

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM116166
2. Name of Operator MCELVAIN OIL & GAS PROP INC		6. If Indian, Allottee or Tribe Name
Contact: TONY G COOPER E-Mail: TONY.COOPER@MCELVAIN.COM		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 1050 17TH STREET SUITE 1800 DENVER, CO 80265-1801	3b. Phone No. (include area code) Ph: 303-893-0933 Ext: 381 Fx: 303-893-0934	8. Well Name and No. EK 29 BS2 FEDERAL COM 4H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 30 T18S R34E SESE 175FSL 100FEL		9. Well ID 30-025-42700-00-X1
		10. Field and Pool, or Exploratory E K
		11. County or Parish, and State LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

McElvain Energy, Inc. received approval from the NMOCD for a Non-Standard Location (NSL) pertaining to the EK 29 BS2 Federal Com #4H, API#: 30-025-42700. The NSL request was to revise the setback requirements from 510 feet from a directly offsetting tract to a 330 ft setback from a directly offsetting tract. This change allows McElvain Energy, Inc. to contact an additional 360 ft of 2nd Bone Spring reservoir (an additional 180 ft to the North & South section lines), thus, improving drainage efficiency similar to offsetting operators in the area. McElvain Energy, Inc. has attached the revised C-102, directional plan and approved NSL document from the NMOCD for the EK 29 BS2 Federal Com #4H.

The new TMD of the well will be 14,759 ft (increased from 14,502 ft). This additional 257 ft will result in an increase in the production casing cement tail slurry of ~50 sacks. Therefore, the

Original Drilling COA still stand dated 9/2/2015

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #316725 verified by the BLM Well Information System For MCELVAIN OIL & GAS PROP INC, sent to the Hobbs Committed to AFMSS for processing by LINDA JIMENEZ on 10/02/2015 (16LJ0051SE)	
Name (Printed/Typed) TONY G COOPER	Title SR EHS SPECIALIST
Signature (Electronic Submission)	Date 09/16/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>EDWARD FERNANDEZ</u>		Title <u>PETROLEUM ENGINEER</u>	Date <u>11/10/2015</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Hobbs	

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ******NOV 23 2015**

Additional data for EC transaction #316725 that would not fit on the form

32. Additional remarks, continued

revised 5 ?? production casing single-stage cement design is as follows (volumes include 25% excess):

20 bbls Gel Spacer

Lead Slurry ? 590 sx VERSACEM ? System: Density: 11.5 ppg, Yield: 2.672 cuft/sx

Tail Slurry ? 1,200 sx VERSACEM ? System: Density: 14.5 ppg, Yield: 1.225 cuft/sx

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



HOBBS OCD

NOV 16 2015

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September 2, 2015

MCELVAIN ENERGY, INC.
Attn: Ms. Jordan Kessler

ADMINISTRATIVE NON-STANDARD LOCATION

Administrative Order NSL-7337
Administrative Application Reference No. pJAG1520130161

McElvain Energy, Inc.
OGRID 22044
EK 29 BS2 Federal Com. Well No. 4H
API No. 30-025-42700

Proposed Location:

	<u>Footages</u>	<u>Unit</u>	<u>Sec.</u>	<u>Twsp</u>	<u>Range</u>	<u>County</u>
Surface	175' FSL & 100' FEL	P	30	18S	34E	Lea
Penetration Point	330' FSL & 725' FWL	M	29	18S	34E	Lea
Final perforation (Terminus)	330' FNL & 656' FWL	D	29	18S	34E	Lea

Proposed Project Area:

<u>Description</u>	<u>Acres</u>	<u>Pool</u>	<u>Pool Code</u>
W/2 W/2 of Section 29	160	E-K; Bone Spring	21650

Reference is made to your application received on August 12, 2015.

You have requested to drill this horizontal well at an unorthodox oil well location described above in the referenced pool or formation. This location is governed, by the Special Rules for the E-K; Bone Spring Pool, which provides for 80-acre units, with wells located within 150 feet of the center of a governmental quarter-quarter section. Rule 19.15.16.14.B(2) NMAC concerning directional wells in designated project areas is also applicable, making setback requirements apply to the distance from the outer boundary of the designated project area. This surface location is outside the project area, and is permitted by Rule 19.15.16.15.B (4) NMAC which allows for surface locations outside project area. This location is unorthodox because portions of the proposed completed interval are less than 510 feet to a directly offsetting tract and less than 783 feet diagonally to a diagonally offsetting tract.

Your application has been duly filed under the provisions of Division Rules 19.15.15.13 NMAC and 19.15.4.12.A(2) NMAC.

It is our understanding that you are seeking this location because it will allow for efficient well spacing and reservoir drainage. Further, the W/2 of Section 29 and E/2 E/2 of Section 30 are being developed by the applicant in the Bone Spring formation with North-South horizontal wells.

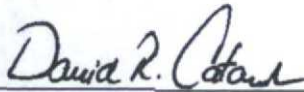
It is also understood that you have given due notice of this application to all operators or owners who are "affected persons," as defined in Rule 19.15.4.12 A (2) NMAC, in all adjoining units towards which the proposed location encroaches.

Pursuant to the authority conferred by Division Rule 9.15.15.13 (B) NMAC, the above-described unorthodox location is hereby approved.

This approval is subject to your being in compliance with all other applicable Division rules, including, but not limited to Division Rule 19.15.5.9 NMAC.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on September 2, 2015.



DAVID R. CATANACH
Director

DRC/mam

cc: New Mexico Oil Conservation Division – Hobbs
Bureau of Land Management - Carlsbad

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (505) 748-1263 Fax: (505) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 478-3460 Fax: (505) 478-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name EK 29 BS2 FEDERAL COM	Well Number 4H
OGRID No.	Operator Name McELVAIN ENERGY, INC	Elevation 3904

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	30	18 S	34 E		175	SOUTH	100	EAST	LEA

Bottom Hole Location If Different From Surface

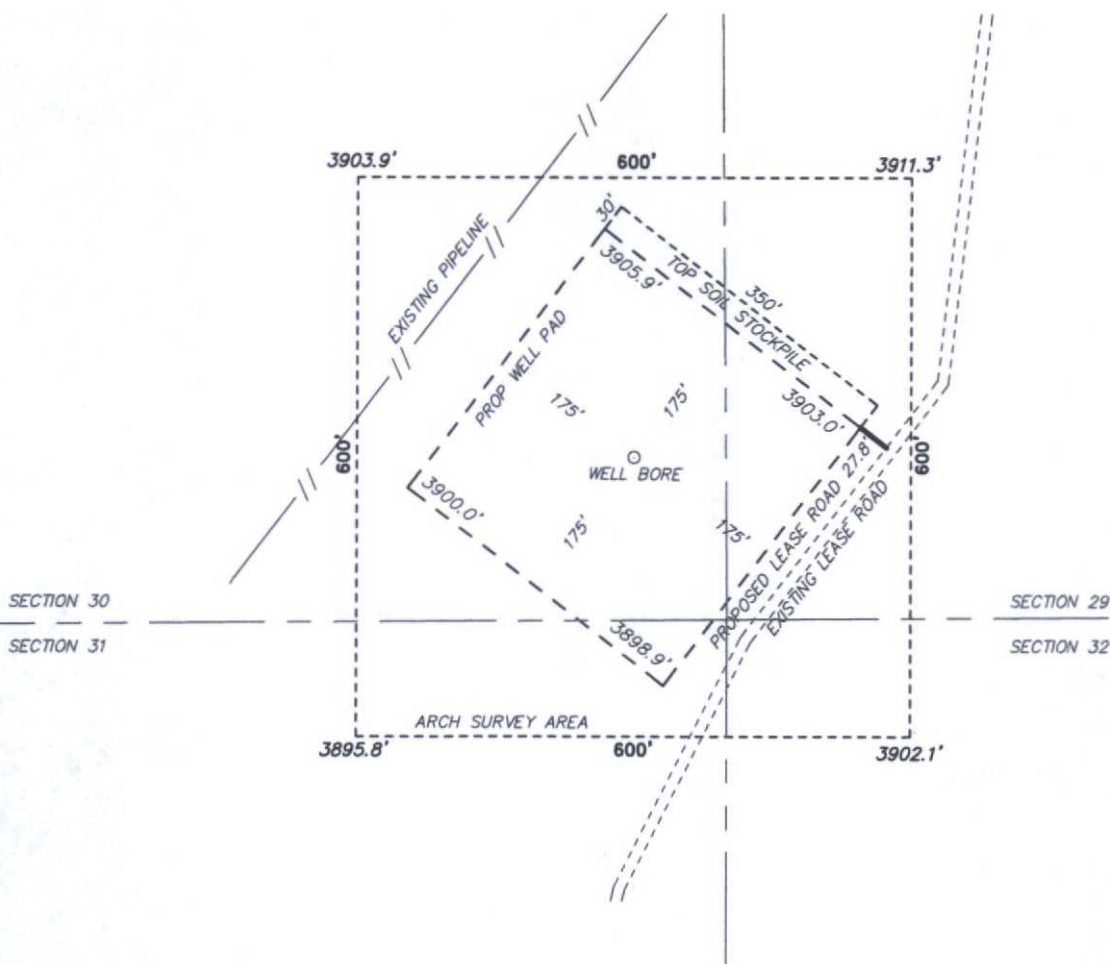
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	29	18 S	34 E		330	NORTH	656	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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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

