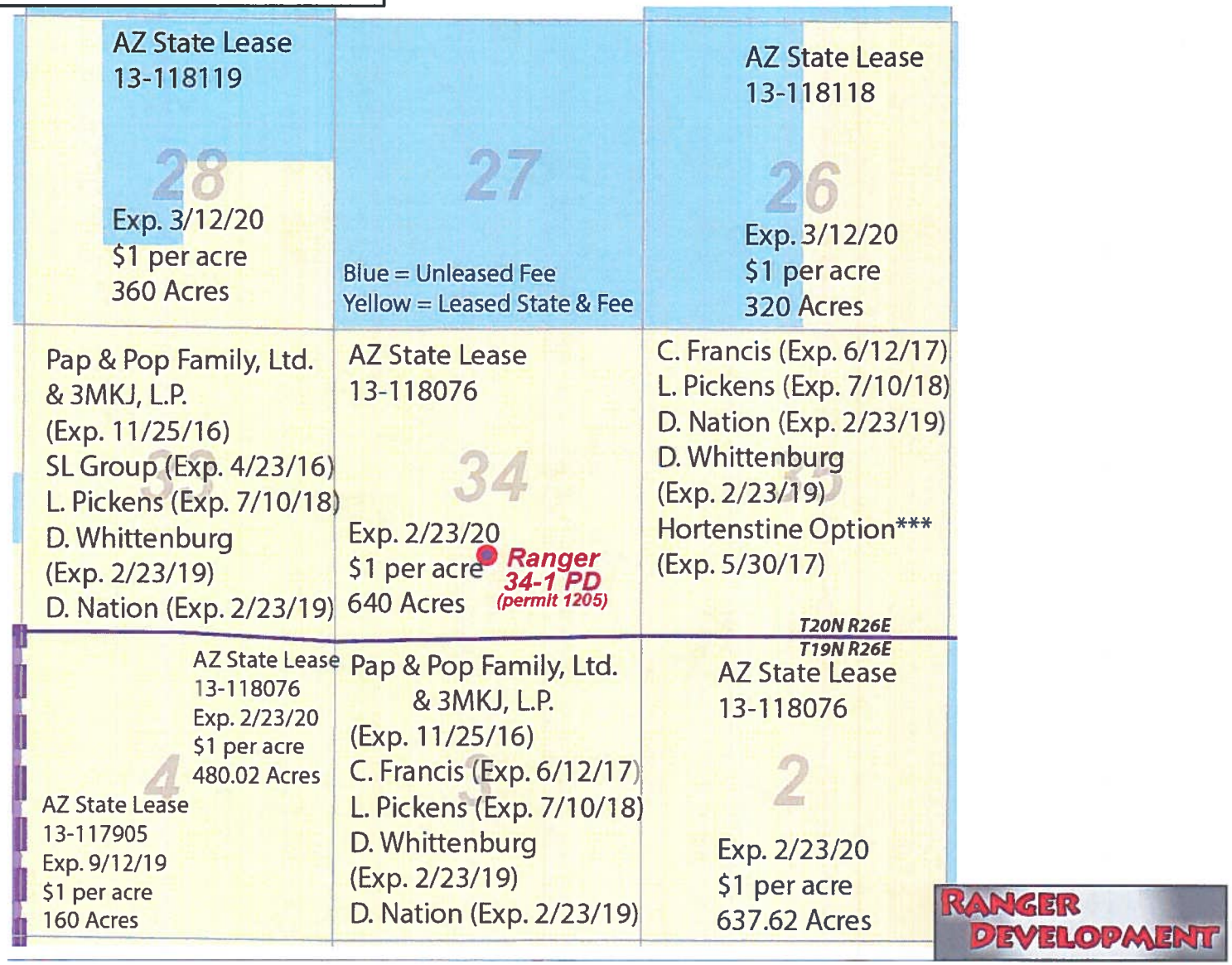
Seismic lines shown in blue

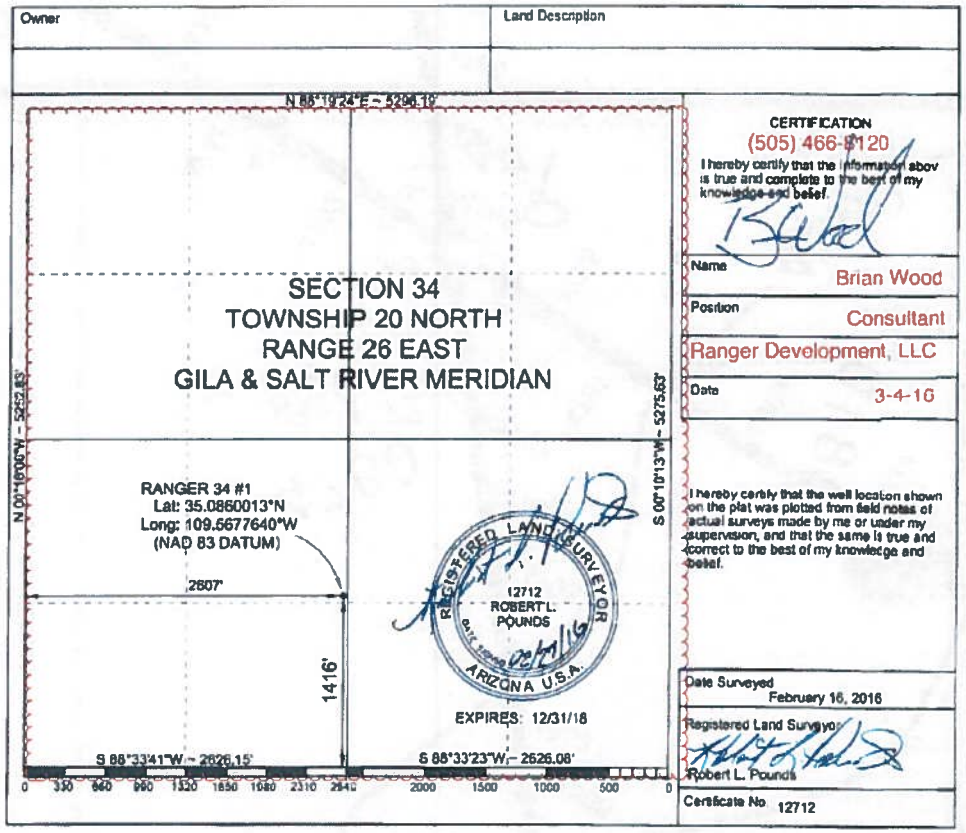
RANGER DEVELOPMENT

LAND PLAT

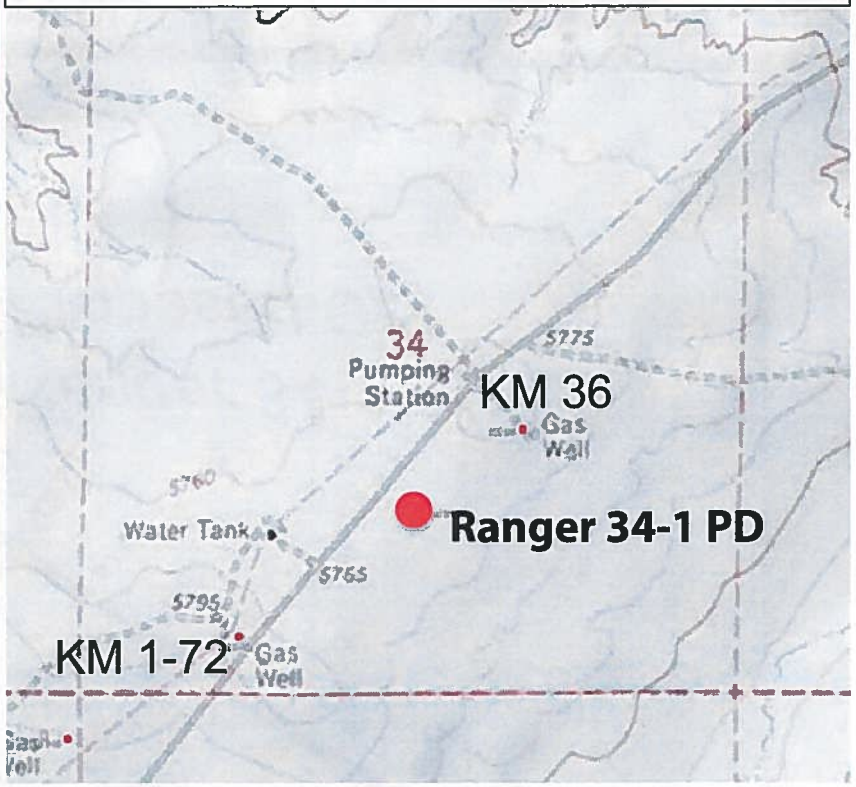
Ranger Development

Showing locations of Ranger 34-1 PD (permit 1205) and all adjacent state & fee leases





