

INCLINATION REPORT

30-015-40006

FIELD NAME

Corral Canyon, Bone Spring South

LEASE NAME

North Brushy Draw Federal 35-2H

OPERATOR

RKI Exploration & Production, LLC

ADDRESS

210 Park Avenue, Suite 900, Oklahoma City, OK 73102

LOCATION (Section, Block, and Survey)

COUNTY

Eddy

RECORD OF INCLINATION

Measured Depth (feet)	Course Length (Hundreds of feet)	Angle of Inclination (Degrees)	Displacement per 100 feet (Sine of Angle x 100)	Course Displacement (Feet)	Accumulative Displacement (Feet)
215	215	0.25	0.44	0.94	0.94
519	304	1.00	1.75	5.31	6.24
736	217	1.00	1.75	3.79	10.03
1,099	363	0.75	1.31	4.75	14.78
1,576	477	1.50	2.62	12.49	27.27
1,982	406	0.25	0.44	1.77	29.04
2,365	383	1.50	2.62	10.03	39.07
2,623	258	0.75	1.31	3.38	42.44
2,943	320	2.00	3.49	11.17	53.61
3,408	465	2.00	3.49	16.23	69.84
3,790	382	1.25	2.18	8.33	78.17
3,917	127	1.50	2.62	3.32	81.50
4,393	476	1.00	1.75	8.31	89.80
4,873	480	1.00	1.75	8.38	98.18
5,196	323	1.25	2.18	7.05	105.23
5,453	257	1.00	1.75	4.49	109.71
5,830	377	2.00	3.49	13.16	122.87

Accumulative total displacement of well bore at total depth of

11,171 feet = 4,492.11 feet

Inclination measurements were made in

☐ Tubing☐ Casing☐ Open Hole☒ Drill Pipe

Inclination Data Certification

I declare that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge.



8/5/2013

Signature of Authorized Representative

Date

Mark Cochran CFO

Name of Person and Title

Latshaw Drilling Company, LLC

Name of Company

Telephone: 918-355-4380

Inclination Data Certification

I declare that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge.



8-13-13

Signature of Authorized Representative

Date

Jody Noerdlinger, Regulatory Analyst

Name of Person and Title

RKI Exploration & Production

Operator

Telephone: 405-996-5774

RECORD OF INCLINATION

Measured Depth (feet)	Course Length (Hundreds of feet)	Angle of Inclination (Degrees)	Displacement per 100 feet (Sine of Angle x 100)	Course Displacement (Feet)	Accumulative Displacement (Feet)
6,322	492	0.05	0.09	0.43	123.30
7,021	699	22.60	38.43	268.62	391.92
7,493	472	64.00	89.88	424.23	816.15
8,129	636	91.70	99.96	635.72	1,451.87
8,514	385	90.10	100.00	385.00	1,836.87
9,315	801	92.20	99.93	800.41	2,637.28
9,727	412	90.20	100.00	412.00	3,049.28
10,456	729	93.00	99.86	728.00	3,777.28
10,841	385	88.98	99.98	384.94	4,162.22
11,171	330	91.50	99.97	329.89	4,492.11
	(11,171)		-	-	4,492.11

Form 3160-4
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**WELL COMPLETION OR RE-COMPLETION REPORT AND LOG****Bold*** fields are required.**Section 1 - Completed by Operator****1. BLM Office***

Carlsbad, NM

2. Well Type*

OIL

3. Completion Type*

New Well

Operating Company Information**4. Company Name***

RKI EXPLORATION AND PRODUCTION

5. Address*

210 PARK AVE., SUITE 900

OKLAHOMA CITY OK 73102

6. Phone Number*

405-949-2221

Administrative Contact Information**7. Contact Name***

JODY _ NOERDLINGER

8. Title*

REGULATORY ANALYST

9. Address*

210 PARK AVE., SUITE 900

OKLAHOMA CITY OK 73102

10. Phone Number*

405-996-5774 _

11. Mobile Number

405-414-0151

12. E-mail*

jnoerdlinger@rkixp.com

13. Fax Number

405-996-5772

Technical Contact Information☒ Check here if Technical Contact is the same as Administrative Contact.**14. Contact Name*****15. Title*****16. Address*****17. Phone Number*****18. Mobile Number****19. E-mail*****20. Fax Number****Surface Location**