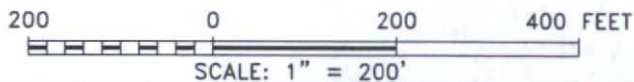
N: 628621.3 E: 766996.1 (NAD83)	N: 628640.1 E: 769593.2 (NAD83)	N: 628660.4 E: 772232.9 (NAD83)	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unLEASEd 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. Signature _____ Date _____ Printed Name _____ Email Address _____
BOTTOM HOLE LOCATION Lat - N 32°43'30.24" Long - W 103°35'20.26" NMSPCE- N 628314.6 E 770252.7 (NAD-83)			
SURFACE LOCATION Lat - N 32°42'42.99" Long - W 103°35'28.94" NMSPCE- N 623533.9 E 769543.9 (NAD-83)			
N: 623342.4 E: 767043.1 (NAD83)			
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. Date Surveyed _____ Signature & Seal of Professional Surveyor _____ Certificate No. _____ Gory _____ BASIN SURVEYS 0' 500' 1000' 1500' 2000' SCALE: 1" = 1000' WO Num.: 31339			

SECTION 30, TOWNSHIP 18 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



McELVAIN ENERGY, INC
EK 29 BS2 FEDERAL COM 4H
ELEV. - 3904'
 Lat - N 32°42'42.99"
 Long - W 103°35'28.94"
 NMSPCE- N 623533.9
 E 769543.9
 (NAD-83)

HOBBS, NM IS ±26 MILES TO THE EAST OF LOCATION.



Directions to Location:

FROM JUNCTION OF US 529 AND GEMINI ROAD GO
 NORTHWEST ON US 529 1.6 MILES, TURN
 SOUTHWEST ON LEASE ROAD 1.7 MILES, SOUTHEAST
 ON LEASE ROAD 0.7 MILES, LEFT ON LEASE ROAD
 871.2 FEET AND PROPOSED LEASE ROAD WILL BE
 ON LEFT.

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P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basin-surveys.com

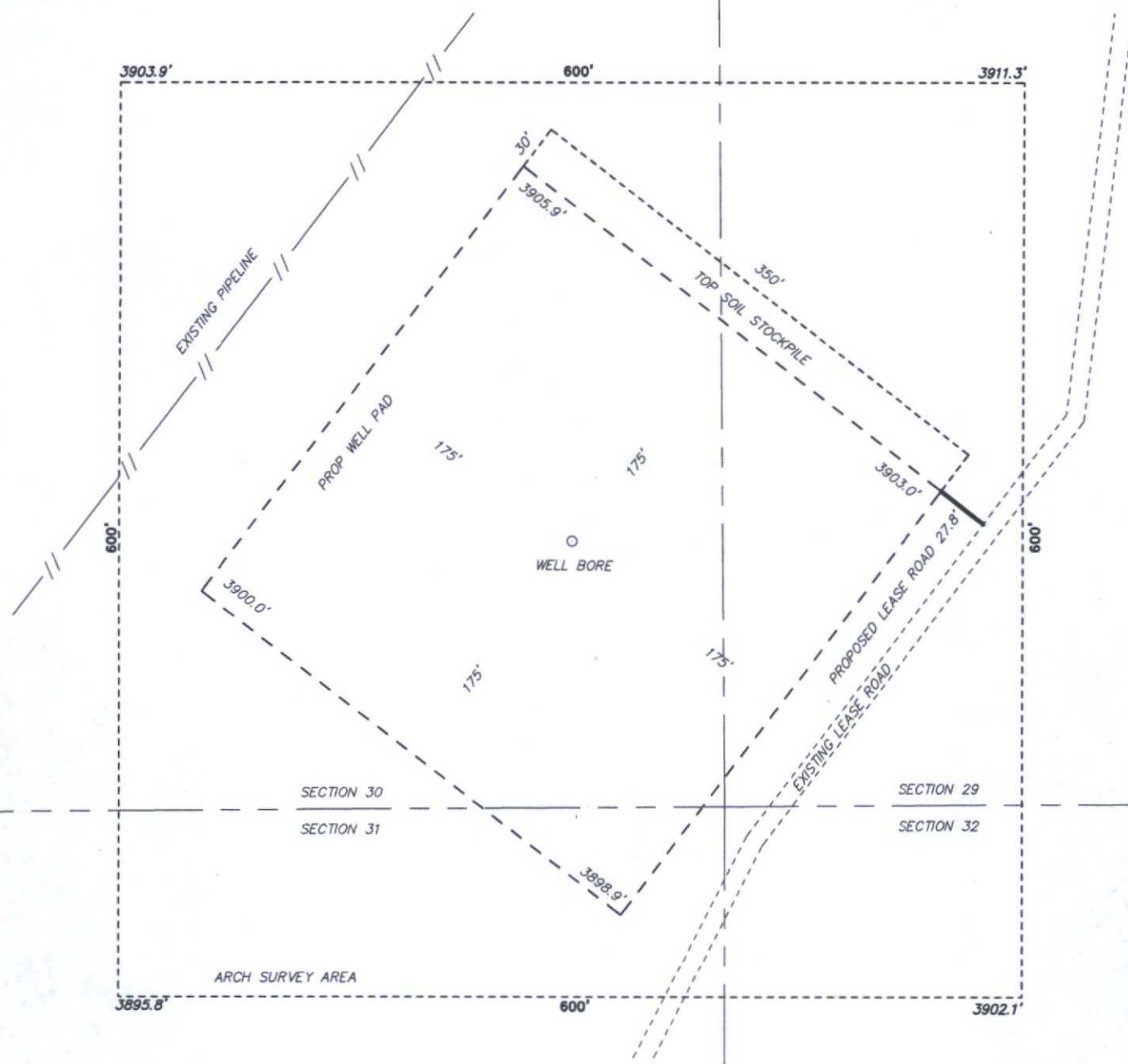
McELVAIN ENERGY, INC

REF: EK 29 BS2 FEDERAL COM 4H / WELL PAD TOPO

THE EK 29 BS2 FEDERAL COM 4H LOCATED 175' FROM
 THE SOUTH LINE AND 100' FROM THE EAST LINE OF
 SECTION 30, TOWNSHIP 18 SOUTH, RANGE 34 EAST.

N.M.P.M., LEA COUNTY, NEW MEXICO.