Ranger 34-1 Location with Topography

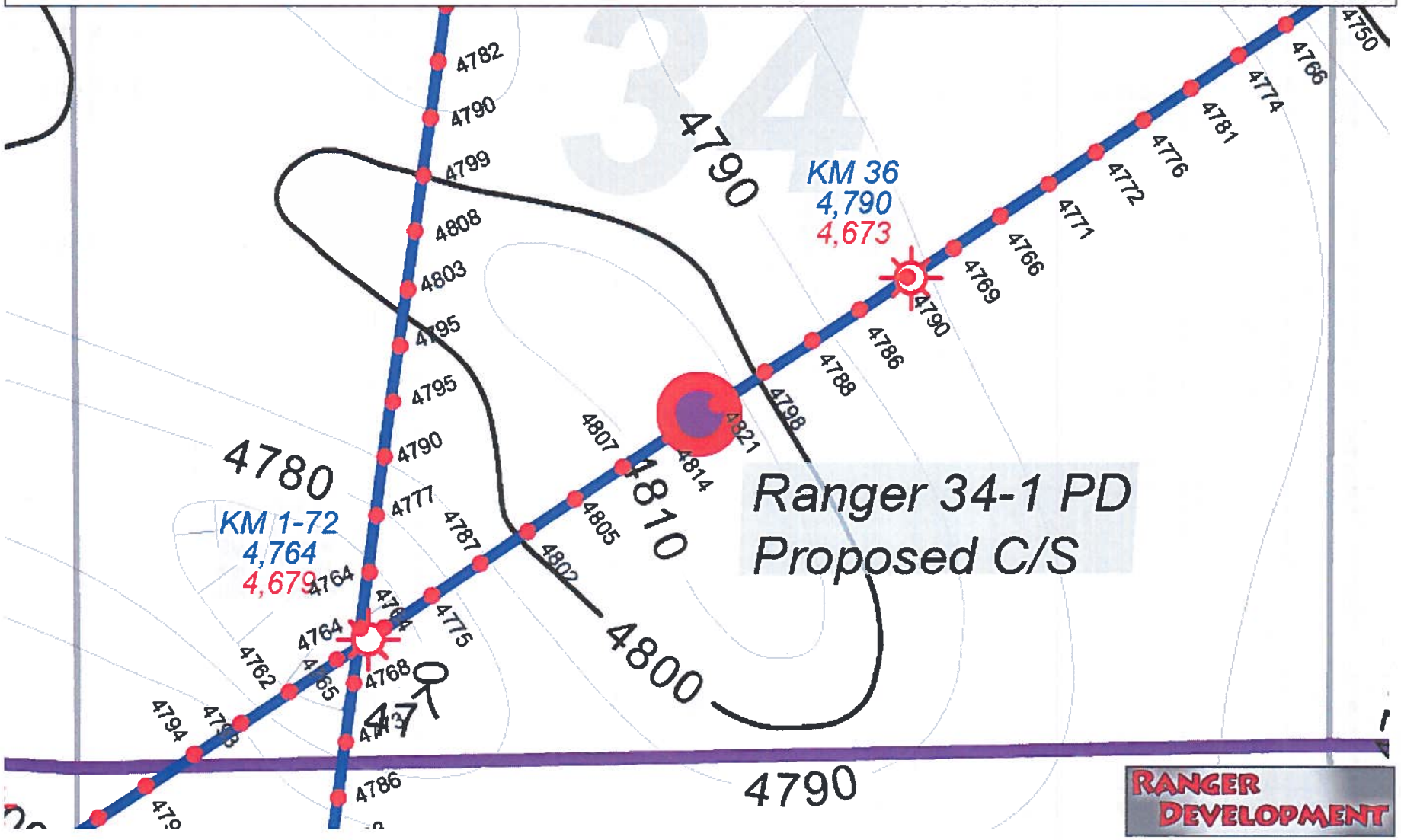


Ranger 34-1 Coordinates: 35.0860013° N -109.5677640° W (NAD83)
1416' FSL, 2607' FEL, Ground Elevation 5759'
Shotpoint 1236, 15-P-1 Seismic Line