21. Specify location using one of the following methods:

a) State, County, Section, Township, Range, Meridian, N/S Footage, E/W Footage, with Qtr/Qtr, Lot, or Tract

b) State, County, Latitude, Longitude, Metes & Bounds description

State***County or Parish***

NM	EDDY			
Section 35	Township 25S	Range 29E	Meridian NEW MEXICO PRINCIPAL	
Qtr/Qtr NENW	Lot # _____	Tract # _____	N/S Footage 330 FNL	E/W Footage 660 FEL
Latitude _____	Longitude _____	Metes and Bounds		

Producing Interval Location

22. Specify location or

☐ Check here if the producing hole location is the same as the surface location.

State* NM	County or Parish* EDDY			
Section 35	Township 25S	Range 29E	Meridian NEW MEXICO PRINCIPAL	
Qtr/Qtr _____	Lot # _____	Tract # _____	N/S Footage 422 FNL	E/W Footage 630 FEL
Latitude _____	Longitude _____	Metes and Bounds		

Bottom Location

23. Specify location or

☐ Check here if the bottom hole location is the same as the surface location.

State* NM	County or Parish* EDDY			
Section 35	Township 25S	Range 29E	Meridian NEW MEXICO PRINCIPAL	
Qtr/Qtr SESE	Lot # _____	Tract # _____	N/S Footage 313 FSL	E/W Footage 659 FEL
Latitude _____	Longitude _____	Metes and Bounds		

Lease and Agreement

24. Lease Serial Number* NMNM54290	_____
26. If Unit or CA/Agreement, Name and/or Number _____	27. Field and Pool, or Exploratory Area* CORRAL CANYON; BS SOUTH

Well

28. Well Name* NORTH BRUSHY DRAW FEDERAL 35		29. Well Number* 2H		30. API Number 30-015-40006	
31. Date Spudded 02/16/2013		32. Date T.D. Reached 03/08/2013		33. Date Completed 05/01/2013 <input type="checkbox"/> Dry & Abandoned <input checked="" type="checkbox"/> Ready to Produce	
34. Elevations (DF, RKB, RT, GL) 3053 Kelly Bushing					
35. Total Depth: MD 11743 TVD 7373		36. Plug Back Total Depth: MD 11675 TVD 7376		37. Depth Bridge Plug Set: MD _____ TVD _____	

30-015-40006

38. Type Electric & Other Mechanical Logs Run

(Submit copy of each)

POROSITY, RESISTIVITY, CBL

39.

Was Well Cored? ☒ No ☐ Yes (Submit Analysis)

Was DST run? ☒ No ☐ Yes (Submit Report)

Directional Survey? ☐ No ☒ Yes (Submit Copy)

40. Casing and Liner Record (Report all strings set in well)

Hole Size	Casing Size	Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks.	Slurry Vol. (BBL)	Cement Top	Amount Pulled
17.5	13.375	J-55	54.5	0	590	—	510	—	0	—
12.25	9.625	J-55	40	0	3176	—	1225	—	0	—
8.75	5.5	P-110	17	22	11733	5302	1770	—	2700	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—

41. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)
2.875	6798	—
—	—	—
—	—	—

42. Producing Intervals

Formation	Top (MD)	Bottom (MD)
A) BONE SPRING	8015	11639
B) —	—	—
C) —	—	—
D) —	—	—

43. Perforation Record

Top	Bottom	Size	No. Holes	Perf. Status
11487	11639	—	—	ACTIVE
11239	11391	—	—	ACTIVE
10991	11143	—	—	ACTIVE
8015	10985	—	—	ACTIVE