SECTION 30, TOWNSHIP 18 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



100 0 100 200 FEET
SCALE: 1" = 100'

McELVAIN ENERGY, INC

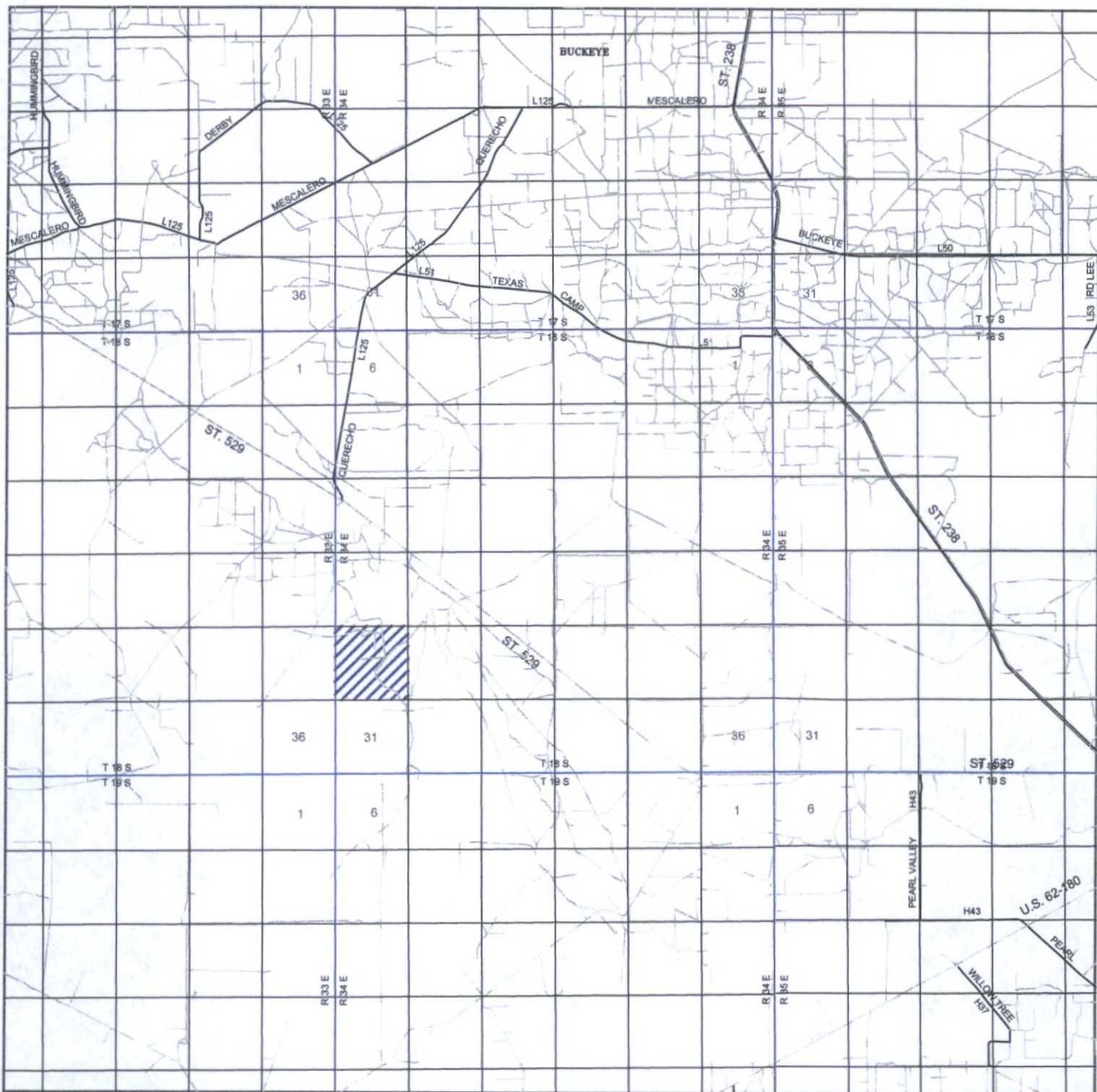
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EK 29 BS2 FEDERAL COM 4H

Located 175' FSL and 100' FEL
 Section 30, Township 18 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.



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 Hobbs, New Mexico 88241
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0 1 MI 2 MI 3 MI 4 MI

SCALE: 1" = 2 MILES

W.O. Number: KAN 31339

Survey Date: 12-11-2014

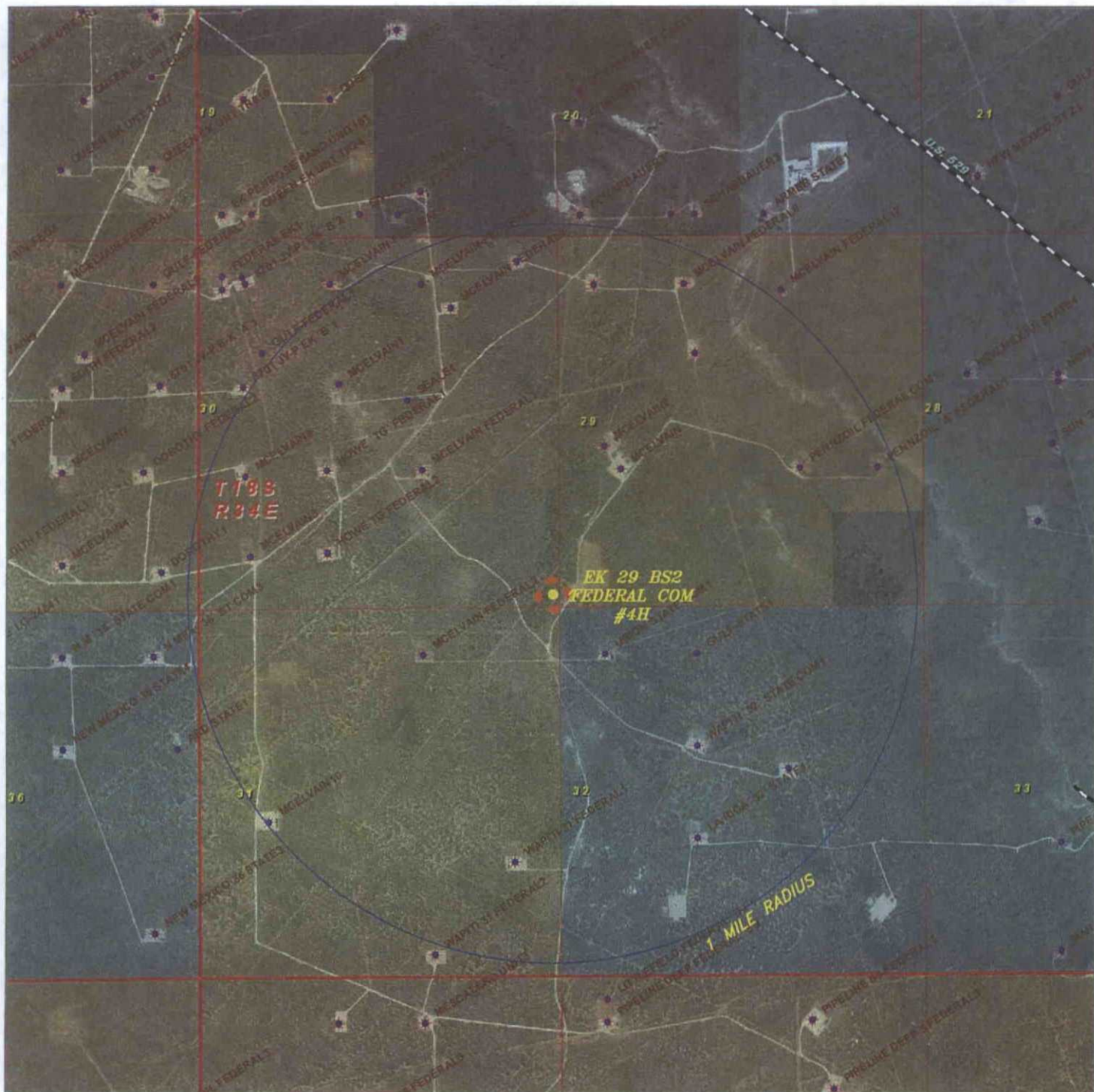
YELLOW TINT - USA LAND

BLUE TINT - STATE LAND

NATURAL COLOR - FEE LAND



**McELVAIN
 ENERGY, INC**



EK 29 BS2 FEDERAL COM 4H

Located 175' FSL and 100' FEL
Section 30, Township 18 South, Range 34 East,
N.M.P.M., Lea County, New Mexico.