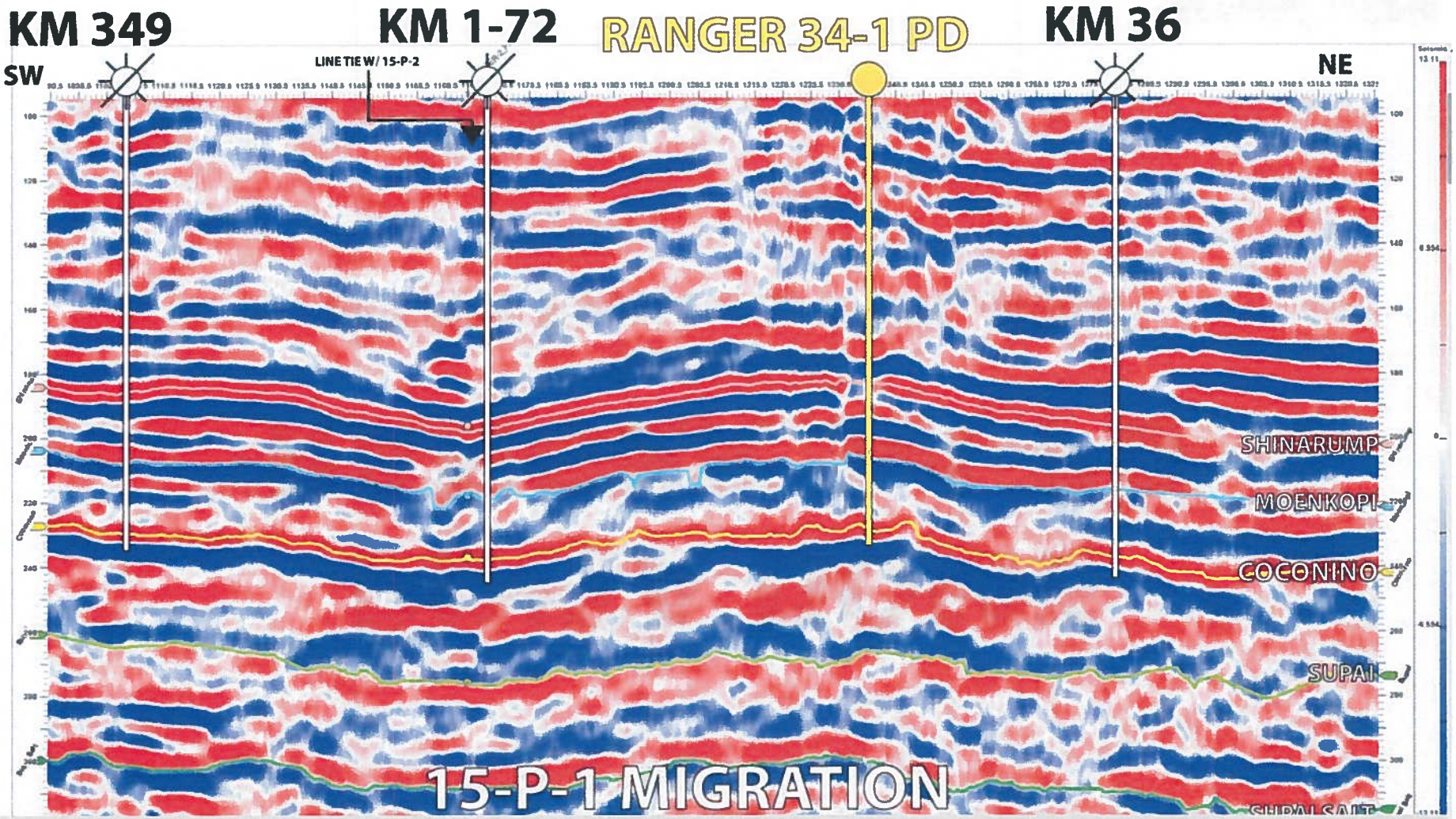
RANGER DEVELOPMENT

Ranger 34-1 Location with Top Permian Coconino Structure Map

Interpretation of seismic data suggests the Ranger 34-1 well will be about 50 feet high to the KM 1-72 well and 30 feet high to the KM 36.



Justification



Objective: Drill highest part of Pinta Dome imaged by seismic line 15-P-1 and establish comingled gas production from Coconino Sandstone and Shinarump Conglomerate.

RANGER DEVELOPMENT

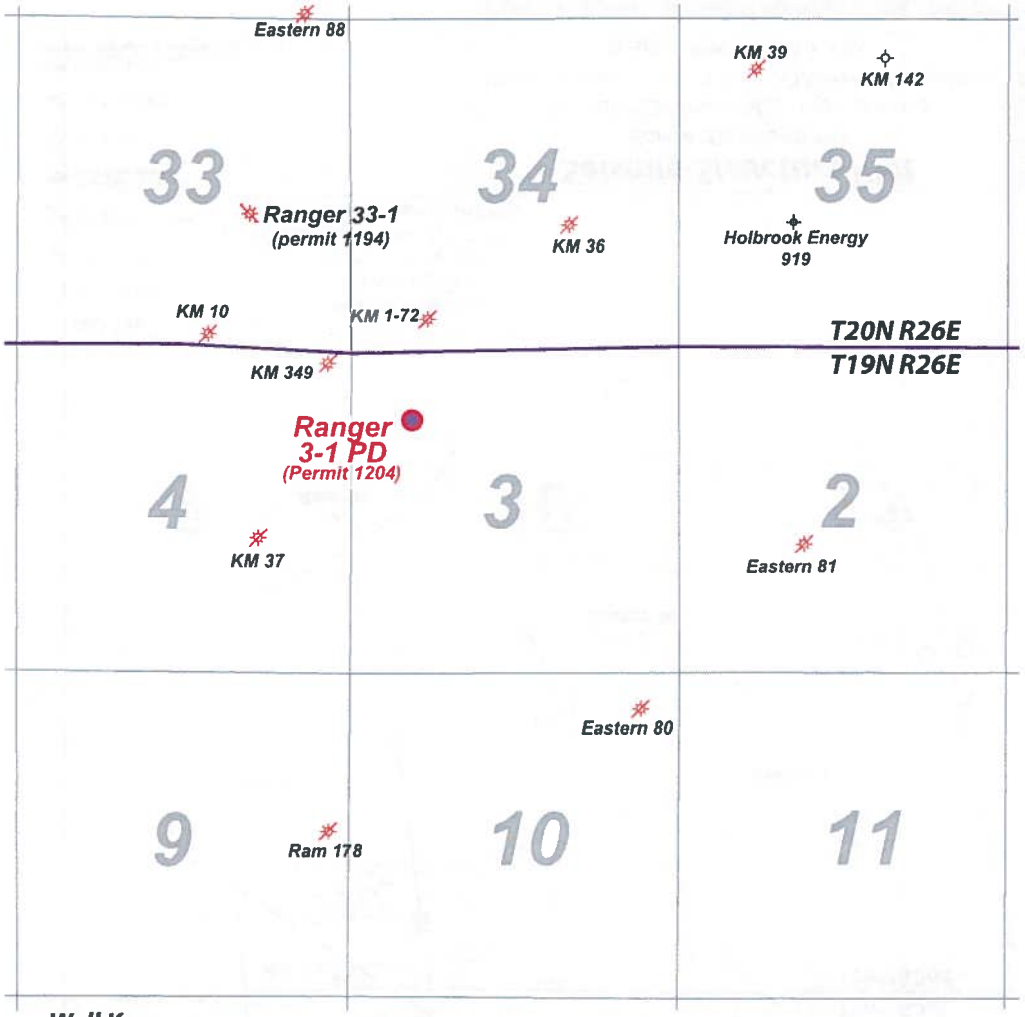
PINTA DOME
RANGER 3-1 PD

Location

NW NW Section 3, T19N, R26E

RANGER DEVELOPMENT

Well Plat



Well Key

- Shut-in helium well
- P&A Historic Producing Helium well
- P&A Historic Helium Gas Show Well
- Shut-in well, production capability unknown
- P&A Dry Hole
- Actively Permitted Well (Location Exception Required)