44. Acid, Fracture, Treatment, Cement Squeeze, etc.

Top	Bottom	Amount and Type of Material
11487	11639	TOTAL LIQUID=5,592 BBLS(15% HCL ACID,AQUA VIS, DYNA FRAC);TOTAL PROPPANT=195,570 LBS(20/40, 40/70)
11239	11391	TOTAL LIQUID=6,180 BBLS(15% HCL ACID,AQUA VIS, DYNA FRAC);TOTAL PROPPANT=203,170 LBS(20/40, 40/70)
10991	11143	TOTAL LIQUID=5,963 BBLS(15% HCL ACID,AQUA VIS, DYNA FRAC);TOTAL PROPPANT=201,340LBS(20/40, 40/70)
8015	10895	TOTAL LIQUID=66,423 BBLS(15% HCL ACID,AQUA VIS,DYNA FRAC);TOTAL PROPPANT=2,439,940 LBS(20/40, 40/70)

45. Production Method and Well Status for Production Intervals

Production Method	Well Status
Electric Pump Sub-Surface	Producing Oil Well

46. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity
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05/01/2013	05/06/2013	24	>>>>>>	108	310	2206	45	_____
Choke Size	Tubing Pressure Flowing / Shut In	Casing Pressure	24 Hour Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas/Oil Ratio	
24/64	360 0	0	>>>>>>	108	310	2206	3	

47. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity
_____	_____	_____	>>>>>>	_____	_____	_____	_____	_____
Choke Size	Tubing Pressure Flowing / Shut In	Casing Pressure	24 Hour Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas/Oil Ratio	
_____	_____	_____	>>>>>>	_____	_____	_____	_____	

48. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity
_____	_____	_____	>>>>>>	_____	_____	_____	_____	_____
Choke Size	Tubing Pressure Flowing / Shut In	Casing Pressure	24 Hour Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas/Oil Ratio	
_____	_____	_____	>>>>>>	_____	_____	_____	_____	

49. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil (BBL)	Gas (MCF)	Water (BBL)	Oil Gravity Corr. API	Gas Gravity
_____	_____	_____	>>>>>>	_____	_____	_____	_____	_____
Choke Size	Tubing Pressure Flowing / Shut In	Casing Pressure	24 Hour Rate	Oil (BBL)	Gas (MCF)	Water (BBL)	Gas/Oil Ratio	
_____	_____	_____	>>>>>>	_____	_____	_____	_____	

50. Disposition of Gas (Sold, used for fuel, vented, etc.)

Captured

51. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top (MD)
BONESPRING	8015	11639	_____	DELAWARE	3227
_____	_____	_____	_____	BRUSHY CANYON	5519
_____	_____	_____	_____	BONE SPRING	7037
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

52. Formation (Log) Markers

53. Additional remarks (include plugging procedure):

54. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other:

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

55. Name

JODY NOERDLINGER

56. Title

REGULATORY ANALYST

57. Date* (MM/DD/YYYY)

08/07/2013

**58. Signature***

You have the ability to sign this form only if a SmartCard or digital certificate has been issued to you.

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.

Section 2 - System Receipt Confirmation**59. Transaction**

216245

60. Date Sent

08/07/2013

61. Processing Office

Carlsbad, NM

Section 3 - Internal Review #1 Status**62. Review Category****63. Date Completed****64. Reviewer Name**

65. Comments

Section 4 - Internal Review #2 Status

66. Review Category

67. Date Completed

68. Reviewer Name

69. Comments

Section 5 - Internal Review #3 Status

70. Review Category

71. Date Completed

72. Reviewer Name

73. Comments

Section 6 - Internal Review #4 Status

74. Review Category

75. Date Completed

76. Reviewer Name

77. Comments

Section 7 - Final Approval Status

78. Disposition

79. Date Completed

80. Reviewer Name

81. Reviewer Title

82. Comments

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wellson Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

ITEMS 24, 22, and 23: Locations on Federal or Indian land should be described in accordance with Federal

requirements. Consult local Federal office for specific instructions.

ITEM 34: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 40: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

PRIVACY ACT

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling completing/recompleting and operations on an oil and gas lease.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 60 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), MS 401 LS, 1849 C Street, N.W., Washington, D.C. 20240.