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basinsurveys.com

0' 1000' 2000' 3000' 4000'

SCALE: 1" = 2000'

W.O. Number: KAN 31339

Survey Date: 12-11-2014

YELLOW TINT - USA LAND

BLUE TINT - STATE LAND

NATURAL COLOR - FEE LAND



McELVAIN
ENERGY, INC



McElvain Energy, Inc.

Sec. 30 T18S R34E

EK Federal Com 30

EK Federal Com 29 #4H

Wellbore #1

Plan #4 21Apr15 kjs

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Anticollision Report

23 April, 2015



New Tech

Anticollision Report

Company: McElvain Energy, Inc.
 Project: Sec. 30 T18S R34E
 Reference Site: EK Federal Com 30
 Site Error: 0.0ft
 Reference Well: EK Federal Com 29 #4H
 Well Error: 0.0ft
 Reference Wellbore: Wellbore #1
 Reference Design: Plan #4 21Apr15 kjs

Local Co-ordinate Reference
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Output errors are at
 Database:
 Offset TVD Reference:

Well EK Federal Com 29 #4H
 WELL @ 3924.0ft (Original Well Elev)
 WELL @ 3924.0ft (Original Well Elev)
 True
 Minimum Curvature
 2.00 sigma
 EDM 2003.16 Single User Db
 Offset Datum

Reference Plan #4 21Apr15 kjs

Filter type: NO GLOBAL FILTER: Using user defined selection & filtering criteria
 Interpolation Method: Stations
 Depth Range: Unlimited
 Results Limited by: Maximum center-center distance of 10,000.0ft
 Warning Levels Evaluated at: 2.00 Sigma

Error Model: ISCWSA
 Scan Method: Closest Approach 3D
 Error Surface: Elliptical Conic

Survey Tool Program Date 4/23/2015

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	14,759.1	Plan #4 21Apr15 kjs (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name	Reference Measure	Offset Measure	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation	Warning
Offset Well - Wellbore - Design						
EK Federal Com 30						
McElvain #2 - Wellbore #1 - Wellbore #1	12,141.2	9,917.6	99.7	33.2	1.499	Level 3, CC, ES, SF



New Tech Anticollision Report

Company: McElvain Energy, Inc.
Project: Sec. 30 T18S R34E
Reference Site: EK Federal Com 30
Site Error: 0.0ft
Reference Well: EK Federal Com 29 #4H
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #4 21Apr15 kjs

Local Co-ordinate Reference
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Output errors are at
Database:
Offset TVD Reference:
Well EK Federal Com 29 #4H
WELL @ 3924.0ft (Original Well Elev)
WELL @ 3924.0ft (Original Well Elev)
True
Minimum Curvature
2.00 sigma
EDM 2003.16 Single User Db
Offset Datum

Offset Design EK Federal Com 30 - McElvain #2 - Wellbore #1 - Wellbore #1														Offset Site Error: 0.0 ft
Survey Program: 100-MWD														Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance		Minimum		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (ft)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	16.0	16.0	0.0	0.0	19.30	2,117.7	741.4	2,243.7					
100.0	100.0	120.8	120.8	0.1	0.2	19.30	2,117.4	741.5	2,243.5	2,243.2	0.24	9,190.335		
200.0	200.0	220.1	220.1	0.3	0.4	19.31	2,117.0	741.6	2,243.2	2,242.5	0.67	3,326.258		
300.0	300.0	319.0	319.0	0.5	0.6	19.31	2,116.7	741.8	2,242.9	2,241.8	1.10	2,030.422		
400.0	400.0	418.8	418.8	0.8	0.8	19.32	2,116.4	741.9	2,242.7	2,241.2	1.54	1,457.723		
500.0	500.0	519.3	519.2	1.0	1.0	19.32	2,116.2	742.0	2,242.5	2,240.5	1.97	1,135.531		
600.0	600.0	623.3	623.3	1.2	1.2	19.32	2,115.9	741.9	2,242.2	2,239.8	2.42	927.238		
700.0	700.0	729.2	729.2	1.4	1.4	19.32	2,115.3	741.6	2,241.6	2,238.7	2.87	781.247		
800.0	800.0	829.6	829.6	1.7	1.6	19.32	2,114.7	741.4	2,241.0	2,237.7	3.30	678.555		
900.0	900.0	925.4	925.4	1.9	1.8	19.32	2,114.2	741.3	2,240.4	2,236.7	3.73	601.402		
1,000.0	1,000.0	1,024.2	1,024.2	2.1	2.0	19.33	2,113.7	741.3	2,240.0	2,235.8	4.16	538.958		
1,100.0	1,100.0	1,125.1	1,125.1	2.3	2.3	19.33	2,113.3	741.1	2,239.5	2,234.9	4.59	487.486		