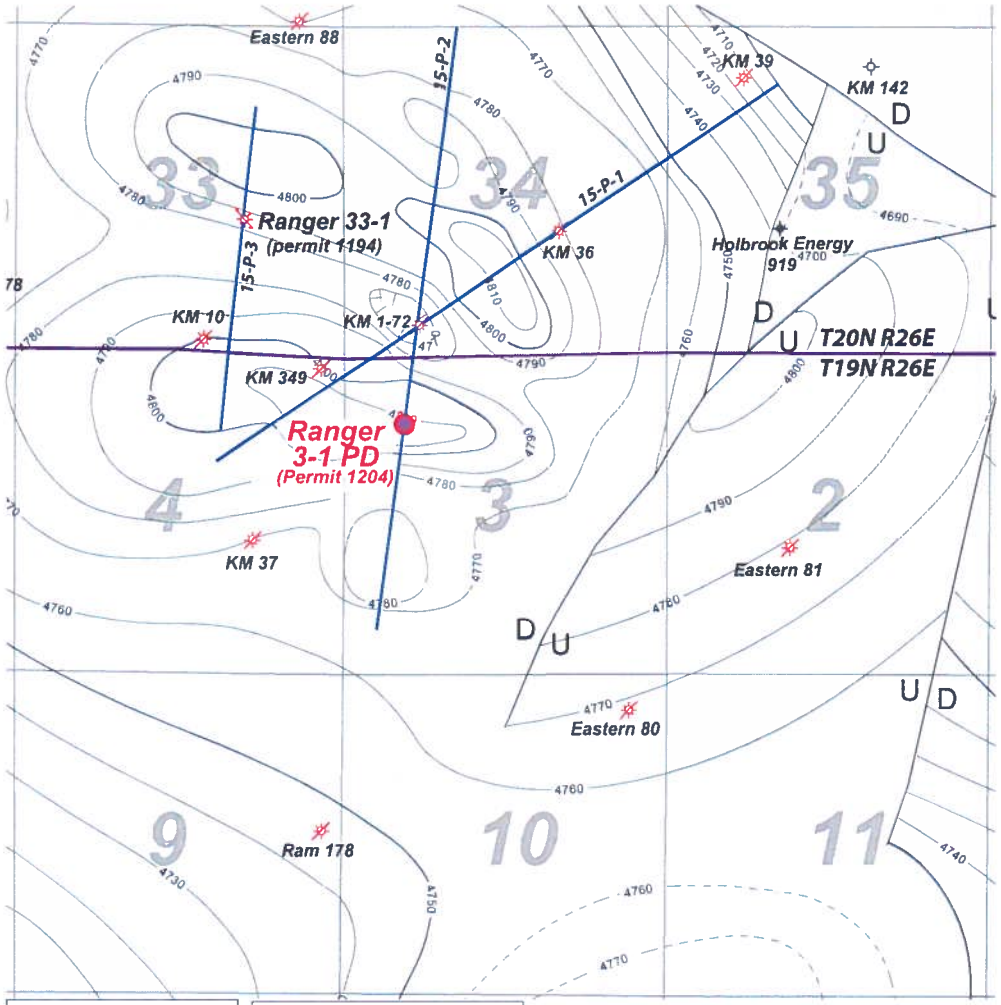
Ranger 3-1 PD Details:
NW NW Sec 3, T19N, R26E
35.078970° N
-109.573269° W
(WGS 84)
975' FWL
1120' FNL
Shotpoint 2150

Note: Wells referred to by Historical Operator - State Permit Number
(KM 1-72 = Kerr McGee State Permit 1-72)

Well Location Plat
Ranger Development
Showing all current
& historic wells

RANGER DEVELOPMENT

Structure Plat



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Note: Wells referred to by Historical Operator - State Permit Number (KM 1-72 = Kerr McGee State Permit 1-72)

Map Datum: NAD27
Polyconic Projection
XY Units: US FEET
Ellipsoid: Clarke 1866
Central Meridian: -109.5243027
Latitude of Origin: 35.0582902

Seismic-Structure Plat

Ranger Development

Structure Contours (MSL) Top Coconino

Based on well control & 2015 2D Seismic Acquisition

Seismic lines shown in blue

RANGER DEVELOPMENT

LAND PLAT

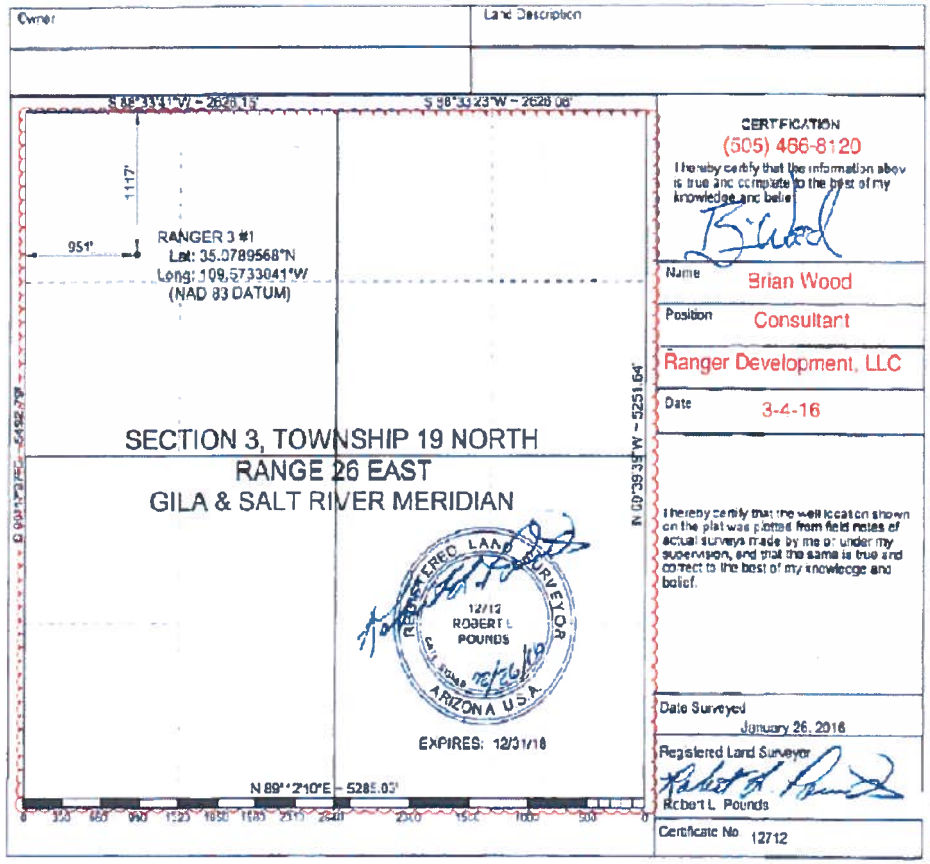
Ranger Development

Showing locations of Ranger 3-1 PD (permit 1204) and all adjacent state & fee leases