1,200.0	1,200.0	1,231.4	1,231.4	2.6	2.5	19.32	2,112.7	740.9	2,238.9	2,233.8	5.04	443.855		
1,300.0	1,300.0	1,331.2	1,331.2	2.8	2.7	19.33	2,111.9	740.8	2,238.1	2,232.6	5.48	408.608		
1,400.0	1,400.0	1,427.1	1,427.0	3.0	2.9	19.33	2,111.2	740.8	2,237.4	2,231.5	5.90	379.135		
1,500.0	1,500.0	1,526.8	1,526.8	3.2	3.1	19.34	2,110.6	740.8	2,236.9	2,230.6	6.33	353.163		
1,600.0	1,600.0	1,628.5	1,628.5	3.5	3.3	19.34	2,110.0	740.7	2,236.3	2,229.5	6.77	330.204		
1,700.0	1,700.0	1,735.0	1,734.9	3.7	3.5	19.35	2,109.2	740.5	2,235.5	2,228.3	7.22	309.575		
1,800.0	1,800.0	1,831.6	1,831.6	3.9	3.7	19.35	2,108.4	740.4	2,234.7	2,227.1	7.65	292.209		
1,874.0	1,874.0	1,904.4	1,904.4	4.1	3.9	19.36	2,107.8	740.5	2,234.2	2,226.2	7.97	280.444		
1,900.0	1,900.0	1,934.4	1,934.4	4.1	4.0	-83.42	2,107.5	740.6	2,234.0	2,225.9	8.08	276.466		
2,000.0	2,000.0	2,031.2	2,031.2	4.3	4.2	-83.47	2,106.6	741.0	2,233.0	2,224.5	8.47	263.490		
2,100.0	2,099.9	2,128.2	2,128.2	4.5	4.4	-83.59	2,105.8	741.3	2,231.7	2,222.9	8.87	251.480		
2,200.0	2,199.6	2,230.8	2,230.7	4.7	4.6	-83.79	2,104.9	741.5	2,230.2	2,220.9	9.29	239.977		
2,297.8	2,296.9	2,333.5	2,333.4	4.9	4.8	-84.06	2,104.0	741.6	2,228.4	2,218.7	9.72	229.313		
2,300.0	2,299.1	2,335.7	2,335.7	4.9	4.8	-84.07	2,104.0	741.6	2,228.4	2,218.6	9.73	229.080		
2,400.0	2,398.5	2,437.4	2,437.3	5.2	5.0	-84.34	2,102.8	741.8	2,226.2	2,216.0	10.17	218.984		
2,500.0	2,497.9	2,536.6	2,536.6	5.4	5.2	-84.61	2,101.6	741.9	2,224.0	2,213.4	10.61	209.694		
2,600.0	2,597.3	2,628.8	2,628.7	5.6	5.4	-84.86	2,100.6	742.1	2,222.0	2,211.0	11.04	201.335		
2,700.0	2,696.7	2,724.3	2,724.2	5.9	5.6	-85.12	2,099.9	742.2	2,220.3	2,208.8	11.48	193.401		
2,800.0	2,796.0	2,818.1	2,818.0	6.1	5.8	-85.38	2,099.4	742.4	2,218.9	2,207.0	11.93	186.057		
2,900.0	2,895.4	2,912.5	2,912.5	6.4	6.0	-85.64	2,099.1	742.7	2,217.8	2,205.5	12.38	179.175		
3,000.0	2,994.8	3,003.0	3,003.0	6.6	6.2	-85.89	2,099.1	743.0	2,217.1	2,204.3	12.83	172.862		
3,100.0	3,094.2	3,100.6	3,100.5	6.9	6.4	-86.16	2,099.3	743.4	2,216.7	2,203.4	13.29	166.766		
3,200.0	3,193.6	3,199.5	3,199.4	7.2	6.6	-86.44	2,099.5	743.7	2,216.3	2,202.6	13.76	161.021		
3,300.0	3,293.0	3,297.4	3,297.3	7.4	6.8	-86.71	2,099.6	744.2	2,215.9	2,201.6	14.24	155.640		
3,400.0	3,392.3	3,394.4	3,394.3	7.7	7.0	-86.98	2,100.1	744.6	2,215.8	2,201.1	14.71	150.624		
3,500.0	3,491.7	3,495.3	3,495.2	8.0	7.2	-87.26	2,100.6	744.9	2,215.8	2,200.6	15.19	145.827		
3,600.0	3,591.1	3,600.8	3,600.7	8.3	7.4	-87.56	2,100.9	745.0	2,215.7	2,200.0	15.69	141.213		
3,700.0	3,690.5	3,706.5	3,706.4	8.5	7.7	-87.87	2,100.9	744.9	2,215.2	2,199.0	16.19	136.841		
3,800.0	3,789.9	3,805.5	3,805.4	8.8	7.9	-88.15	2,100.9	745.0	2,214.8	2,198.1	16.67	132.831		
3,900.0	3,889.3	3,906.8	3,906.7	9.1	8.1	-88.43	2,100.7	745.2	2,214.4	2,197.2	17.17	129.000		
4,000.0	3,988.7	4,004.1	4,004.0	9.4	8.3	-88.71	2,100.6	745.3	2,214.0	2,196.3	17.65	125.434		
4,100.0	4,088.0	4,103.7	4,103.6	9.6	8.5	-88.99	2,100.5	745.3	2,213.7	2,195.5	18.14	122.024		
4,200.0	4,187.4	4,204.3	4,204.2	9.9	8.7	-89.28	2,100.5	745.2	2,213.5	2,194.8	18.64	118.776		
4,300.0	4,286.8	4,304.2	4,304.1	10.2	8.9	-89.58	2,100.4	744.9	2,213.2	2,194.1	19.13	115.697		
4,400.0	4,386.2	4,405.0	4,405.0	10.5	9.1	-89.87	2,100.3	744.6	2,213.0	2,193.4	19.63	112.755		
4,500.0	4,485.6	4,505.0	4,504.9	10.8	9.3	-90.17	2,100.3	744.1	2,212.9	2,192.7	20.12	109.970		
4,600.0	4,585.0	4,605.5	4,605.4	11.1	9.5	-90.47	2,100.2	743.6	2,212.7	2,192.1	20.62	107.308		
4,700.0	4,684.4	4,705.2	4,705.2	11.4	9.8	-90.77	2,099.9	743.0	2,212.5	2,191.4	21.12	104.776		
4,800.0	4,783.7	4,804.2	4,804.1	11.7	10.0	-91.07	2,099.8	742.3	2,212.4	2,190.7	21.61	102.365		
4,900.0	4,883.1	4,906.2	4,906.1	11.9	10.2	-91.38	2,099.7	741.5	2,212.3	2,190.2	22.11	100.037		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



New Tech

Anticollision Report

Company: McElvain Energy, Inc.
Project: Sec. 30 T18S R34E
Reference Site: EK Federal Com 30
Site Error: 0.0ft
Reference Well: EK Federal Com 29 #4H
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #4 21Apr15 kjs

Local Co-ordinate Reference
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Output errors are at
Database:
Offset TVD Reference:
Well EK Federal Com 29 #4H
WELL @ 3924.0ft (Original Well Elev)
WELL @ 3924.0ft (Original Well Elev)
True
Minimum Curvature
2.00 sigma
EDM 2003.16 Single User Db
Offset Datum

Offset Design EK Federal Com 30 - McElvain #2 - Wellbore #1 - Wellbore #1												Offset Site Error: 0.0 ft	
Survey Program: 100-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toothface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)		Separation Factor
5,000.0	4,982.5	5,005.4	5,005.3	12.2	10.4	-91.69	2,099.5	740.6	2,212.3	2,189.6	22.61	97.836	
5,083.5	5,065.5	5,088.4	5,088.3	12.5	10.6	-91.95	2,099.3	739.9	2,212.2	2,189.2	23.03	96.069	
5,100.0	5,081.9	5,104.1	5,104.0	12.5	10.6	-91.99	2,099.3	739.7	2,212.2	2,189.1	23.11	95.735	
5,200.0	5,181.3	5,206.2	5,206.1	12.8	10.8	-92.31	2,099.0	738.8	2,212.2	2,188.6	23.61	93.690	
5,227.1	5,208.3	5,231.6	5,231.5	12.9	10.9	-92.39	2,099.0	738.5	2,212.2	2,188.5	23.74	93.170	
5,300.0	5,280.7	5,302.8	5,302.7	13.1	11.0	-92.61	2,098.8	737.8	2,212.3	2,188.2	24.10	91.777	
5,400.0	5,380.0	5,405.9	5,405.8	13.4	11.2	-92.93	2,098.5	736.8	2,212.4	2,187.8	24.61	89.893	
5,500.0	5,479.4	5,504.0	5,503.9	13.7	11.4	-93.23	2,098.2	735.8	2,212.5	2,187.4	25.11	88.123	
5,600.0	5,578.8	5,602.3	5,602.2	14.0	11.6	-93.54	2,098.0	734.8	2,212.8	2,187.2	25.60	86.423	
5,700.0	5,678.2	5,700.3	5,700.1	14.3	11.8	-93.84	2,097.8	733.9	2,213.1	2,187.0	26.10	84.794	
5,800.0	5,777.6	5,788.8	5,788.6	14.6	12.0	-94.11	2,097.8	733.2	2,213.8	2,187.2	26.58	83.300	
5,900.0	5,877.0	5,883.7	5,883.6	14.9	12.2	-94.41	2,098.1	732.4	2,214.9	2,187.8	27.07	81.830	
6,000.0	5,976.4	5,979.5	5,979.4	15.2	12.4	-94.70	2,098.6	731.7	2,216.2	2,188.6	27.56	80.417	
6,100.0	6,075.7	6,079.3	6,079.2	15.5	12.6	-95.00	2,099.4	731.0	2,217.7	2,189.7	28.06	79.038	
6,200.0	6,175.1	6,171.0	6,170.9	15.7	12.8	-95.28	2,100.0	730.5	2,219.4	2,190.9	28.54	77.756	
6,300.0	6,274.5	6,262.8	6,262.7	16.0	13.0	-95.56	2,101.0	729.9	2,221.4	2,192.4	29.03	76.529	
6,400.0	6,373.9	6,355.5	6,355.3	16.3	13.2	-95.85	2,102.5	729.0	2,224.0	2,194.5	29.51	75.351	
6,500.0	6,473.3	6,458.3	6,458.1	16.6	13.4	-96.18	2,104.0	727.8	2,226.6	2,196.5	30.02	74.165	
6,600.0	6,572.7	6,548.2	6,548.0	16.9	13.6	-96.46	2,105.6	726.7	2,229.3	2,198.8	30.50	73.087	
6,700.0	6,672.1	6,644.4	6,644.1	17.2	13.8	-96.78	2,107.5	725.2	2,232.4	2,201.4	31.00	72.023	
6,800.0	6,771.4	6,740.3	6,740.0	17.5	14.0	-97.09	2,109.5	723.8	2,235.8	2,204.3	31.49	71.003	
6,900.0	6,870.8	6,839.5	6,839.2	17.8	14.2	-97.42	2,111.7	722.1	2,239.2	2,207.3	31.99	70.004	
7,000.0	6,970.2	6,940.5	6,940.2	18.1	14.4	-97.75	2,114.0	720.4	2,242.8	2,210.4	32.49	69.032	
7,100.0	7,069.6	7,036.6	7,036.2	18.4	14.6	-98.06	2,116.2	718.8	2,246.5	2,213.6	32.98	68.113	
7,200.0	7,169.0	7,135.7	7,135.3	18.7	14.9	-98.39	2,118.5	717.2	2,250.3	2,216.8	33.48	67.211	
7,300.0	7,268.4	7,231.3	7,230.8	19.0	15.1	-98.69	2,120.7	715.8	2,254.2	2,220.2	33.97	66.355	
7,400.0	7,367.7	7,330.7	7,330.1	19.3	15.3	-99.01	2,123.1	714.2	2,258.2	2,223.8	34.47	65.511	
7,500.0	7,467.1	7,426.4	7,425.9	19.6	15.5	-99.32	2,125.5	712.7	2,262.4	2,227.4	34.96	64.710	
7,600.0	7,566.5	7,530.1	7,529.5	19.9	15.7	-99.65	2,128.1	711.2	2,266.7	2,231.2	35.47	63.907	
7,700.0	7,665.9	7,629.9	7,629.3	20.2	15.9	-99.95	2,130.5	710.1	2,270.9	2,234.9	35.97	63.140	
7,800.0	7,765.3	7,732.2	7,731.5	20.5	16.1	-100.27	2,132.8	709.0	2,275.1	2,238.6	36.47	62.383	
7,900.0	7,864.7	7,840.3	7,839.7	20.8	16.3	-100.60	2,134.9	707.7	2,279.0	2,242.0	36.98	61.621	
8,000.0	7,964.1	7,955.4	7,954.7	21.1	16.6	-100.95	2,136.6	706.3	2,282.6	2,245.1	37.51	60.847	
8,100.0	8,063.4	8,072.0	8,071.2	21.4	16.8	-101.30	2,137.4	705.0	2,285.4	2,247.4	38.04	60.072	
8,200.0	8,162.8	8,175.4	8,174.7	21.7	17.0	-101.60	2,137.6	704.3	2,287.8	2,249.2	38.55	59.349	
8,300.0	8,262.2	8,274.9	8,274.1	22.0	17.2	-101.87	2,137.8	704.0	2,290.2	2,251.1	39.04	58.657	
8,400.0	8,361.6	8,379.3	8,378.6	22.3	17.5	-102.16	2,137.8	703.8	2,292.5	2,253.0	39.55	57.967	
8,500.0	8,461.0	8,476.3	8,475.6	22.6	17.7	-102.42	2,137.8	704.0	2,294.9	2,254.9	40.04	57.316	
8,600.0	8,560.4	8,570.5	8,569.8	22.9	17.9	-102.67	2,137.9	704.2	2,297.4	2,256.9	40.52	56.691	
8,700.0	8,659.7	8,657.8	8,657.1	23.2	18.0	-102.90	2,138.2	704.5	2,300.3	2,259.3	41.00	56.110	
8,800.0	8,759.1	8,756.0	8,755.3	23.5	18.2	-103.14	2,139.0	705.3	2,303.6	2,262.1	41.49	55.525	
8,900.0	8,858.5	8,850.6	8,849.9	23.8	18.4	-103.37	2,140.0	706.3	2,307.2	2,265.2	41.97	54.969	
9,000.0	8,957.9	8,953.0	8,952.2	24.1	18.7	-103.61	2,140.9	707.4	2,310.6	2,268.2	42.47	54.402	
9,100.0	9,057.3	9,052.0	9,051.3	24.4	18.9	-103.86	2,141.8	708.3	2,314.2	2,271.2	42.97	53.859	
9,200.0	9,156.7	9,142.8	9,142.0	24.7	19.1	-104.09	2,142.7	708.5	2,317.8	2,274.4	43.44	53.352	
9,300.0	9,256.1	9,236.4	9,235.6	25.0	19.3	-104.35	2,144.0	708.3	2,322.0	2,278.0	43.93	52.860	
9,400.0	9,355.4	9,333.4	9,332.6	25.3	19.5	-104.61	2,145.5	707.8	2,326.3	2,281.9	44.42	52.377	
9,500.0	9,454.8	9,425.8	9,425.0	25.6	19.7	-104.87	2,147.1	707.3	2,330.9	2,286.0	44.89	51.921	
9,514.1	9,468.9	9,440.6	9,439.8	25.6	19.7	-104.91	2,147.4	707.2	2,331.6	2,286.6	44.97	51.854	
9,525.0	9,479.7	9,452.3	9,451.4	25.6	19.7	-93.13	2,147.6	707.2	2,332.0	2,287.0	45.02	51.798	
9,550.0	9,504.5	9,475.3	9,474.5	25.7	19.8	-67.01	2,148.0	707.0	2,332.0	2,286.9	45.08	51.731	
9,575.0	9,529.3	9,495.7	9,494.9	25.8	19.8	-48.26	2,148.4	706.8	2,330.6	2,285.6	45.05	51.736	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



New Tech

Anticollision Report

Company: McElvain Energy, Inc.
 Project: Sec. 30 T18S R34E
 Reference Site: EK Federal Com 30
 Site Error: 0.0ft
 Reference Well: EK Federal Com 29 #4H
 Well Error: 0.0ft
 Reference Wellbore: Wellbore #1
 Reference Design: Plan #4 21Apr15 kjs

Local Co-ordinate Reference
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Output errors are at
 Database:
 Offset TVD Reference:

Well EK Federal Com 29 #4H
 WELL @ 3924.0ft (Original Well Elev)
 WELL @ 3924.0ft (Original Well Elev)
 True
 Minimum Curvature
 2.00 sigma
 EDM 2003.16 Single User Db
 Offset Datum