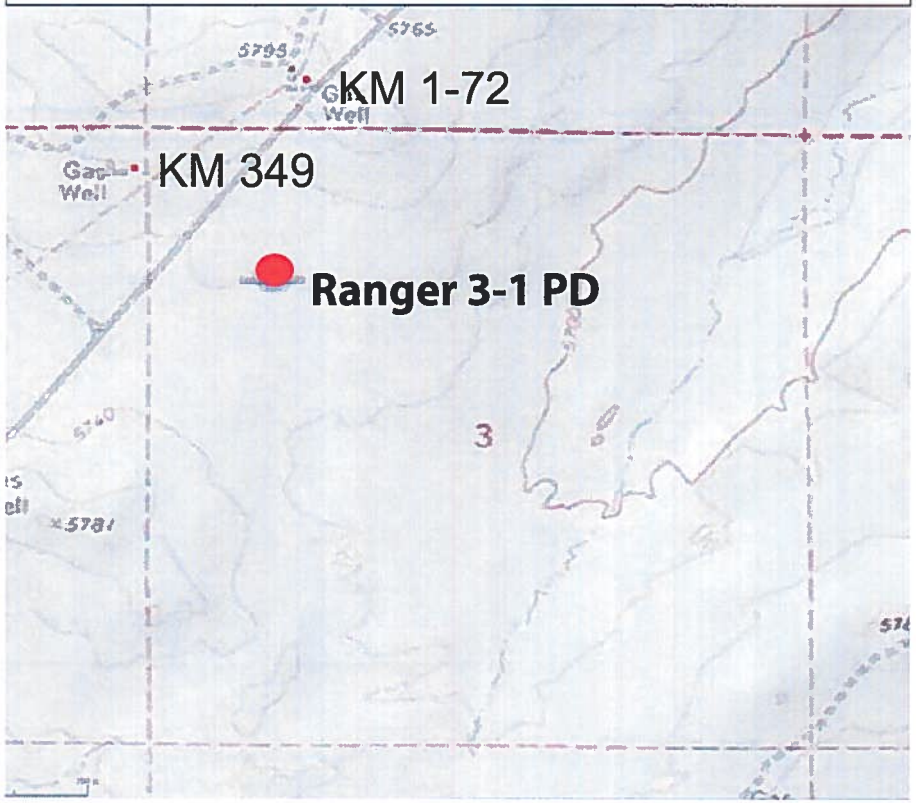
Yellow = Leased State & Fee

Pap & Pop Family, Ltd. & 3MKJ, L.P. (Exp. 11/25/16) SL Group (Exp. 4/23/16) L. Pickens (Exp. 7/10/18) D. Whittenburg (Exp. 2/23/19) D. Nation (Exp. 2/23/19)	AZ State Lease 13-118076 34 Exp. 2/23/20 $1 per acre 640 Acres	C. Francis (Exp. 6/12/17) L. Pickens (Exp. 7/10/18) D. Nation (Exp. 2/23/19) D. Whittenburg (Exp. 2/23/19) Hortenstine Option*** (Exp. 5/30/17)
AZ State Lease 13-118076 Exp. 2/23/20 $1 per acre 480.02 Acres 4 AZ State Lease 13-117905 Exp. 9/12/19 $1 per acre 160 Acres Ranger 3-1 PD (Permit 1204)	Pap & Pop Family, Ltd. & 3MKJ, L.P. (Exp. 11/25/16) C. Francis (Exp. 6/12/17) L. Pickens (Exp. 7/10/18) D. Whittenburg (Exp. 2/23/19) D. Nation (Exp. 2/23/19)	T20N R26E T19N R26E AZ State Lease 13-118076 2 Exp. 2/23/20 $1 per acre 637.62 Acres
C. Francis (Exp. 6/12/17) D. Nation (Exp. 2/23/19) L. Pickens (Exp. 7/10/18) D. Whittenburg (Exp. 2/23/19) Hortenstine Option*** (Exp. 5/30/17)	AZ State Lease 13-118076 Exp. 2/23/20 $1 per acre 240 Acres AZ State Lease 13-118076 Exp. 2/23/20 $1 per acre 240 Acres	Pap & Pop Family, Ltd. & 3MKJ, L.P. ******Option******* 11 Exp. 5/30/17