Offset Design EK Federal Com 30 - McElvain #2 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft
Survey Program: 100-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
9,600.0	9,554.0	9,524.1	9,523.3	25.8	19.9	-36.63	2,149.0	706.7	2,328.0	2,283.1	44.95	51.786	
9,625.0	9,578.4	9,546.1	9,545.3	25.9	19.9	-29.30	2,149.4	706.5	2,324.1	2,279.4	44.77	51.915	
9,650.0	9,602.6	9,568.7	9,567.9	25.9	20.0	-24.44	2,149.9	706.4	2,319.0	2,274.5	44.50	52.106	
9,675.0	9,626.5	9,592.3	9,591.4	26.0	20.0	-21.07	2,150.4	706.3	2,312.6	2,268.4	44.17	52.359	
9,700.0	9,649.9	9,615.8	9,615.0	26.0	20.1	-18.62	2,150.9	706.2	2,304.9	2,261.1	43.76	52.675	
9,725.0	9,672.9	9,639.0	9,638.1	26.1	20.1	-16.79	2,151.4	706.1	2,296.0	2,252.7	43.28	53.055	
9,750.0	9,695.4	9,661.6	9,660.8	26.1	20.1	-15.39	2,151.8	706.0	2,285.9	2,243.2	42.73	53.500	
9,775.0	9,717.3	9,683.8	9,683.0	26.1	20.2	-14.31	2,152.3	705.9	2,274.6	2,232.5	42.12	54.008	
9,800.0	9,738.5	9,706.8	9,706.0	26.2	20.2	-13.47	2,152.8	705.9	2,262.2	2,220.7	41.45	54.576	
9,825.0	9,759.0	9,730.5	9,729.7	26.2	20.3	-12.83	2,153.3	705.6	2,248.6	2,207.8	40.73	55.200	
9,850.0	9,778.8	9,747.9	9,747.0	26.2	20.3	-12.32	2,153.6	705.3	2,233.9	2,194.0	39.96	55.902	
9,875.0	9,797.8	9,765.6	9,764.7	26.3	20.4	-11.94	2,153.9	705.0	2,218.3	2,179.1	39.15	56.659	
9,900.0	9,815.9	9,782.2	9,781.3	26.3	20.4	-11.68	2,154.3	704.8	2,201.6	2,163.3	38.31	57.470	
9,925.0	9,833.0	9,797.4	9,796.5	26.3	20.4	-11.51	2,154.6	704.5	2,184.0	2,146.6	37.44	58.331	
9,950.0	9,849.3	9,813.0	9,812.1	26.3	20.5	-11.44	2,155.0	704.2	2,165.6	2,129.0	36.57	59.224	
9,975.0	9,864.5	9,829.2	9,828.3	26.3	20.5	-11.48	2,155.3	704.0	2,146.3	2,110.6	35.69	60.134	
10,000.0	9,878.6	9,849.3	9,848.4	26.4	20.5	-11.66	2,155.8	703.7	2,126.1	2,091.3	34.84	61.024	
10,025.0	9,891.7	9,863.3	9,862.3	26.4	20.6	-11.92	2,156.1	703.5	2,105.2	2,071.2	34.00	61.917	
10,050.0	9,903.6	9,875.9	9,875.0	26.4	20.6	-12.31	2,156.3	703.3	2,083.6	2,050.4	33.20	62.761	
10,075.0	9,914.4	9,887.4	9,886.5	26.4	20.6	-12.86	2,156.5	703.2	2,061.4	2,029.0	32.46	63.514	
10,100.0	9,924.0	9,897.7	9,896.7	26.4	20.6	-13.63	2,156.7	703.0	2,038.6	2,006.9	31.79	64.123	
10,125.0	9,932.4	9,907.3	9,906.3	26.5	20.7	-14.70	2,156.9	702.9	2,015.4	1,984.1	31.24	64.512	
10,150.0	9,939.5	9,915.7	9,914.8	26.5	20.7	-16.21	2,157.1	702.8	1,991.6	1,960.8	30.84	64.578	
10,175.0	9,945.4	9,922.7	9,921.8	26.5	20.7	-18.43	2,157.2	702.7	1,967.5	1,936.9	30.67	64.161	
10,200.0	9,950.1	9,925.4	9,924.4	26.6	20.7	-21.70	2,157.3	702.7	1,943.1	1,912.3	30.83	63.034	
10,225.0	9,953.4	9,930.6	9,929.7	26.6	20.7	-27.60	2,157.4	702.7	1,918.5	1,886.7	31.77	60.386	
10,250.0	9,955.4	9,932.7	9,931.7	26.7	20.7	-39.13	2,157.4	702.6	1,893.7	1,859.2	34.50	54.884	
10,275.0	9,956.2	9,933.7	9,932.7	26.7	20.7	-67.02	2,157.4	702.6	1,868.8	1,827.4	41.34	45.209	
10,290.5	9,956.0	9,933.8	9,932.8	26.8	20.7	-98.52	2,157.4	702.6	1,853.3	1,809.2	44.07	42.056	
10,300.0	9,955.7	9,933.7	9,932.7	26.8	20.7	-98.48	2,157.4	702.6	1,843.8	1,799.7	44.12	41.795	
10,400.0	9,952.9	9,933.0	9,932.0	27.1	20.7	-98.08	2,157.4	702.6	1,744.0	1,699.3	44.68	39.029	
10,500.0	9,950.0	9,932.2	9,931.3	27.6	20.7	-97.67	2,157.4	702.6	1,644.1	1,598.8	45.37	36.237	
10,600.0	9,947.2	9,931.5	9,930.5	28.2	20.7	-97.24	2,157.4	702.6	1,544.3	1,498.2	46.17	33.449	
10,700.0	9,944.4	9,930.7	9,929.8	29.0	20.7	-96.81	2,157.4	702.6	1,444.6	1,397.5	47.07	30.690	
10,800.0	9,941.5	9,929.9	9,929.0	29.8	20.7	-96.37	2,157.4	702.7	1,344.8	1,296.8	48.06	27.981	
10,900.0	9,938.7	9,929.2	9,928.2	30.8	20.7	-95.92	2,157.3	702.7	1,245.1	1,196.0	49.13	25.341	
11,000.0	9,935.8	9,928.3	9,927.4	31.8	20.7	-95.46	2,157.3	702.7	1,145.5	1,095.2	50.28	22.782	
11,100.0	9,933.0	9,927.5	9,926.6	33.0	20.7	-94.98	2,157.3	702.7	1,045.9	994.4	51.49	20.312	
11,200.0	9,930.1	9,926.6	9,925.7	34.1	20.7	-94.50	2,157.3	702.7	946.4	893.6	52.76	17.938	
11,300.0	9,927.3	9,925.4	9,924.4	35.4	20.7	-93.76	2,157.3	702.7	847.0	793.0	54.08	15.663	
11,400.0	9,924.4	9,924.8	9,923.9	36.7	20.7	-93.46	2,157.3	702.7	747.8	692.4	55.44	13.488	
11,500.0	9,921.6	9,923.8	9,922.9	38.0	20.7	-92.88	2,157.2	702.7	648.9	592.0	56.85	11.414	
11,600.0	9,918.8	9,922.8	9,921.9	39.4	20.7	-92.32	2,157.2	702.7	550.3	492.0	58.28	9.442	
11,700.0	9,915.9	9,921.9	9,920.9	40.8	20.7	-91.75	2,157.2	702.8	452.3	392.5	59.75	7.570	
11,800.0	9,913.1	9,920.9	9,919.9	42.3	20.7	-91.20	2,157.2	702.8	355.4	294.2	61.24	5.804	
11,900.0	9,910.2	9,919.9	9,919.0	43.8	20.7	-90.65	2,157.2	702.8	261.0	198.2	62.75	4.159	
12,000.0	9,907.4	9,919.0	9,918.0	45.3	20.7	-90.10	2,157.2	702.8	172.8	108.5	64.28	2.688	
12,100.0	9,904.5	9,918.0	9,917.1	46.8	20.7	-89.56	2,157.1	702.8	107.8	42.0	65.83	1.638	
12,141.2	9,903.4	9,917.6	9,916.7	47.4	20.7	-89.34	2,157.1	702.8	99.7	33.2	66.48	1.499 Level 3, CC, ES, SF	
12,200.0	9,901.7	9,917.1	9,916.2	48.3	20.7	-89.02	2,157.1	702.8	115.7	48.3	67.40	1.717	
12,300.0	9,898.8	9,916.2	9,915.2	49.9	20.7	-88.49	2,157.1	702.8	187.5	118.5	68.98	2.718	
12,400.0	9,896.0	9,915.3	9,914.3	51.5	20.7	-87.97	2,157.1	702.8	277.3	206.8	70.57	3.630	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



New Tech

Anticollision Report

Company: McElvain Energy, Inc.
 Project: Sec. 30 T18S R34E
 Reference Site: EK Federal Com 30
 Site Error: 0.0ft
 Reference Well: EK Federal Com 29 #4H
 Well Error: 0.0ft
 Reference Wellbore: Wellbore #1
 Reference Design: Plan #4 21Apr15 kjs

Local Co-ordinate Reference
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Output errors are at
 Database:
 Offset TVD Reference:

Well EK Federal Com 29 #4H
 WELL @ 3924.0ft (Original Well Elev)
 WELL @ 3924.0ft (Original Well Elev)
 True
 Minimum Curvature
 2.00 sigma
 EDM 2003.16 Single User Db
 Offset Datum

Offset Design EK Federal Com 30 - McElvain #2 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft
Survey Program: 100-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
12,500.0	9,893.2	9,914.4	9,913.4	53.1	20.7	-87.45	2,157.1	702.8	372.4	300.2	72.16	5.160	
12,600.0	9,890.3	9,913.5	9,912.5	54.7	20.7	-86.94	2,157.0	702.9	469.5	395.7	73.77	6.364	
12,700.0	9,887.5	9,912.6	9,911.6	56.4	20.7	-86.43	2,157.0	702.9	567.6	492.2	75.38	7.530	
12,800.0	9,884.6	9,911.7	9,910.8	58.0	20.7	-85.93	2,157.0	702.9	666.3	589.3	77.00	8.653	
12,900.0	9,881.8	9,910.8	9,909.9	59.7	20.7	-85.43	2,157.0	702.9	765.3	686.7	78.62	9.734	
13,000.0	9,878.9	9,910.0	9,909.0	61.3	20.7	-84.94	2,157.0	702.9	864.5	784.3	80.24	10.774	
13,100.0	9,876.1	9,909.1	9,908.2	63.0	20.7	-84.45	2,157.0	702.9	963.9	882.1	81.87	11.774	
13,200.0	9,873.2	9,908.3	9,907.3	64.7	20.7	-83.97	2,156.9	702.9	1,063.4	979.9	83.50	12.736	
13,300.0	9,870.4	9,907.4	9,906.5	66.4	20.7	-83.50	2,156.9	702.9	1,163.0	1,077.9	85.13	13.662	
13,400.0	9,867.6	9,906.6	9,905.7	68.1	20.7	-83.03	2,156.9	702.9	1,262.7	1,175.9	86.76	14.554	
13,500.0	9,864.7	9,905.8	9,904.9	69.8	20.7	-82.56	2,156.9	702.9	1,362.4	1,274.0	88.39	15.414	
13,600.0	9,861.9	9,905.0	9,904.1	71.5	20.7	-82.10	2,156.9	703.0	1,462.2	1,372.1	90.02	16.243	
13,700.0	9,859.0	9,904.2	9,903.2	73.2	20.7	-81.65	2,156.9	703.0	1,561.9	1,470.3	91.64	17.043	
13,800.0	9,856.2	9,903.4	9,902.5	74.9	20.7	-81.20	2,156.9	703.0	1,661.7	1,568.5	93.27	17.816	
13,900.0	9,853.3	9,902.6	9,901.7	76.7	20.7	-80.75	2,156.8	703.0	1,761.6	1,666.7	94.89	18.564	
14,000.0	9,850.5	9,901.8	9,900.9	78.4	20.7	-80.32	2,156.8	703.0	1,861.4	1,764.9	96.51	19.286	
14,100.0	9,847.6	9,900.2	9,899.2	80.1	20.7	-79.39	2,156.8	703.0	1,961.3	1,863.3	97.99	20.015	
14,200.0	9,844.8	9,900.2	9,899.2	81.9	20.7	-79.39	2,156.8	703.0	2,061.1	1,961.4	99.73	20.667	
14,300.0	9,841.9	9,899.5	9,898.5	83.6	20.6	-78.99	2,156.8	703.0	2,161.0	2,059.7	101.35	21.323	
14,400.0	9,839.1	9,898.6	9,897.7	85.4	20.6	-78.53	2,156.8	703.0	2,260.9	2,158.0	102.94	21.964	
14,500.0	9,836.3	9,897.8	9,896.9	87.1	20.6	-78.07	2,156.7	703.0	2,360.8	2,256.3	104.53	22.586	
14,579.6	9,834.0	9,897.1	9,896.2	88.5	20.6	-77.71	2,156.7	703.0	2,440.4	2,334.6	105.78	23.070	
14,600.0	9,833.4	9,897.0	9,896.0	88.9	20.6	-77.62	2,156.7	703.0	2,460.7	2,354.6	106.11	23.191	
14,700.0	9,830.6	9,896.1	9,895.2	90.7	20.6	-77.16	2,156.7	703.1	2,560.6	2,453.0	107.68	23.780	
14,759.1	9,828.9	9,895.7	9,894.7	91.7	20.6	-76.89	2,156.7	703.1	2,619.8	2,511.2	108.61	24.122	



New Tech

Anticollision Report

Company: McElvain Energy, Inc.
Project: Sec. 30 T18S R34E
Reference Site: EK Federal Com 30
Site Error: 0.0ft
Reference Well: EK Federal Com 29 #4H
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #4 21Apr15 kjs

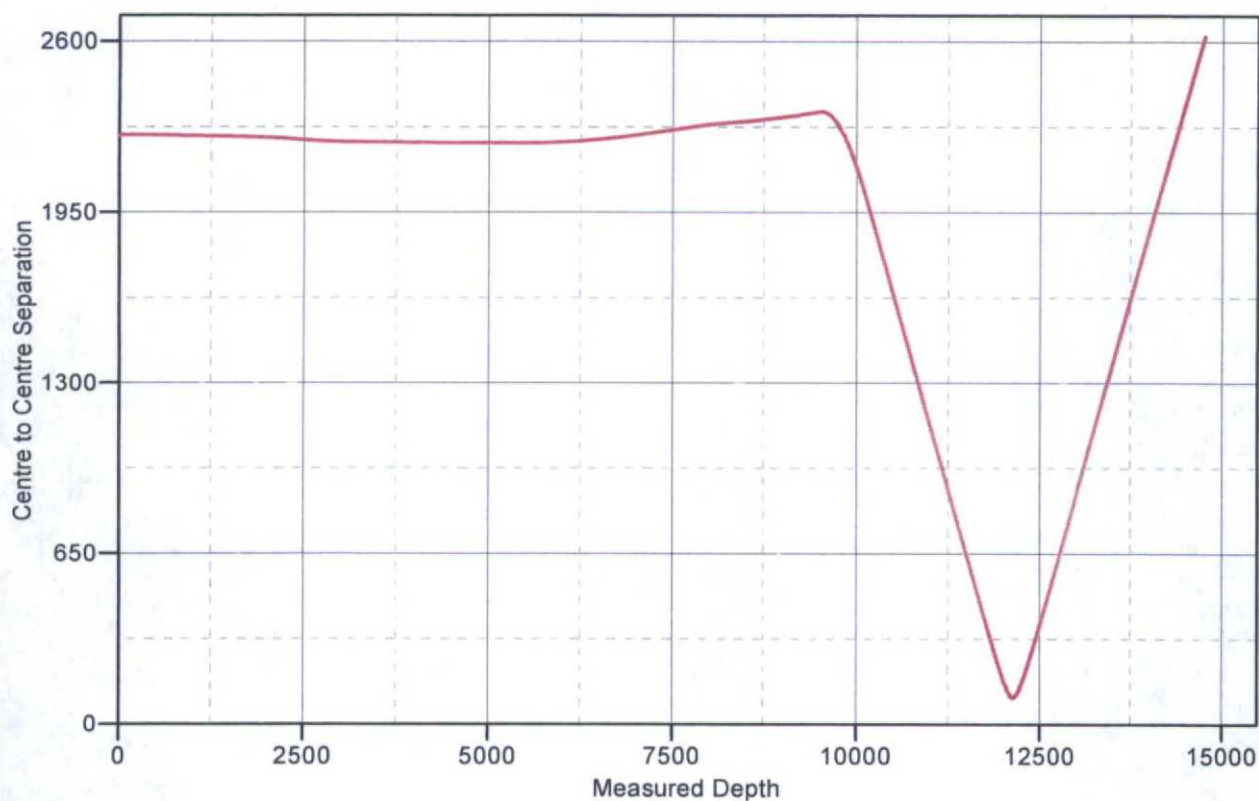
Local Co-ordinate Reference
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Output errors are at
Database:
Offset TVD Reference:

Well EK Federal Com 29 #4H
WELL @ 3924.0ft (Original Well Elev)
WELL @ 3924.0ft (Original Well Elev)
True
Minimum Curvature
2.00 sigma
EDM 2003.16 Single User Db
Offset Datum

Reference Depths are relative to WELL @ 3924.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W °

Coordinates are relative to: EK Federal Com 29 #4H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.40°

Ladder Plot



LEGEND

✖ McElvain #2, Wellbore #1, Wellbore #1 V0