RANGER DEVELOPMENT



Ranger 3-1 PD Location with Topography

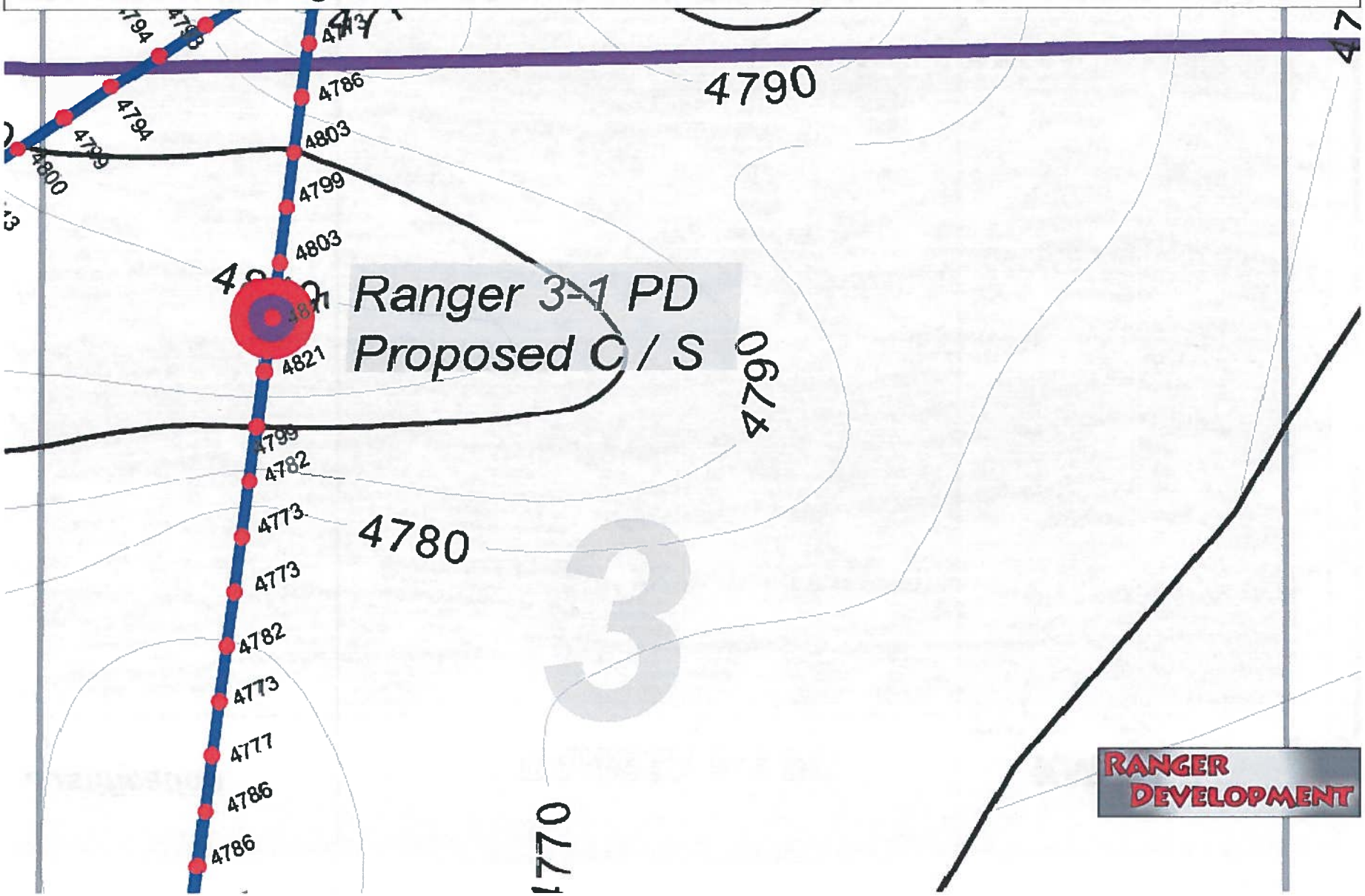


Ranger 3-1 PD Coordinates: 35.0789568°N -109.5733041°W (NAD83)
951' FWL, 1117' FNL; Ground Elevation: 5739'
Shotpoint 2150, 15-P-2 Seismic Line

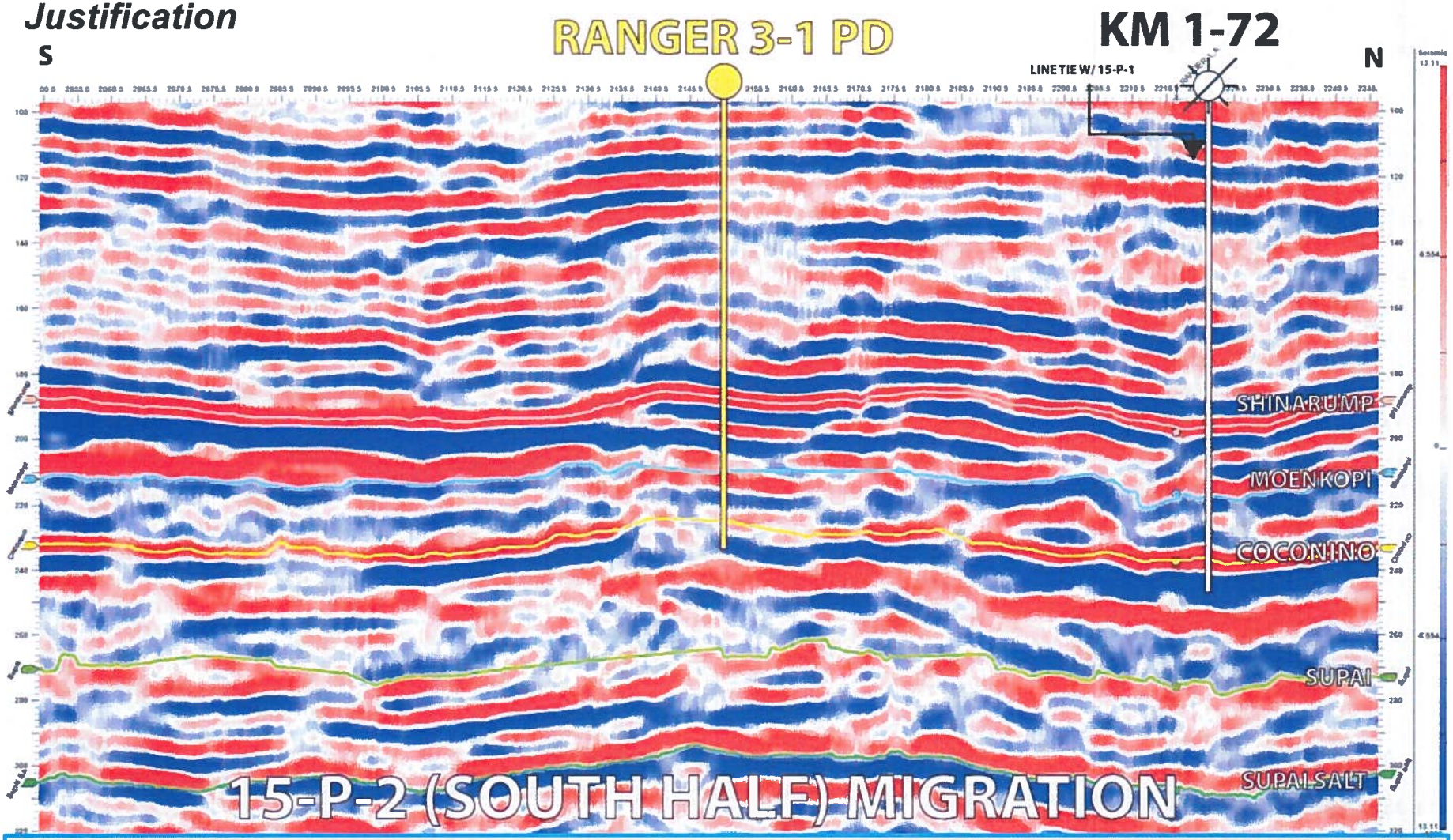
RANGER DEVELOPMENT

Ranger 3-1 Location with Top Permian Coconino Structure Map

Interpretation of seismic data suggests the Ranger 3-1 well will be about 50 feet high to the KM 1-72 well 1660 feet north of the well location.



Justification



Objective: Drill highest part of Pinta Dome in Section 3 imaged on seismic line 15-P-2, and establish comingled gas production from Coconino Sandstone and Shinarump Conglomerate.

RANGER DEVELOPMENT

Holbrook Energy 35-1

Permit 919

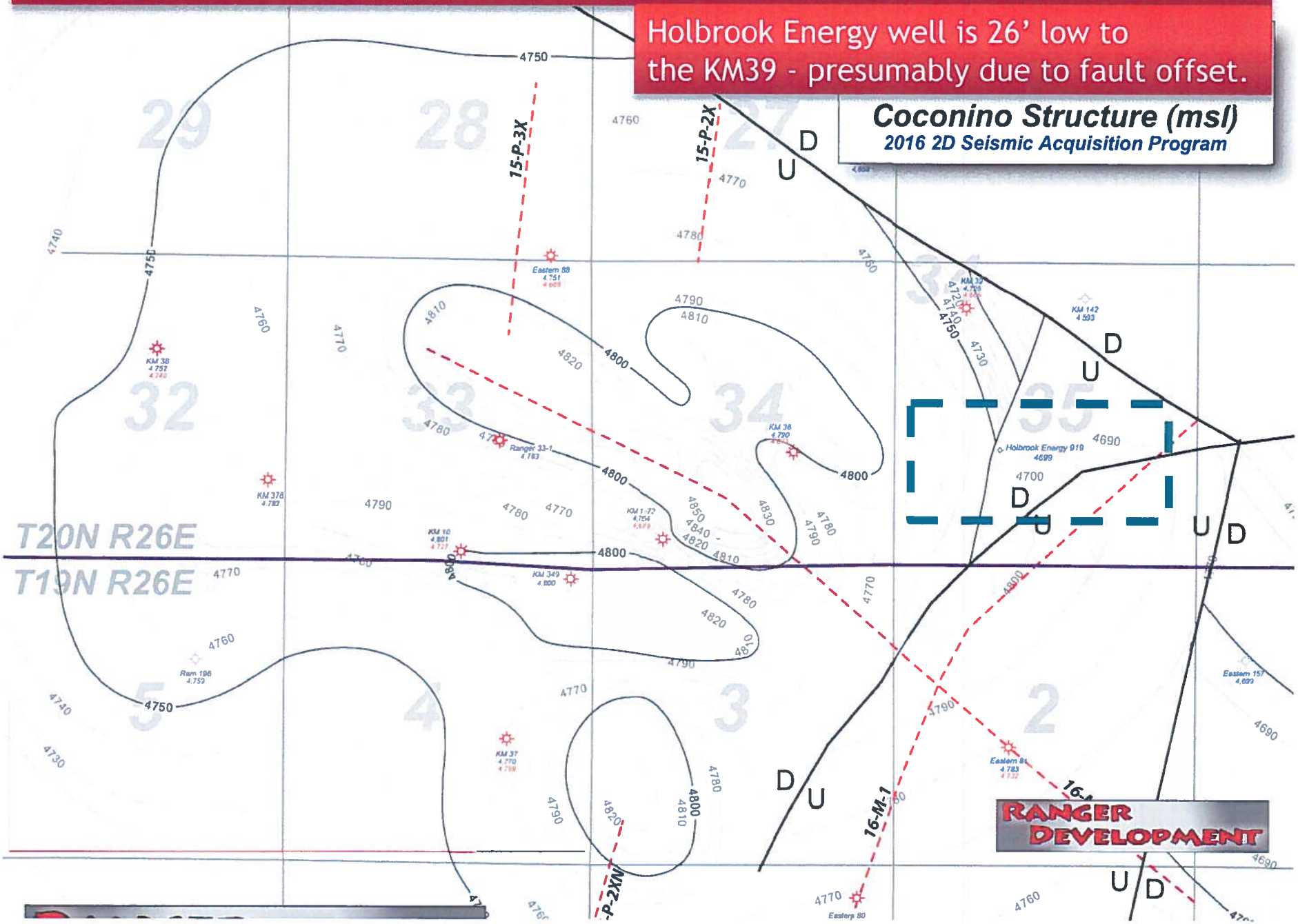
Apache County, Arizona

April 8, 2016

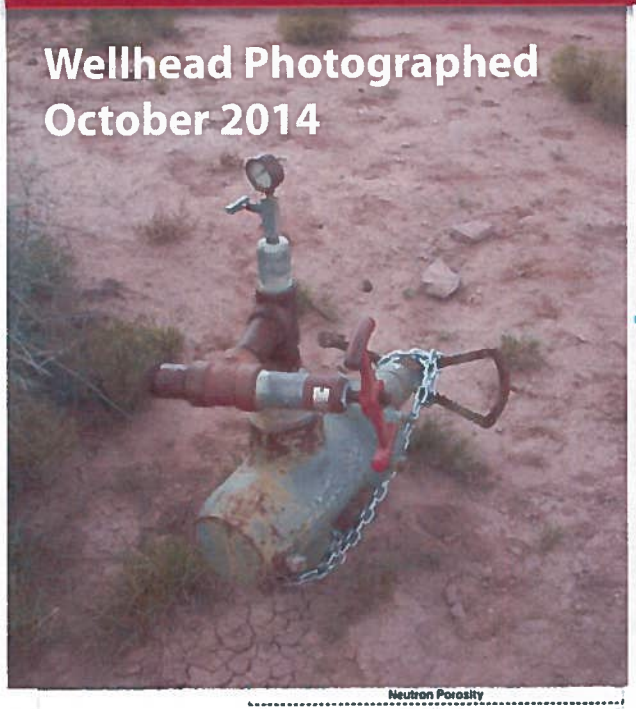
RANGER DEVELOPMENT

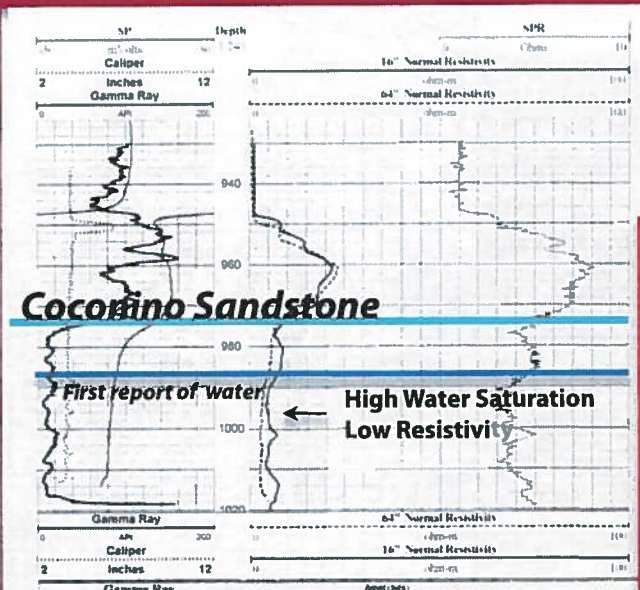
Holbrook Energy 35-1 Hortenstine Reentry Candidate

Holbrook Energy well is 26' low to the KM39 - presumably due to fault offset.



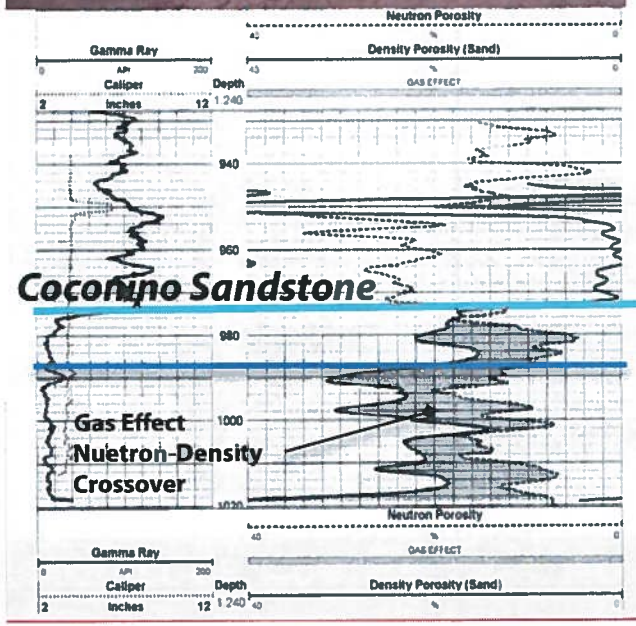
Holbrook Energy 35-1 Hortenstine

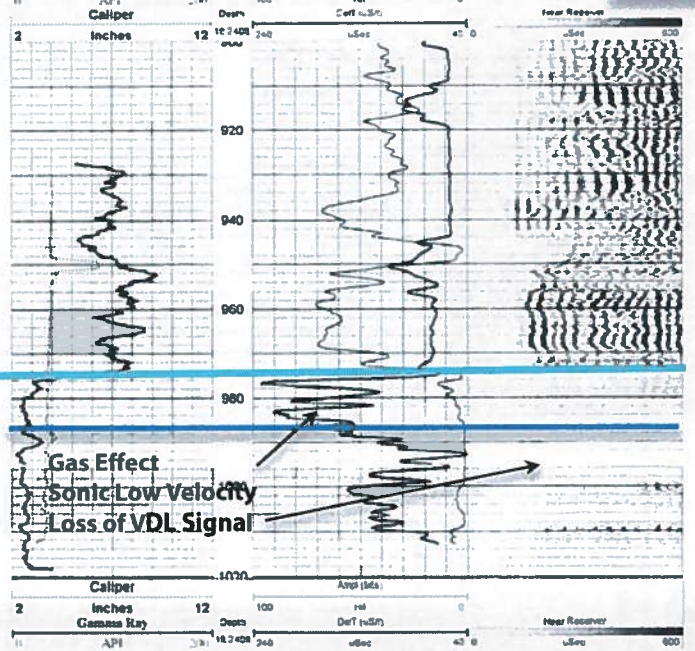




Mick Peterson
Jet West (Farmington) October 2004
Summary

- Fluid Level 783' formation water (no sample reported).
- Well cased to 950' w 4 ½" casing, drilled to TD (1020') w 3 7/8" bit.
- Gas Effect from 975' to 1020'



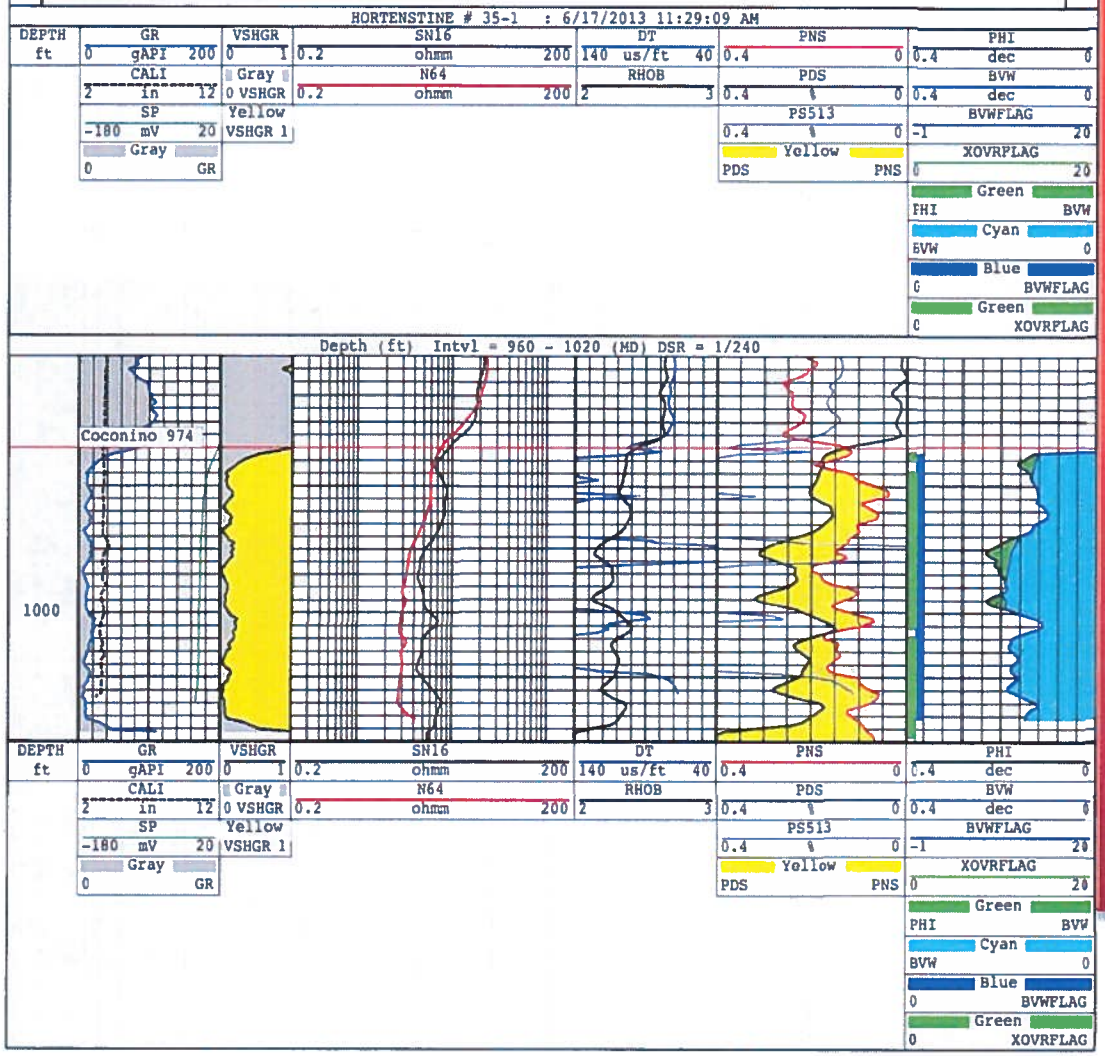


RANGER DEVELOPMENT

Holbrook Energy 35-1 Hortenstine

Petrophysical Analysis

Lee Utley
(281) 639-1616
lee@utleypetro.com



Lee Utley
Utley Petrophysics (Houston) June 2013
Summary

- Mostly agrees w/ M. Peterson - cycle skipping of Delta T log, VDL display, amplitude curve on sonic suggest gas.
- Resistivity 3-4 ohm-m. Suspects water saturation >50% (closer to 90%) Resistivity of Water (Rw) 0.16 ohm-m. TDS calculated at 41,500 mg/l.
- Coconino porosity 16%, 44' neutron-density crossover - gas through whole interval, analysis shows Coconino wet and would probably produce water.
- *"the parameters used could be way off if helium is present. I really don't know what parameters would be affected if helium is present"*

RANGER DEVELOPMENT

Recommendation

1 - Request permission from State of Arizona Oil & Gas Commision to reenter and run velocity log/VSP.

2 - Move completion rig and re-enter well. Production test Coconino (plugback to test just top formation). If productive complete well as producer. If excessive water production, plug and move uphole to perforate and test Shinarump Conglomerate and attempt to establish helium production.

RANGER DEVELOPMENT

OGCC April 8, 2016 meeting Guest register

Name – please print	Organization	email	phone
David Wallace	RANGER Development LLC	dww@twinbridges LLC.com	303 3085963
Tony Hines	RANGER Development LLC	tonyhines@iacx.com	972-960-3210
Kurt Constenius	" "	kconstenius@comcast.net	520-797-9515
AL DEFALCO	FIRST WESTERN RESOURCES	1STWESTERNRESOURCE@	
Rock Porter	Ranger Development		
Thomas White	Kendrer Morgan	Thomas_White@kindermorgan	928-242-4133
DENNIS TURNER	self	dturner39@cox.net	928/200-0052
Joe Dixon	AZ State Land Dept.	jdixon@azland.gov	602-542-2685
Rick Zeise	AZ Attorney General's Office		